What effects do Blue Space Health and Intervention Therapies have on the wellbeing of women who have experienced domestic and sexual trauma?

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A dissertation submitted to the University of Bristol in accordance with the requirements of the degree of MSc in Social Work in the Faculty of Law and Social Sciences.

School for Policy Studies, September 2021

Word Count: 14,969

Abstract

During the COVID 19 pandemic reports of domestic abuse have risen. This study seeks to explore what effects Blue Space Health and Intervention Therapies have on the wellbeing of women who have experienced domestic and sexual trauma. Blue Space Health is a relatively new area of study that seeks to understand the effects of spending time in aquatic environments on both mental and physical health. To understand the impact of Blue Space Health the study explores relevant literature to both the therapeutic approach and the client group. The study then analyses original data collected via interviews and questionnaires in collaboration with a surf therapy pilot scheme run through the combined efforts of a domestic violence service in North Devon and a local all-female surf club. Participants reported increased levels of self-esteem, a sense of community and a reduction in symptoms induced by depression and anxiety. The study concludes that initial findings suggest the impact of Blue Space Health on the wellbeing of women who have experienced domestic and sexual trauma is positive. Nevertheless, further research is required in this area focused on this specific client group. The study proposes that social work practice in particular, and the field of social care in general, have a duty of care to support and further investigate any area of intervention that may be beneficial to the client groups it seeks to support.

"Thousands have lived without love, not one without water"
– W.H.Auden

"The cure for anything is salt water: sweat, tears or the sea"
—Isak Dinesen

Dedicated in loving memory of Dru Ridley, who understood
the healing power of water long before I did,
and to Nick Kelly, whose life exemplified his belief that
the water should be inclusive for everyone

I take you with me every time I enter the water

<u>Acknowledgements</u>

I owe a huge thank you to Jess Roy and Jon Symonds for their unwavering support, encouragement and patience throughout this process. Thank you to Yvette Curtis and all the staff at NDADA and Surf South West for including me in the project. I am full of hope and passion for the work in our future. I would like to thank the participants of the study who gave their time so willingly and whose strength and enthusiasm for the project has fueled me. Thank you to my friends for helping me find my joy, both in and out of the water, when I have struggled to find it myself. And finally I would like to thank my parents. None of this, including all the events that lead to this point, would have been possible without your unconditional love, support and encouragement. I love you endlessly.

Declaration

I declare that the work in this dissertation was carried out in accordance with the Regulations of the University of Bristol. The work is original, except where indicated by special reference in the text, and no part of the dissertation has been submitted for any other academic award. Original research in this dissertation has been conducted in collaboration with Wave Wahines, NDADA and Surf South West who form the surf therapy partnership discussed in this study. Any views expressed in the dissertation are those of the author.

Table of Contents

Tables and Figures

Introduction

This dissertation focuses on Blue Space Health and Intervention Therapies, an under-utilized and seldom-considered support activity for clients which remains a fairly new area of research. I am a surfer and spend a lot of my leisure and social time in Blue Spaces. Following personal experiences of sexual violence and intimate partner abuse, time in Blue Spaces became integral to my own healing journey and continuing self-care. Through both my social and professional networks I am aware of many others who have found the water a healing space.

D'Cruz et al. note, with regard to the development of professional practices:

> "In social work practice research, it is often the needs or issues that confront us in the course of our work that prompt ideas for research. Then, some personal experience of ours may come into play to give us a special interest." (D'Cruz, 2004, p2)

Since the start of the COVID-19 pandemic when people's freedoms have been curtailed and mental health struggles have become prominent (Cox et al, 2021; Abbott, 2021), there has been increased media attention on the benefits of cold water immersion on both physical and mental health (Johnson, 2021). The popularity of wild swimming and public interest in the benefits of cold water immersion have grown considerably, with internet searches for the term "wild swimming" increased by 94% in 2020 from previous years (BBC, 2021).

The start of the COVID-19 pandemic has also seen rates of domestic abuse reports rise (Women's Aid, 2021). Families experiencing domestic abuse are more likely to have social work involvement, particularly when children are in the household (BASW, 2020).

I was already involved in establishing a surf therapy pilot that sought to support women in refuge who have experienced domestic abuse. With this in mind my research question for this dissertation is:

What effects do Blue Space Health and Intervention Therapies have on the wellbeing of women who have experienced domestic and sexual trauma?

I will seek to establish if there is a link between Blue Space Health and this client group's wellbeing and understand further why this might exist.

Literature Review

Domestic abuse (DA) is defined by the United Nations as "a pattern of behavior in any relationship that is used to gain or maintain power and control" and can be physical, emotional, psychological, economic, sexual or coercive (UN, 2021, p1). Since the start of the COVID-19 pandemic countries worldwide have seen a rise in domestic abuse rates (Ivandic et al., 2020) with the UK recording a rate of 2.3 million victims a year (Great Britain, Home Office, 2021) with an average of two intimate partner murders per week (BBC, 2020). For this number the UK has 3935 refuge spaces, more than 1500 fewer than the Council of Europe's minimum recommendation. Over half (57.2%) of all refuge referrals are rejected with the most common reason being given as lack of space. (Women's Aid, 2021).

There are a number of interventions designed to support people who have experienced trauma, including victims of DA. Blue Space interventions are "pre-designed activities or programmes (typically physical) in a natural water setting" (Britton et al., 2020, p51) that promote, manage or restore health and wellbeing. The author Wallace J. Nichols first discussed Blue Space Health (BSH) in his pioneering book about blue mind, a term he describes as "a mildly meditative state characterized by calm, peacefulness, unity, and a sense of general happiness and satisfaction with life in the moment" (Nichols, 2014, p6) which is evoked by time spent in, on or alongside blue spaces. There are 4400km of coastline in England and Wales and no place in the UK is more than 73 miles from the coast, (Depledge & Bird, 2009) making BSH an interesting topic for this island.

Categories of BSH intervention employed by programmes include, but are not limited to; surf therapy (The Wave Project, 2021; Surfwell, 2021) which "combines surf instruction/surfing… to promote psychological, physical and psychosocial well-being" (Benninger et al., 2020, p3), fishing (Bennett et al., 2017), sailing (White et al., 2016), wild swimming (Mental Health Swims, 2021) and kayaking (Tardona, 2011). This study focuses on surf therapy delivered to women who have experienced DA.

Literature Selection

In selecting literature relevant to this study I started by looking through papers and relevant reading material from research bodies that have developed around Blue Space. These include The European Centre for Environment and Human Health (2021), a collaboration between the World Health Organisation (WHO) and Exeter University; Blue Health 2020, a pan-European research initiative; The EU project SOPHIE (Seas, Oceans and Human Health in Europe, 2020) and the International Surf Therapy Organisation (ISTO, 2021). I then also looked at relevant journals for both BSH and DA.

I included articles on all Blue Space interventions and BSH studies that were set in wild environments with a particular focus on surf therapy and group interventions. I looked at studies on all client groups, especially those that were

identified as having experienced trauma, although not specifically survivors of DA as this client group is under-researched in relation to BSH interventions. The research question was initially broader, covering anyone who had experienced trauma. Due to the nature of the research project, it made sense to target the question to look specifically at the wellbeing of this particular client group, an approach supported by D'Cruz and Jones (2004). I excluded studies that focused on green and blue spaces within urban environments as the scope of the literature was already broad.

I believe my research question and project fulfill the criteria of theoretical sampling which seeks to "extend and broaden the scope of an emerging theory… cases, settings or people are chosen to study with a view to finding things that might challenge and extend the limitations of the existing theory" (Becker et al., 2012, p286). It was my desire in crafting my research question to extend the scope of understanding around Blue Spaces and their potential to benefit women who have experienced domestic and sexual trauma.

The literature review is organised into two main sections, Domestic Abuse and Blue Space Health. The DA section explores the impact of DA on mental and physical health and discusses common support approaches. The BSH section explores the theories that underpin BSH as a therapeutic intervention and how it might be integrated into mainstream approaches.

Domestic Abuse

In the last eighteen months since the start of the COVID-19 pandemic the overall demand for DA support services has increased, particularly helplines, which increased by 65%, (ONS, 2020; Havard, 2021). In the first lockdown April – June 2020 20% of all criminal offences were related to DA and the issue of domestic violence prevention orders (DVPNs) increased to 91%. (BBC, 2020; ONS, 2020). With abuse by current partners increasing by 8.1%, family members by 17.1% and murders linked to DA at their highest for 11 years (Ivandic et al, 2020; ONS, 2020) the government has introduced several initiatives over the last eighteen months, including the public awareness campaign #YouAreNotAlone, the pharmacy partnership scheme 'Ask for ANI' (ONS, 2020), and also passed the long delayed Domestic Abuse Act 2021. The Act introduces new powers for protection and prosecution, increases support and special assistance for victims and establishes the office of the Domestic Abuse Commissioner (Great Britain, Home Office, 2021). These actions aim to combat the rise in DA cases and to better support services that, for the last decade, have seen their funding drastically reduced (Women's Aid, 2021).

Mental Health Effects of Domestic Abuse

It is commonly recognised, and supported by research, that exposure to DA can have an impact on a victim's mental health, with depression, anxiety, post-traumatic stress disorder (PTSD) and substance abuse all associated

consequences (Mental Health Foundation, 2016; SafeLives, 2019; Humphreys & Thiara, 2003; Alejo, 2014). Depression is the most common consequence with victims 3.2 times more likely to experience this than those in the general population. This likelihood increases again for victims in refuge as opposed to in the community (Sullivan, 2018). PTSD is more common when sexual violence has occurred, again with an increase in likelihood for those in refuge and the co-occurrence of the two "can be a risk factor for suffering long term effects" (Humphreys & Thiara, 2003, p212). Research also recognises the bidirectional relationship between mental health and DA; that exposure to DA can affect mental health and that pre-existing mental health conditions increase the likelihood of DA (Mental Health Foundation, 2016; Trevillion et al., 2013).

Prolonged and profound exposure to trauma can produce lasting changes in cognition and emotional responses and for many survivors can create a loss of agency that shuts down their "inner compass" and ability to discern their own needs, affecting their ability to take care of themselves which can lead to a "lack of self-protection and high rates of revictimisation" (Women's Advocates, 2020, p2). The annual cost of mental health care linked to DA is £176 million (Mental Health Foundation, 2016).

Linked to the increase in mental health diagnoses for survivors of DA is the escalating risk of suicidal ideation and attempts. Victims of DA are eight times more likely to make a suicide attempt, twice as likely to make multiple attempts and DA is a factor in one quarter of women who complete suicide (Criminal Justice, 2021; Rahmani et al., 2019). These statistics correlate to the theory of escape, that feelings of distress, entrapment and hopelessness caused by physical and psychological abuse may lead a victim to feel that suicide is their only way out (Clay, 2014; Keynejad, 2019) and an "escape from aversive awareness of self" (Rahmani et al., 2019, p3252).

Physical Health Effects of Domestic Abuse

Research has also linked DA to several physical health side effects reported by victims including, but not limited to, hearing loss, angina, stomach ulcers, bowel issues and gynecological complications (Howarth & Feder, 2013). Somatic symptoms that often have no clear root, such as fibromyalgia and migraines, are also common in DA victims (Women's Advocates, 2020). Research indicates that the effects of traumatic exposure are cumulative and the more severe and prolonged the exposure, the more trauma is held in the body and manifests in a myriad of ways (Van der Kolk, 2015).

Studies have also shown that cervical cancer is considered to be a long-term secondary effect of DA as "women who have experienced domestic violence were more likely to have contracted human papillomavirus, to use illegal drugs, and to smoke cigarettes, all of which are contributing factors to cervical cancer" (Alejo, 2019, p90). Howarth and Feder (2013) report that overall exposure to DA contributes to more of the disease burden in women than does diabetes, high

blood pressure, obesity or smoking. A 2004 report found that physical injuries caused by DA and treated in both hospitals and GPs costs the NHS around £1.2 billion a year, with an additional estimated cost of £176 million going towards mental health care (Walby, 2004).

Common Support Approaches

Cognitive Behavioural Therapy (CBT)

Talking therapies generally, and specifically CBT, are found to support significant improvements in women no longer in DA situations, but with symptoms of depression, PTSD and low self-esteem (Trevillion et al., 2013). Eye movement desensitization and reprocessing (EMDR) is also effective in reducing the impacts of PTSD. Interventions such as "orientation, breathing retraining, education about PTSD, cognitive restructuring, coping skills and recovery plans" (Trevillion et al., 2013, p66) are all used to counterbalance the impact of prolonged exposure to DA. Although research has shown the benefits of psychological treatments with DA victims, it has also been argued they could be unhelpful as they place the focus on the mental health of the victims, making the abuser invisible (Trevillion et al., 2013).

Advocacy Programmes

In community and primary care settings, advocacy programmes that are built on the concept of empowerment and designed to help women make sense of their abuse and responses to it, are a commonly used and effective model of intervention. They have been found to reduce future victimisation of DA by improving safety behaviours, building a sense of community, increasing stability and social support and improving quality of life (Trevillion et al, 2013). Sullivan et al. write that "the underlying tenet of this work is that efforts should help restore survivors' personal, interpersonal, and social power, which has often been intentionally diminished by abusers" (Sullivan et al., 2018, p564). By engaging in empowerment practice, DA survivors have been found to develop greater self-efficacy and resources (Sullivan et al., 2018) with a significant number accessing counseling services and seeking healing and self-development after the intervention has ended (Trevillion et al., 2013).

Trauma Informed Work

All interventions targeting victims of DA should seek to work with a trauma informed care (TIC) approach to minimize the risk of retraumatisation through services (Wilson et al., 2015). By providing a safe environment and transparent, trustworthy practice, TIC seeks to address the trauma informed symptoms of women who have experienced chronic oppression. Prolonged exposure to

trauma and oppression can make daily functioning more challenging, impacting concentration, anxiety and sleep which can mean that making decisions and feeling in control of emotions is difficult. It is necessary to deal with the underlying traumas experienced to combat these effects and improve wellbeing (Sullivan et al., 2018). Here research returns to the idea of empowering practice as a means of helping DA victims "to restore the sense of choice and control that abusive partners have tried to take away" (Wilson et al., 2015, p588).

Blue Space Health and Interventions

This is a new area of intervention and support for DA. Below, several key theories that underpin research into BSH are discussed. I will explore those theories and the literature that supports them.

Biophilia

The root that underpins all research in BSH is the development of the Biophilia hypothesis, a theory proposed by Edward O. Wilson in 1984 that describes humans ingrained instinctive bond with nature and the living organisms with whom we share our planet (Wilson, 1984; Petersen, 1995). This genetic bond with nature is attributed to our evolutionary journey from water beings to land dwellers who have spent the majority of our evolution in nature (The Wave, 2020), whose ancestors required access to fresh water to survive (White et al., 2010) and whose biology contains a high water content; 78% of our bodies are water at birth which decreases with age to about 60% (Nichols, 2014).

71% of our planet is covered by water and it is, along with air, the "primary ingredient for supporting life" (Nichols, 2014, p8). The WHO recognizes this link and that as "most of the earth's surface is covered by water, and most of the human body is composed of water" (WHO, 2017) there is a critical link between health, water and our ecosystems and that contact with nature is a universal, basic human need (Heerwagen, 2012). Hydrophilia is a medical term that refers to something "having a strong affinity to water" ('Hydrophilia', 2021) that in this hypothesis could be understood as a logical natural extension of biophilia (Foley et al., 2019).

Despite the term biophilia not being coined until the 1980's, immersion in water as a restorative practice for the mind and body has been recognized for thousands of years (Nichols, 2014). Archeological excavation of Roman Baths have uncovered the pro-social impact associated with bathing for this ancient civilization (Cartwright, 2013) and, more recently, the Victorians were known for prescribing recovery by the sea to "take the waters" after periods of illness (Depledge & Bird, 2009). It has also been suggested that ancient coastal dwelling communities whose diets included higher amounts of the Omega 3 fatty acids found in fish benefitted from increased brain development (White et al., 2010).

Aquatic environments remain a top tourist attraction worldwide so the development of BSH as an important therapeutic option may well be a logical extension of health care in the 21st century (The Wave, 2020). As Heerwagen succinctly puts it, "the biophilia hypothesis and supporting research tells us that as a species, we are still powerfully responsive to nature's form, processes and patterns" (Heerwagen, 2012, p39).

Attention Restoration Theory

It was Kaplan and Kaplan who first discussed in depth the theory of Attention Restoration (ART) which proposes that humans have two types of attention: directed, which requires strong focused concentration; and involuntary or non-directed, and that time spent in natural environments stimulates the latter type, allowing our directed attention to rest and our minds to relax (Kaplan & Kaplan, 1989). The activation of involuntary attention is "typically captured in a bottom-up fashion by features of the environment itself" (Kaplan & Berman, 2010, p48) and needs to be gentle, a concept coined 'soft fascination' that is activated in calm, natural environments that attract involuntary attention and limit the need for direct attention (Kaplan & Berman, 2010).

Allowing our directed attention to rest combats attention fatigue when we have been required to specifically focus on one thing (Ohly et al, 2016). ART therefore proposes that time spent in natural environments allows us to recover our concentration abilities, offers us time to reflect and consider problems (Ohly, 2016) and can "renew attention after exerting mental energy" (Ackerman, 2021, p2).

'Soft–fascination' has links with the psychological concept of 'flow', a term identified by psychologist Mihaly Csikszentmihalyi who contends that flow is a "hyper-focused mind state that makes us more productive" (The Wave, 2020, p23). It is a state that benefits our wellbeing that we experience when we are "completely absorbed to the exclusion of all else" (The Wave, 2020, p23). These concepts support Ulrich's research on biophilia which states that after a stressful situation, humans have a biological impulse to seek a natural environment in which they can ease the impact of stress, recharge and renew positive feelings (Ulrich, 1993) thus supporting a symbiotic relationship between the two theories.

Stress Recovery Theory

Closely intertwined with ART is Stress Recovery Theory (SRT) that explores humans' recovery rates from stress and how this links to their environment. Ulrich et al. (1991) explain that if someone is experiencing stress that is impacting their body, brain and behaviours, time spent in an "unthreatening natural environment" will mitigate and reduce feelings of stress by restoring a "positively-toned emotional state" (Ulrich et al., 1991, p1). This restorative

quality inspired by nature links closely to ART as the brain has time to relax whilst the mind is "occupied without purpose" (Ulrich et al., 1991, p206).

Research shows that living within close proximity to, or having regular contact with, natural environments affects our nervous system and reduces the risk of stress related illnesses (The Wave, 2020; Ashbullby et al., 2013). Research also shows that regular contact also reduces health inequalities by reducing stress, promoting increased physical activity and stronger communities (Depledge and Bird, 2009).

Cold water immersion in particular has been found to be beneficial in reducing stress and boosting the immune system. Immersion evokes the body's stress response, both hormonal and psychological, readying the immune system to deal with injury or illness (The Wave, 2020) and reducing cell inflammation which is a chronic stress response linked to depression and anxiety. This stress response reduces in intensity with repeated exposure (van Tulleken, 2018). Cross-adaptation is a term used when the body adapts one type of stress for another. "Through cross-adaptation, cold water immersion may be able to reduce this chronic stress response together with inflammation and mental health problems" (van Tulleken, 2018, p2), thus alleviating responses evoked in every day life such as panic attacks.

Physical Health Effects

The final key area of research reflects the physical health effects of BSH. It is commonly acknowledged and well supported by research that regular exercise is necessary for maintaining both physical and mental health. A report from the Chief Medical Officer for England (2004) finds that regular exercise has the same impact as antidepressants in treating mild to moderate depression as well as improving concentration and mild cognitive impairments (Lam & Riba, 2016). The earlier humans participate in regular exercise, the greater the reduction in risk of developing obesity, anxiety and depression (Ashbullby et al., 2013; The Wave, 2020). The frequency of the exercise is relative to the benefit received. In order for it to be effective in reducing depression participants must engage a minimum of three times per week (Lam & Riba, 2016) with research showing that regular activity increases neuron development in the hippocampus which supports learning and memory (The Wave, 2020).

Exercise in natural environments is "increasingly being considered as key settings for health promotion" (Ashbullby et al., 2013, p138). Aquatic environments and cold water immersion offer specific physical benefits such as boosting circulation, lymphatic drainage and the production of brown fat which reduces weight gain (The Wave 2020). Swimming has been found to release "endorphins and endocannabinoids (the brain's natural cannabis-like substance)" (Nichols, 2014, p110) in part due to the constant stretch and release of the muscles and accompanied rhythmic breathing that stimulates a meditative state. Endorphins such as dopamine and serotonin, released during aerobic exercises like surfing and swimming, support emotional processing in the

prefrontal and limbic parts of the brain (Nichols, 2014). The release of cytokines, pro-inflammatory proteins which impact immune responses, are also reduced with repeated cold water exposure which in turn can reduce symptoms of depression (van Tulleken et al, 2018).

Mainstream Integration

Green health, meaning health promoted in a natural environment context, is now part of the National Health Service (NHS), a strategy proposed in the Natural Environment White Paper (2014) which, amongst other aims, sets out to build partnerships and develop joint wellbeing strategies between Local Nature Partnerships and Health and Wellbeing Boards, and to connect communities with nature by improving access to countryside and coastlines via public transport and development projects (Great Britain, 2014). More widely, the EU programme SOPHIE has found that nature is now considered as an "alternative or adjunct to medication for some mental health conditions; and in some countries the concept of 'nature prescriptions' is already being applied" (SOPHIE, 2020, p1). It is hoped that this integration into mainstream support will see a rise in awareness of and access to BSH.

Blue Space Health and Domestic Abuse

Although research and literature on the effects of DA on women is plentiful, the common intervention approaches covered by the literature focus on psychological and therapeutic methods. I have found very little that focuses specifically on natural environments and BSH as an intervention to target the impact of DA and trauma. A high percentage of client groups in BSH studies are veterans experiencing PTSD and young people with special educational, behavioural and physical needs.

This may be because underfunded DA services are not able to offer a range of holistic support and must focus their resources on stabilizing mental health and basic daily functions (Women's Aid, 2021). It must be acknowledged that access to BSH, particularly surfing, which requires expensive equipment and qualified instructors, has financial implications when considering social inclusion. Geographical location increases the financial burden with the requirement of transport to enable access to aquatic environments. Marshall et al. (2019) write that with the development of inland wave pools these obstacles and limitations in delivery will reduce. However, they do still have financial implications.

BSH is still a relatively new area of research and Marshall et al. argue that when it comes to the structure of surf therapy research, "developing a programme theory as to how surf therapy works would be beneficial to guide research and evaluation" (Marshall et al., 2019, p2). This is supported by Britton et al who call for "more rigorous pilot interventions co-designed in collaboration with population groups, professionals, policymakers and researchers" (Britton et al., 2020, p65) to evaluate findings and reduce the risk of bias that impacts

researchers' ability to determine the impact of BSH. Most studies seek to assess self-esteem, resilience, confidence, stress management and pro-social behaviours (amongst other wellbeing indicators), which are often measured through self-reporting methods (Britton et al., 2020). Developing more resilient and diverse methods of assessment, as well as offering interventions to a greater variety of client groups, would increase the recognition awarded to BSH interventions as being effective treatment methods.

Nichols discusses the concept of whole happiness in relation to BSH, which is born from being "outside, actively in motion, pursuing goals, and solving problems together" (Nichols, 2014, p48). This concept would promote empowerment, growth, social support and community, some of the key areas that DA services focus on. It is too soon to understand the full impact of COVID-19 on DA victims but, as Britton et al. claim, BSH "has the potential to improve mental health for diverse groups, but more research and investigations are required" (Britton et al., 2020, p65) to strengthen the link between the client group and the approach.

These points also tie into theories around Green Social Work (GSW). GSW is a transdisciplinary, holistic area of practice developed over the last decade that seeks to incorporate social work's aim to "transform the socio-political and economic forces that have a deleterious impact upon the quality of life of poor and marginalised populations and secure the policy changes and sustainable social transformations necessary for enhancing the well-being of people and the planet today and in the future" (Dominelli et al., 2018, p2). Although mostly focused on the impact of environmental crises, it more generally acknowledges the links between social policies, human behaviour and the economy and the correlating "extent of suffering experienced by victim-survivors" (Dominelli, 2012, p16), emphasizing the important relationship between people and their physical environment, responding to problems in their totality (Dominelli et al., 2018) and understanding how changes impact the stability of human life and wellbeing (Kapro, 2016).

GSW also has roots in social-environmental justice, taking its lead from indigenous movements that have long advocated for "the restoration of their rights over their resources and more sustainable lifestyles based on a symbiotic and respectful relationship with nature" (Dominelli, 2012, p313). Some of the core values of the theory are built upon equality, social inclusion, equal resource distribution and "a rights-based approach to meeting people's needs to live and develop their talents in an ethical and sustainable manner" (Dominelli et al., 2018, p3), which matches the values of empowerment practice.

As survivors of DA often experience both physical and mental health diagnoses, and research around BSH supports its positive impact on both physical and mental health difficulties, this study seeks to establish if BSH is an effective intervention for DA victims.

Methods

This chapter details the methodological approach of my study. Here I discuss the design, context and methods and conclude by considering my recruitment approach and ethics.

To reiterate, my research question for this study is:

What effects do Blue Space Health and Intervention Therapies have on the wellbeing of women who have experienced domestic and sexual trauma?

The research question was initially broader, covering anyone who had experienced trauma. However, due to time and financial limitations, as well as constraints imposed by the pandemic and the nature of the course, it made sense to reduce the focus of the question to specifically look at the wellbeing of this particular client group. D'Cruz and Jones support this point by stating that when "faced with such considerations, it is not uncommon for the scope of the project to be reduced and perhaps for the research question itself to be reviewed and amended accordingly." (D'Cruz & Jones, 2004, p7)

Study context

The pilot sought to offer three sessions of surf therapy that were each two hours long and held once a week for women within the North Devon Against Domestic Abuse (NDADA) service. These sessions were offered in partnership with Wave Wahines, an all-female surf club run by Yvette Curtis. Sessions were facilitated by an International Surfing Association (ISA) qualified surf instructor and two water assistants, one of whom was myself, as well as a member of staff from the refuge. Participants met at the local surf school where they changed into wetsuits and rash vests before walking down to the beach. As the project facilitator, Yvette led mindfulness exercises on the beach before the surf instructor gave a beginners' surf lesson. The mindfulness exercises were informed by Groundswell's Surf Therapy curriculum which is "rooted in somatic, trauma-informed, nature, and community therapy models" (Groundswell, 2021, p1) and seeks to support women who have experienced trauma and subsequent mental health needs. The ratio of participants to staff in the water was 1:1 and the water session lasted one and a half hours.

I was able to secure ethical clearance to the research project as I was already involved with the surf therapy pilot as a volunteer and it was made clear that the data from my research would be used to support further funding bids for the programme. Yvette was able to secure a small amount of funding through private donations to support the pilot project. Due to funding limitations we agreed that the pilot would run for three weeks and support a maximum of four women. Although this was half the capacity and running time of the proposed course it was felt this would be sufficient to obtain the necessary data.

Philosophical Approach

This study follows the paradigm of interpretivism, that truth is a matter of perception and is shaped by our experiences and feelings, as well as cultural and historical influences (Ryan, 2018). Ryan writes "interpretivism has a 'relativist' ontological perspective. Relativists suggest that reality is only knowable through socially constructed meanings and that there is no single shared reality" (Ryan, 2018, p9). As a researcher it is proposed that one cannot be completely removed from beliefs and experiences. Researchers try to understand how individuals "make sense of the world around them" (Bryman, 2012, p26) and how their own influences impact the way they approach their work. It is a common approach within qualitative studies using self-reported collection methods. This design was appropriate for this study because it is seeking the voice, experience and interpretation of the participant.

Research Design

The study design is mixed method and longitudinal. This design was chosen because it best addressed the research question. The methods I employed were questionnaires and interviews. The study needed to be longitudinal because the aim of the research was to map any changes in the wellbeing of the participants over the course of the surf therapy pilot. Becker et al. (2012) state that longitudinal design is mostly concerned with capturing change over time as data is collected on at least two different occasions and is "valuable for charting changes in experiences and views following a change of some sort" (Becker et al., 2012, p282), the change in this circumstance being the exposure to surf therapy on a weekly basis.

In terms of longitudinal design, this initial research project does not quite meet the criteria of a prospective design (Becker et al., 2012) as, although timeframes can vary and the tracking in this case was intensive to map a particular intervention, the course was a pilot and cannot yet be considered significant enough to be considered a turning point or policy intervention. Likewise, despite using a questionnaire as a data collection method, the design cannot be considered to be a cross-sectional social survey as the number of participants was too few. Due to funding and logistical restrictions there is not currently the opportunity to collect data from a larger group. Should the project expand in the future the research design could be developed to meet the criteria for both models.

The design is closer to a panel design as it "entails collection of data on the same group of people on at least two occasions" (Becker et al., 2012, p221) as opposed to a cohort design since the participants' ages and backgrounds were too varied.

Becker et al. (2012) go on to discuss recent developments in qualitative methods that reflects researchers' needs to understand the lived experience of participants and how this influences their reasoning for changes in policies and interventions. Mixed longitudinal designs that marry qualitative longitudinal and

survey datasets have become a popular choice as they offer both depth and breadth in analysis, producing richer, more robust evidence. I felt a qualitative longitudinal design was a suitable design fit for my research. The interviews with the participants are qualitative as they seek to capture the feelings and opinions of the participants. The questionnaire offers quantifiable data which, despite the limited number of responses, shows changes in the participants' perceived wellbeing over the course of the pilot.

Research Methods

Interviews

I knew that I wanted to interview participants because I wanted to hear their voice and opinions in full to understand their experience of the pilot. The research question seeks to monitor any change in participants' wellbeing so participant contribution was necessary to obtain that data. My decision to adopt this method was supported by Campbell et al. who state that "interviews enable the exploration of data about feelings and beliefs, attitudes and fears, hopes and opinions" (Campbell et al., 2017, p52).

My choice to use interviews in the design was also influenced by the wealth of information on the method and technique for conducting a good research interview. Interviews are the most widely used method in qualitative research (Bryman, 2016; Kadushin & Kadushin, 2013) and the technique that is used most frequently and consistently in social work practice (Grinnell et al., 2005; Shaw & Gould, 2001). Shaw and Gould write that "interviewing is an everyday activity… the mass media, human services and researchers generate a great deal of information through interviewing" (Shaw & Gould, 2001, p65) which extends as a dominant practice method to researchers seeking data and social workers seeking information to inform their practice, particularly those whose role focuses on casework.

When considering the interview schedule I wanted to focus the conversation on specific topics around wellbeing and each of the participants' experience of Blue Spaces. However, I wanted also to leave enough space to explore the opinions and feelings of the participants without restricting their contribution so as to make use of any "unanticipated data interviewees offer" (Grinnell et al., 2005, p246). For this reason I chose a semi-structured interview style which allows for an interview schedule to focus on specific topics and hypotheses whilst offering considerable flexibility and a more natural conversation (Grinnell et al., 2005; Bryman, 2016). Bryman (2016) writes that within qualitative research there are two main interview formats adopted, unstructured and semi-structured, both of which allow the interviewer to depart from the interview guide in both order and wording to ask follow-up questions to participants' responses. This technique, known as "funneling", helps to narrow questions as the interview progresses from a broad starting question (Grinnell et al., 2005). Bell states that "where theory is expected to emerge from the data…it may be that a looser

interview format is useful" (Bell, 2017, p75), a valid approach which provides the researcher with "rich, detailed answers" (Bryman, 2016, p467). This was exactly the type of data I was seeking in my research.

Whilst it is clear that interviewing is an effective, frequently used method of collecting data it is not without its disadvantages. Participants may provide inaccurate answers due to a number of factors. These include, but are not limited to: being unable to remember, inadvertently making mistakes without realizing it, or deliberately doctoring their responses to fit a specific narrative either for themselves or for the interviewer, perhaps as a subconscious desire to please (Grinnell et al., 2005). Interviewing is also a time-heavy method as it requires considerable organization to set up, particularly with harder to reach client groups, and time post-interview to transcribe the conversation. As my research project only sampled a small number of participants I was able to mitigate the effects of this disadvantage from being too time consuming. The small sample size of participants could also then be viewed as a disadvantage although Campbell et al. write that "qualitative research does not necessarily require large numbers as the essential issue in sampling is that respondents are 'information rich' through lived experience" (Campbell et al., 2017, p53).

I had wanted to conduct my interviews in person as it is easier to control the environment (Grinnell et al., 2005), to mirror the body language and tone of the interviewee and to allow space for pauses and reflection, than it is with online platforms. However, due to university-wide restrictions on any face-to-face research due to the COVID pandemic this was not possible. Zoom provided a positive alternative and although some of the nuance of in-person interaction was inevitably lost I was still able to conduct full interviews that produced rich, in-depth data. Society has adapted over the last 18 months to communicate more comfortably via online platforms. It is my opinion that had I tried to conduct these research interviews a year ago at the start of the pandemic the responses would not have been as natural.

Questionnaires

I chose to include a questionnaire in my research design to measure any change in the participants' feelings of wellbeing between the start of the pilot and its completion. A pre and post test design is important for "showing whether there have been any measurable changes in respondents scores… and to try to establish whether the intervention they have experienced has played any part in these changes" (Bell, 2017, p120). This design format is longitudinal as responses were collected over two time periods (Grinnell et al., 2005).

The format also constituted a group-administered survey, which is commonly used with groups who meet on a regular basis (Grinnell et al., 2005). Despite university restrictions meaning I was unable to distribute the surveys myself, the gatekeeper was able to distribute them to the group who completed them individually. Completed questionnaires were then placed in a sealed envelope for me to open at a later point. By taking the opportunity for participants to

complete the questionnaires when they were already gathered, this element of the research design was able to guarantee a higher response rate than if the questionnaires had been mailed or sent online to participants (Grinnell et al., 2005).

I had originally intended the questionnaire to be a combined GAD-7 and PHQ-9, the questionnaires used in many medical settings to gauge anxiety and depression. However, there were several disadvantages to this initial proposal. The dataset these combined questionnaires would have produced may have been rich in content but not necessarily focused on general wellbeing, providing instead an analysis of any changes in medical diagnosis. Even with a small sample group, the analysis of these questionnaires would have been extensive. This design would also have required a greater level of disclosure from participants, which may have proved distressing for them and seemed unnecessary to the research question. For this reason I applied for and was granted permission to use the Warwick-Edinburgh Mental Wellbeing Scales (WEMWBS).

There are two versions of the WEMWBS, a fourteen item scale and a seven item scale. I chose to the use the shorter, abridged WEMWBS 7 (see Appendix 1). I felt that for the purpose of this research project the longer fourteen item scale would not add much more depth of understanding but would increase the amount I was asking participants to disclose. WEMWBS was developed to "enable the measuring of mental wellbeing in the general population and the evaluation of projects, programmes and policies which aim to improve mental wellbeing" (Warwick Medical School, 2020, p1) which suited my purpose perfectly. I liked the WEMWBS scales because they are considered easy to complete and are well – received by participants for their positive focus on interventions and mental health.

Recruiting Participants

As I was already involved in the partnership between Wave Wahines and NDADA the recruitment process was straightforward. Yvette fulfilled the role of gatekeeper, defined by Grinnell et al. as someone "with formal or informal authority to control access to sites" (Grinnell et al., 2005, p236) and, through her communication with the manager and staff at the refuge, four participants were recruited. At the time three of the four participants were resident at the refuge and the fourth had just recently moved from the refuge to private housing in the local area. Prior to committing to the course the staff explained to the participants what the course would involve and what the research would require from them (if they chose to participate). Campbell et al. emphasise the point that "purpose needs to be explained clearly" (Campbell et al., 2017, p54) from an ethical perspective as well as consideration given to the timing of the research. It was explained clearly to the participants that participation on the course was not reliant on them also participating in the research. As part of my ethics application (see Appendix. 3.2), I wrote an introductory letter about the project and explained what the research would be used for. The letter explained who I

was, what the participants would be asked to do (participate in an interview and questionnaire), that participation was completely voluntary and that all information would be anonymised and confidential. All four participants on the course were happy to participate in the research once they understood its use and that the data they provided would be anonymised.

The questionnaires were distributed by the gatekeeper and completed on location at the surf school. Four were completed before the start of the first session and three were completed a fortnight after the last session. The disparity in completed questionnaire numbers was due to attrition.

I intended to do the interviews a fortnight after the pilot completed. It was a challenge to retain participants for the interviews because they happened after the surf therapy pilot had ended. Due to the transitory nature of the participants' current circumstances and their need to change their contact details frequently to protect their safety, it took more negotiation and time to organize. All interviews were conducted over the telephone or Zoom with support from participants' key workers. I was conscious that the participants were already familiar with me and that I did not want our already established friendly bond to influence their interview answers. Campbell et al. write that one of the challenges of interviews is that participants might "be afraid of offending the interviewer" (Campbell et al., 2017, p53) and may unintentionally doctor their answers, providing answers that portray themselves in a good light or as amenable to the interviewer. I stated clearly at the start of each interview that it was most helpful to the project if the participants were completely honest in the opinions they shared as this would help to improve the service for future participants and offered unconditional positive regard (Rogers, 1951) towards all the opinions and statements they gave, regardless of their content.

Due to the limited number of participants, attrition was probably the most significant problem facing the research design that would affect the data collected. Becker et al. write that "all longitudinal designs suffer from the problem of attrition… whereby some people refuse or are unable to continue their participation" (Becker et al., 2012, p225). The risk of attrition was compounded by the vulnerabilities of the participant group and, despite support from services, the instability of circumstance that women fleeing domestic violence often find themselves in. In this case the presence and support of the service staff was invaluable for supporting stable participation in the study.

In total, three of the four participants were interviewed. As the sample size of participants was so restricted due to limited funding for the pilot course, one drop out equates to an attrition rate of 25%. Dumville et al. write that "attrition prevents a full intention to treat analysis being carried out and can introduce bias" (Dumville et al., 2006, p1), a limitation of the study that I was already conscious of but now needed to consider further. Gondolf & Foster (1991) found that a review of group programmes in the mid-80s showed attrition to be at almost 60% for both mandatory and volunteer participants in twelve-week therapeutic programmes. It can be reasoned that, despite the voluntary nature of the course and the research programme, some attrition could be expected.

I did try to reach participant 'Surfer 3' through NDADA. However, due to other circumstances the participant had left the service between the end of the course and issue date of the questionnaire. Attrition in higher risk populations is acknowledged as an obstacle to complete data collection as external problems and high levels of psychological distress contribute to its likelihood (Gustavson et al, 2012). Gustavson et al. go on to write that "attrition may also be related to social factors, such as support from spouse or friends" (Gustavson et al., 2012, p2). For a survivor of domestic abuse this support network is often limited by the time they enter refuge so for 'Surfer 3' to have then left the service would have reduced her support system further, supporting the statement by Gustavson et al. One drop-out creates questions around bias and affects the analysis of the data, leaving an incomplete data set for this study. However, "without the service user perspective it could be argued that any picture of service effectiveness would be incomplete" (McLaughlin, 2012, p138) and it is unethical to assume that victims who have experienced trauma are always responsible for attrition, despite their decision to discontinue participation (Hester, 2006). Therefore, despite the risk of attrition and its effects, it is still important to obtain the service users opinions to understand the efficacy of the intervention.

Data Analysis

I conducted a thematic analysis of the interviews as it is one of the most commonly used foundational methods in qualitative analysis (Braun & Clarke, 2006). It is "a method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p79) which is what I did with my transcriptions. When I was conducting the interviews I started to notice common themes in the responses of participants. I then read and re-read the transcripts and highlighted these common themes. These more specific themes were then grouped under the four broader headings that make up my thematic analysis.

To analyse the questionnaires I used basic descriptive statistics, "brief descriptive coefficients that summarize a given data set" (Hayes, 2021, p1). I produced these simple summaries alongside some basic graphic analysis (Trochim, 2021) to identify and discuss changes between the data set from the first questionnaires, conducted prior to the first session of the pilot, and the second questionnaire, conducted after the final session of the pilot.

Ethical Considerations

Ethics are particularly important in social work research considering the values associated with the profession (Bell, 2017), who then lists the key ethical considerations as; respect for human dignity, justice and fair treatment, respect for privacy, informed consent, no coercion or withholding benefits and, fundamentally, to do no harm.

To obtain permission from the university to conduct original research I had to submit an ethics application. This included a completed Ethics Application form, a letter of invitation to the participants and an email to the gatekeeper, a consent form, a list of support services participants could access after the course if required and an information sheet on the study (see Appendix 3). I also included a support email from the facilitator of the project which explained how the research would benefit the pilot. All consent forms completed by the participants were kept securely and anonymised to protect their identities. It was explained to all participants that participation on the course was not determined by participation in the research, that I would not be observing them in the water and that all information would be confidential and anonymous unless there was a safeguarding concern that I was required to report.

In the interviews, I displayed respect for privacy by making it clear to participants that I was not there to ask about their past. I stated that anything they wanted to disclose they could, although the questions I would be asking them would not probe into their trauma. By my communicating clearly, participants were able to give informed consent and by agreeing the parameters of the research prior to consent both parties were able to understand "how to work together and share power" (Becker et al, 2012, p59).

Becker et al. go on to write in regard to reciprocity and coercion that "by giving something in return for receiving information, researchers show their respect towards the participants. This can reduce the power inequality between themselves and the researched. Researchers must put efforts into making a positive difference in the lives of the participants or the group" (Becker et al., 2012, p74). I believe that by making it clear that participants would be welcome and receive the same level of service, regardless of their participation in the research aspect of the project, it communicated respect towards them and created a more relaxed atmosphere through unconditional acceptance.

Due to their experienced trauma DA survivors are considered, in general, to be a vulnerable client group (Brown, 2004). All participants were offered signposting to support services after the interviews, as well as support from staff within the refuge, as social work ethics dictate a care of duty to the wellbeing of the client throughout an interaction (BASW, 2014). No participant subsequently requested further support.

Findings and Discussion

This chapter presents and discusses the study's findings, starting with questionnaires before moving on to analyse the interview transcriptions.

Questionnaires

As stated in the Methods chapter, I decided to us the WEMWBS 7 questionnaire to measure wellbeing in participants. The first questionnaire was completed on the first day of the pilot course prior to commencement of the session. The second questionnaire was completed a fortnight after the completion of the pilot. By asking the participants to complete the same questionnaire twice, once at the start and once at the end of the pilot, I hoped to show any difference in self-assessed wellbeing related to the intervention.

The questionnaire is made up of seven statements that refer to the respondent's current state of; optimism for the future, feeling useful, feeling relaxed, dealing well with problems, thinking clearly, feeling close to others and their ability to make up their own mind. Respondents rate each statement from 1 – None of the Time, to 5 – All of the Time, to indicate the frequency with which they have aligned with these statements.

Results from the first questionnaire showed the majority of responses to sit between the middle and end of the scale of wellness with an average rating of 2.75 (although all results were whole numbers so the nearest average result could be assumed to be 3 if rounded up). A lower number indicates a lower wellbeing rating.

The following table shows the results of the WEMWBS 7 gathered on the day of the first session prior to commencement:

Table 1 – WEMWBS 7 pt.1

10/06/2021	Surfer 1	Surfer 2	Surfer 3	Surfer 4*
Feeling optimistic about the future	4	3	4	3
Feeling useful	4	2	3	2
Feeling relaxed	4	1	2	2
Dealing with problems well	3	2	3	3
Thinking clearly	3	2	2	3
Feeling closer to other people	3	1	2	3
Able to make up my own mind about things	4	3	2	4
Total	25	13	18	20

Wellness Scale Key
1 – None of the time
2 – Rarely
3 – Some of the time
4 – Often
5 – All of the time

*Data for Surfer 4 was collected on 17 June 2021 due to late entry into the programme.

The table shows that three participants gave a response higher than a three, two of the participants for one question or 14% of their responses and one participant for four questions or 57% of her responses. The fourth participant did not offer a response above a three for any of the questions.

The second table shows the responses collected from the second questionnaire issued a fortnight after the pilot course ended:

Table 2 – WEMWBS 7 pt.2

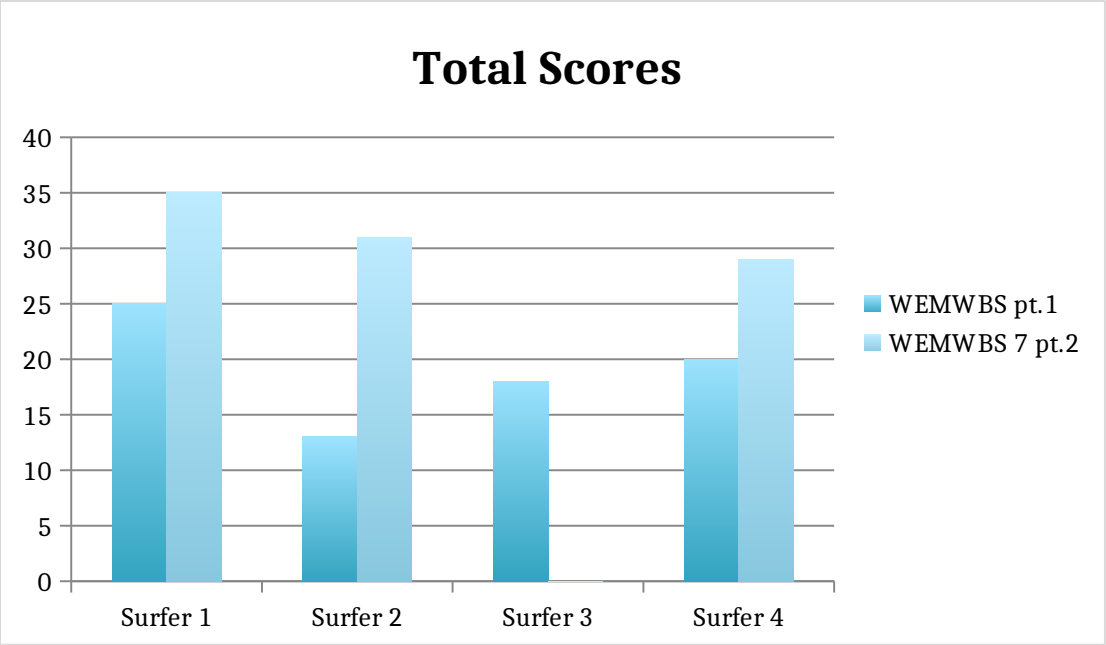
13/07/2021	Surfer 1	Surfer 2	Surfer 3*	Surfer 4
Feeling optimistic about the future	5	5		5
Feeling useful	5	3		3
Feeling relaxed	5	5		4
Dealing with problems well	5	3		4
Thinking clearly	5	5		4
Feeling closer to other people	5	5		4
Able to make up my own mind about things	5	5		5
Total	35	31		29

Wellness Scale Key
1 – None of the time
2 – Rarely
3 – Some of the time
4 – Often
5 – All of the time

*Data for Surfer 3 was not able to be collected due to attrition

Responses from the second questionnaire show that the average response from participants is a 4.5 and that all participants' individual average response has increased with no participant offering a response lower than a three. There is a disparity between the first data set and the second due to attrition from one of the participants.

Graph 1



For the participants who completed the pilot course, each data set shows an increase in the average response. 'Surfer 1' gave an average response of 3.5 prior to the course commencement which increased by nearly 43% to an average response of 5 by the end of her participation in the pilot.

Table 3 - Difference in Results - Surfer 1

	10/06/2021	13/07/2021
Feeling optimistic about the future	4	5
Feeling useful	4	5
Feeling relaxed	4	5
Dealing with problems well	3	5
Thinking clearly	3	5
Feeling closer to other people	3	5
Able to make up my own mind about things	4	5
Average	3.5	5

The table clearly shows by the lack of correlation in scores that responses to all seven questions improved between the two dates. Likewise with 'Surfer 2' there is no correlation and interestingly the highest response given in the first questionnaire becomes the lowest response given in her second questionnaire.

Table 4 - Difference in Results - Surfer 2

	10/06/2021	13/07/2021
Feeling optimistic about the future	3	5
Feeling useful	2	3
Feeling relaxed	1	5
Dealing with problems well	2	3
Thinking clearly	2	5
Feeling closer to other people	1	5
Able to make up my own mind about things	3	5
Average	2	4.4

Surfer 2 shows the greatest increase in response to an individual question with an increase for both Question 3 and 6 of four points from a one to a five. This marks a considerable improvement in Surfer 2's feelings of relaxation and closeness to others between the start and the end of the pilot course.

The final data set shows that Surfer 4's responses increased by an average of 1.3, again with her highest response in the first questionnaire becoming her lowest response in the second questionnaire.

Table 5 - Difference in Results - Surfer 4

	10/06/2021	13/07/2021
Feeling optimistic about the future	3	5
Feeling useful	2	3
Feeling relaxed	2	4
Dealing with problems well	3	4
Thinking clearly	3	4
Feeling closer to other people	3	4
Able to make up my own mind about things	4	5
Average	2.8	4.1

The questionnaire data suggests improved wellbeing between the start of the surf therapy course and the end. However, as this is only a correlation it is not conclusive evidence that the surf therapy is the cause of self-reported improved wellbeing.

Thematic Analysis

Four themes comprise my thematic analysis: Wellbeing & Mental Health, Community & Support, Freedom & Liberation and Exercise & Body.

Wellbeing and Mental Health

Confidence

Confidence building and an increase in self-confidence was a key theme that was evident across all transcripts. Participants reported self-assessed developments in self-confidence and self-esteem and how this differed from their previous circumstances. One participant stated that her previous partner had hugely affected her confidence and that there was a significant difference in how she now felt. She said:

> *"My confidence was also knocked by him. It was just such a huge difference"* (Surfer 4).

This sentiment is supported by Cascardi and O'Leary (1992) who found that self-esteem lowered and depressive symptoms increased with exposure to physical violence, with the frequency and severity of the trauma also contributing factors. Mitchell and Hodson write that "increased levels of violence, minimal personal resources, lack of institutional and informal social support, and greater avoidant coping styles were related to lowered self-esteem" (Mitchell & Hodson, 1983, p1) whilst the unpredictable nature of the violence and ongoing stressors meant that women increasingly showed signs of "learned helplessness"' a reduction in their sense of self-mastery and esteem. Low self-esteem is then linked to social dysfunction, sleep disturbance and anxiety and depression (Matud, 2005).

The participant went on to state:

> *"I definitely feel more confident in myself and want to try more things. It's definitely made me more confident and shown me what I can actually achieve"* (Surfer 4)

Acknowledging previously under-recognised strengths, increasing involvement in social resources and developing identified areas of improvement can all increase self-esteem (Bahadir-Yilmaz & Oz, 2018), promoting mastery of one's life where it had previously been denied.

As well as confidence in self, one participant also expressed her increased confidence within the environment. She stated that she had previously been wary of the sea but, due to her increased exposure, now felt more confident. This confidence had affected her children as well who she now allowed to go in the

water where previously they had been restricted as a symptom of her fear. The participant stated:

> *"I think doing that has given me a confidence boost around water because before I've never let the children go in the water or anything because I've always been a bit scared of it."* (Surfer 2)

The positive impact of the intervention on people connected to the participant was not an area of research that my design had considered. However, it would be interesting to measure the secondary impacts on the wellbeing and confidence of participants' loved ones as a result of the intervention. There is scope to explore this further by also measuring any change in loved ones' perceptions of blue spaces and their motivation to include blue space health in their daily routines.

Wellbeing

Self-reported increases in positive mental health and wellbeing were also evident in the interview transcripts. Participants discussed the evolving state of their mental health from when they were in their abusive relationships, to their state prior to the surf therapy intervention after they had fled, and their perception of their mental health since the end of the pilot course. Participants particularly noted increased feelings of calm and relaxation and a quieting of the mind. Surfer 1 stated:

> *"I immediately start to relax and it calms you and relaxes you and it really has helped"* (Surfer 1)

Phillips states that "much research now shows a positive correlation between time spent in nature and a person's overall health and wellbeing" (Phillips, 2019, p67) which these transcriptions appear to support.

One participant spoke about her mind being on overdrive and her constant battle with overthinking. Another described herself as:

> *"a real wreck mentally and emotionally"* (Surfer 1)

whilst the third stated that she never thought to self-soothe or calm herself as she didn't feel she mattered or was in control so had never had the space to stop and breathe. Each interviewee described the constant state of tension they had lived under prior to fleeing their relationships and the effect this had had on their anxiety. Research supports these reports where severe abuse is "consistently associated with worse social coping, as well as increased levels of anxiety and posttraumatic stress symptoms" (Ferrari et al., 2016, p2).

Transcriptions show that participants discuss their experiences of the surf therapy and its effects on their wellbeing and mental health as being in direct contrast to how they felt previously. One surfer said:

> *"You don't think about calming yourself because you know in your head that you're not a priority, you're not the one that matters, you are not the one that's in control"* (Surfer 4)

All spoke about feeling present, calm and relaxed and that not being rushed into any part of the activity supported them to feel more comfortable. One stated that she:

> *"didn't worry about anything. My mind just switched off from everything that happened or what I was even thinking and I just felt as though the waves washed all my worries away briefly."* (Surfer 2)

These self-reported developments can be linked to ART (Attention Restoration Therapy) and the environment and activity supporting the stimulation of non-directed attention.

Two of the three participants discussed the breathing exercises we had learnt on the beach and how they had tried to employ these tools as well as visualisations in other parts of their life to help them relax. Referring to her bedtime routine Surfer 1 stated:

> *"When I'm going to sleep at night and I'm tense and I just imagine I'm on the beach, sitting on the board with my hand in the sand, listening to the waves. And it works, it actually works"* (Surfer 1)

The third participant stated that she found it difficult to do this when away from the environment of the beach because there were too many distractions with family and housework. However, she reported practicing self-soothing by driving to the beach to listen to the waves or paddle in the water to calm herself when feeling overwhelmed. She said:

> *"I've learned from that that it can be therapy for me which I wouldn't have done that before."* (Surfer 2)

Strang writes that "water is used to discuss emotional ebbs and tides, at both individual and collective levels" (Strang, 2019, p26) and the reports from the participants suggest that the water and the therapeutic exercises we had done relating to it had become a useful tool for them to self-soothe.

Perhaps the most definitive response given regarding the theme of wellbeing was from a participant who was asked how she would describe her mental health and wellbeing during the course. She responded:

> *"I would probably say that whilst I was doing the surfing I didn't have a mental health issue… When I'm there (in the water) I don't think I need any medication or help or support."* (Surfer 2)

Community and Support

The theme of community was repeated frequently in all interviews. This presented itself in different aspects of the course but overall spoke of the need, desire and appreciation for connection with others having been isolated for so long.

Community with Other Participants

All of the participants discussed their social isolation prior to fleeing their past relationships. Long term isolation and lack of exposure led to increased anxiety and fear around meeting new people and being in social situations for some of the participants with Surfer 1 disclosing:

> *"I was so badly cut off and isolated that I was actually fearful of meeting new people, talking to people or being with people"* (Surfer 1).

This experience is supported by research that suggests "women dealing with escalating levels of violence may find it more difficult to maintain ties with friends,"(Mitchell & Hodson, 1983, p632). They write that women's personal and social resources are affected by stress and violence and that the changes induced by that stress, such as reduced social contact, increases their vulnerability to stress, both in the present and the future (1983).

The isolation the women described in their abusive relationships was not immediately alleviated after they moved into the refuge. The women spoke about a greater sense of community being placed with others who had experienced similar situations. However, they had all moved across counties in their efforts to establish their safety which meant leaving behind what limited social support networks they had previously held on to. Surfer 4 discussed the sense of community that was built through similar experience:

> *"Even my friends they don't quite understand… we often in the refuge have chats here and there about our relationships and what we've been through and our individual situations"* (Surfer 4)

One of the participants had already moved out of the refuge and spoke about feeling isolated and a desire to reconnect and build friendships. Mitchell suggests that a woman exposed to DA "may feel uneasy, hesitant, and embarrassed about approaching friends and family" (Mitchell & Hodson, 1983, p634), feelings that would increase an individual's sense of isolation. One participant spoke of an "underlying understanding" amongst her peers and that she was grateful to find people who "got her", whom she could lean on for support. An article on Health Talk advocates "the idea that women can share their experiences of abuse to empower themselves and others is an important one" (Health Talk, 2021, p1), which is further supported by Tutty et al. who discuss group interventions providing a sense of commonality, the "all being in the same boat phenomenon"

which alleviated the shame the women felt at having been abused (Tutty et al., 2006, p3). Empowerment through mutual support was discussed by the participants, one of whom said that to have others in the group clapping, cheering her on and happy to see her happy was a sign of a true, affectionate bond, adding:

> *"When someone is happy to see you happy that's almost like true love, true care and true friendship"* (Surfer 4).

All of the interviewees stated that the course being a group activity was a motivator for their participation with Surfer 2 saying she:

> *"...wanted to reconnect and build my friendships"* (Surfer 2) whilst Surfer 1 said she was motivated to be *"able to bond with people and to be a part of something"* (Surfer 1).

Research suggests that social support benefits psychological health and that support received via social networks "promote health directly by helping individuals to maintain valued social identities, as well as by providing material and emotional support during times of crisis" (Mitchell & Hodson, 1983, p634). As noted in the literature review, advocacy programmes that have been found to be effective in supporting DA survivors also seek to build social support and community. The group dynamic and peer support aspect of the course is both for practical reasons – surf therapy is facilitated well in a group and is more cost effective to run, and for wellbeing reasons. It was the hope of those that set up the pilot that a group format would facilitate a sense of community amongst the women. These ideas are supported by Tutty et al.:

> "the benefits of offering support in groups include the fact that groups reduce social isolation, one of the significant effects of being abused by an intimate partner. Members of support groups provide encouragement to each other, allowing women to see that their reactions to the abuse are not unique" (Tutty et al., 2006, p3)

Support from Facilitators

Participants spoke positively of their gratitude to the facilitators of the course and how much the unconditional support and acceptance they had received from staff had meant to them. They each spoke about feeling supported and understood and two of the participants mentioned how good it was that they had been able to move at their own pace and were not rushed. One said:

> *"They never pressurized me or pushed me or made me do anything that I couldn't manage to do. They were very happy to go at my own pace and in my own time"* (Surfer 1)

Placing the service users' needs at the centre of therapeutic practice is a key social work value (BASW, 2014) and is important for building trust and allowing the voice of the service user to guide the support they receive. Peters et al. support this approach in front-line workers, stating how important it is for staff to be accepting of victims and that unconditional acceptance is a welcome response that "may provide opportunities for victims to further open up and disclose more about the abuse" (Peters et al, 2009, p6). By being in the water with the women, facilitators were able to develop the environment to be a safe space for emotional expression and build a trusting bond by accepting whatever feelings the women needed to convey. Understanding and caring about others is shown through active listening and an empathetic response (Peters et al., 2009), which the facilitators offered the women. They write that "being listened to demonstrates that someone cares, that the person is important, and that what they say means something. This is even more important to victims of domestic violence who have often been silenced and oppressed" (Peters et al., 2009, p5).

One of the participants spoke about how valued she had felt by knowing that there was a group of people turning up every week to run the course as volunteers, that they were organizing it, finding the funding and trying to understand her experience and support her. She said:

> *"Just even being there with us, just trying to understand what we've been through and to help us…it makes me feel good and I want to go out there and do that and try and help others as well"* (Surfer 2)

Actions and behaviours that show the participant was valued by others promote increased self-esteem which in turn, she stated, had made her want to work towards a career where she was also able to help others.

The idea of "paying it forward" was a smaller theme within community as two of the three participants stated a desire to raise money or contribute to the running of the course once they were more financially secure. Surfer 4 disclosed:

> *"My mum and I have decided to find a way to raise money for this surfing therapy"* (Surfer 4)

The third participant, although she did not mention financial support, did state that she had developed a great awareness of other people's situations and increased her empathy towards others. Peer-support is a well-established part of many support services and research suggests it is important for survivors to have the opportunity to support others as it helps them to "turn their negative experiences into something positive. Many services encourage peer support groups and involve volunteers who want to give something back to the services which helped them" (Health Talk, 2021, p1). This also relates to the idea of 'small self' which is defined as a "diminishment of the individual self" (The Wave, 2020, p24), often triggered by a sense of awe in natural environments that is thought to increase our desire to help others. The momentum of a positive upward spiral is not only beneficial to the participant but has the potential to benefit others, a

positive pattern that has the potential to multiply as more and more women are supported by the course.

Freedom and Liberation

Concepts around freedom and liberation were present in all interviews and can be split into two main sub-themes, geography and situation, with overlapping ideas between the two. In both of these sub-themes interviewees found comparisons between their past and their present to be a source of freedom and liberation.

Freedom from Previous Bonds

Participants gave moving accounts of the restrictive bonds they had been under in their previous relationships. They all discussed their limited options for activities whilst they were being abused, and how this had led them to stick to the things they already knew with one participant articulating her perceived lack of joy or development as she had not had any hobbies for such a long time. One said:

> *"...being in a controlled relationship for so many years it's hard to take that control back and that freedom back"* (Surfer 2)

whilst another stated that:

> *"It was like two different worlds going from my relationship with my abuser, to make decision on my own and to have my opinion listened to and validated"* (Surfer 4)

All of the women spoke about the constant tension, stress and anxiety they had lived in and how being given the opportunity to relax and experience joy just for themselves was worlds apart. One interviewee repeated that no one could understand how different it was and another stated that it was like stepping from one world into another. The participants' experiences map on to the findings of existing literature in the field. For example, Matud writes about the effects of living in a state of constant tension:

> "A woman who lives with someone who abuses her physically or emotionally usually develops a stress response to the attacks. If the attacks or threats are repeated, she can develop a series of chronic symptoms... the most prevalent symptoms are depression and post-traumatic stress disorder... anxiety and lowered self-esteem... feelings of guilt, social isolation, and emotional dependence on her abusive partner, together with severe somatic symptoms" (Matud, 2005, p2311)

The juxtaposition between this and the sense of freedom awarded through being listened to and validated and having no one restricting their behaviours was drastic. One interviewee spoke about how free she had felt in the water being

able to:

> *"...scream with joy whilst exchanging smiles and laughs with instructors and other participants"* (Surfer 4)

when she had previously never had the option of expressing herself this way. The participant spoke about the experience as being awakening and opening her eyes to

> *"...what else is out there, what I'm missing. I just want to kind of sweep up all the experiences, all the good stuff, because I'd have so much crap."* (Surfer 4).

This sentiment was repeated by another interviewee who correlated the empowerment of liberation felt in the water to the empowerment of taking back one's sense of self, body and mind. This desire is supported by research from Peters et al. who state that survivors are "marked by a desire to regain a sense of self that does not include their abusive partners" (Peters et al. 2009, p8) and by the success of empowering practice employed by DA support services.

Freedom Felt in Environment

Freedom was also experienced by the participants as a result of the environment. The geography of the location was an expansive stretch of beach with big skies and sand dunes and, of course, the sea. Several of the participants commented on how novel it was for them to spend time in this type of location as their exploration of different environments was limited whilst they were in their abusive relationships. Surfer 4 said:

> *"It was just an event in itself just to actually do something for me"* (Surfer 4)

The location became a therapeutic landscape, described by Doughty (2019) as a space that supports the development of wellbeing, is culturally associated with health and where healing is facilitated. Doughty writes that therapeutic landscapes are places that carry "health-related meaning… by individuals, groups and more broadly societies" (Doughty, 2019, p79). All three participants expressed a previous distrust or sense of unease around the sea, with two of them disclosing traumatic incidences when they were younger relating to water safety in the ocean. This fear of the water influenced one participant's parenting of her children and how much she would let them near the water's edge. She stated that, as she had grown up in an inner-city environment, she had never been exposed to the beach as an environment for leisure activities. One stated:

> *"I lived in a city before and then I moved down here and I knew it was around but I was always a bit sceptical of the sea and I never really went"* (Surfer 2)

The same participant echoed the statements of the other interviewees when she spoke about the course opening her eyes to opportunity for the environment to be a therapeutic setting, that listening to the waves, watching the movement of the water and being in that space was helpful in increasing her wellbeing. She said:

> *"I've never actually understood the benefits of it (the sea) until I did the course"* (Surfer 2).

Phillips supports this idea when discussing blue space health research which found that "being near water is relaxing, partly due to the sound, and partly due to the visual sense of a continually changing waterscape of light, colour and reflections" (Phillips, 2019, p69). When asked if the participants would continue to seek out blue spaces as therapeutic settings, all stated that they would and that it was a self-soothing tool they wanted to work into their regular life. One interviewee summarised the positive impact of the environment on her wellbeing and sense of awareness by commenting:

> *"...you're just in the moment and you're appreciating everything; the ocean, the scenery, the moment, the time you're having. It just makes you appreciate and be so grateful"* (Surfer 1)

Despite the initial concerns described, all three spoke at length about the positive impact the environment had on their wellbeing and sense of freedom. One participant stated that she could not wait to be in the sea every week whilst another said that she:

> *"...felt so alive in the water, I felt so free, I had my freedom back, I had my control back, you know, and it just felt like becoming myself again, not the victim"* (Surfer 2)

The motion felt whilst in the water was an important contributing factor to calming participants nerves. She went on to note:

> *"To actually be in the sea and feel the waves was the highlight for me"* (Surfer 2)

This was a sentiment that they all disclosed and supports previous ideas about why humans find the pulse of the sea so calming. Strang (2019) speaks about the sense of physical weightlessness that is felt whilst in the water and how this can extend to the brain when quieting thoughts, that a gentle wave or motion can induce reflection and support a meditative state that is both restful and calming. "The 'rocking' provided by water, and the 'soothing' and rhythmic sounds of waves" (Strang, 2019, p25) was a visual that one participant reported trying to recall later in the week whilst in the refuge to help her self-soothe when she was feeling anxious. If a person has been in a constant state of tension for an extended period of time, then even being able to relax the muscles in the body would need to be relearned and it was felt by participants that immersion in the water made the release of tension easier.

Exercise and Body

The last main theme to emerge from the transcriptions focused on how participants felt taking exercise and spending time on a new hobby, and how this impacted both their physiology and psychology. Linked to the concerns participants expressed regarding the environment and their trepidation around submersion, several also expressed their concerns prior to the course about their swimming and physical capabilities. Within their previously restricted life, one interviewee reported that exercise had not been possible, or a priority, as it was not deemed important by her abusive partner. Another, due to a diagnosis of arthritis, had questioned how much she would be able to do and if her physical level would be up to standard. The staff approached each participant with unconditional acceptance and emphasized the focus on their needs, which participants reported helped them to relax and feel confident moving at their own pace, with several mentioning the breathing exercises and space to find their balance in the moving water as being particularly helpful.

The physical activity was then reported by participants to be effective in reducing stress and supporting positive wellbeing. Research into the effects of physical activity on mental wellbeing has consistently shown it to "improve emotional disturbances… enhance positive mood, ameliorate distress, decrease anxiety and alleviate depression" (Chan et al, 2019, p102) which links back to research on SRT. A review by Zimmerman and Chakravarti supports this research by showing that regular physical activity is linked to an increase in self-esteem and reduction in depression, anxiety and rumination as well as an association with lowering risk of "all-cause mortality, cardiovascular disease, type-2 diabetes, obesity, hypertension, and thirteen different cancers" (Zimmerman & Chakravarti, In Press, p5). The regularity of the course, weekly for two hours on the same day, meant that participants were able to partake in regular physical activity, a catalyst for improving psychological well-being (Chan et al., 2019) whilst learning a new skill. One participant stated that being able to learn something new had definitely increased her confidence and all three expressed a desire to improve their surfing abilities by joining a local club and sourcing their own equipment after the course ended and when their finances allowed. One participant stated:

> *"I'd like to go swimming and keep trying to get better at surfing and I'd like to make it a regular part of my life, maybe not daily but at least twice per week"* (Surfer 4)

which was a positive development from her previous situation where exercise had not been a regular part of her routine.

Another positive physical impact of the course that I had not anticipated was the reduction in smoking that one interviewee reported. Her doctor had advised her to exercise to help with her depression and anxiety and, because of the amount

she smokes, she stated she had felt nervous because she did not feel physically fit. Despite needing to stop for breaks to catch her breath during the course, the participant self-reported a reduction in her cigarette consumptions. She said that:

> *"...not being stressed and having a clear mind I didn't want to stress smoke... and after the surfing my lungs felt so open and like I could just breathe after so long of my lungs feeling crushed"* (Surfer 2)

The participant stated that in the afternoons, after she attended the course, her cigarette consumption reduced from half a packet in a day to one cigarette a day, which she noted was a huge step for her. The feelings of relaxation and healthy exhaustion she felt as a result of the exercise lasted for the rest of the day and helped her to fall asleep more easily that evening. Another participant, who was living in refuge at the time of her participation, explained that it was common for the women to stress smoke together, even if they had not previously been heavy smokers, as a way of bonding with other residents and coping with the situations they found themselves in. This unexpected positive impact of the surf therapy requires further research, but might suggest that group exercise activities could provide a healthier platform for the women in refuge to bond over rather than increased nicotine consumption and dependency. The participant who had reduced her cigarette intake stated that this was further motivation for her to continue with surfing, as she wanted to improve her abilities and set a positive example to her children more than her desire to continue smoking.

Limitations of the Data

It is important to acknowledge the limitations of the data collected from this study to identify areas for further development in future studies. The first and probably the most obvious is the small sample size. Due to attrition only three of the four participants were interviewed. Considering the already small participant count this is a considerable loss. As previously explained, the participant count was limited due to funding, as is often the case in pilot programmes for new interventions and initiatives. It is widely noted in research design that "using a sample smaller than the ideal increases the chance of assuming as true a false premise" (Faber & Fonseca, 2014, p2). Despite the fact that all interviewees expressed similar opinions and experiences of the surf therapy course, which suggests the positive results of the intervention, the research would carry greater weight if repeated on future cohorts of the programme to show consistent positive effect.

Future study on the same programme would also reduce the risk of bias that this study currently carries. All of the interviewees were open to, and grateful for, their selection and participation on the course. This may mean that their responses are biased towards showing a positive impact as they already viewed their participation as positive before commencing (Britton et al., 2020). McLaughlin talks about this limitation and its prevalence in research, stating that there can often be an "assumed bias or cynicism that organisations, or

researchers, are hand-picking those people who are most likely to agree with them or represent the 'acceptable' face of that service user group" (McLaughlin, 2012, p7). As previously discussed when considering attrition, the transient nature of the participants' current situations, and the commonality of having all fled trauma, increases the potential for this client group to be harder to consistently engage. Low self-esteem as a result of repeated and escalating abuse may reduce an individual's belief that interventions are impactful or that they are worthy of receiving them (Mitchell & Hodson, 1983). It must therefore be a consideration that the staff at the refuge would potentially approach residents whom they believe to be more likely or able to engage consistently, perhaps due to higher levels of self-esteem, and who therefore may carry a positive bias towards the intervention as they are more easily able to participate in it.

Another limitation that must be acknowledged when considering an expansion of the course to other localities and refuges, or its overall ability to support women who have experienced domestic trauma, is geography. For women in refuge to have the opportunity to access the course they must be relocated to a location near the sea. To be transferred to another county the local authority has first to establish a woman's eligibility (Right of Women, 2012) and then secure either a refuge or social housing space. A report from Women's Aid found that 64% of all referrals to refuges were declined due to lack of space (Women's Aid, 2020) which means the number of women the course could be available to is limited, compared to the number of women who flee domestic violence every year.

Continued access to the blue spaces, and surfing in particular, after the course has finished would also require the women to continue living in an appropriate location. Even if they are able to secure accommodation in the same locality to their refuge, the interviewees spoke about financial and transportation limitations as restrictions to continued access to blue spaces. Many rural areas and rural beaches are not always serviced by regular or reliable public transport (Great Britain, 2014) which means that, without the ability to financially support personal transport, the women could face a barrier in getting to the beach. Surf equipment is both expensive and cumbersome, so potentially unsuitable for public transport or for someone with limited financial resources. One of the participants spoke about wanting to find a community of like-minded women she could continue to access blue spaces with after the course had finished as this would alleviate some of the barriers. This would suggest that, without further planning and post-course support, the intervention could have limited short-term benefits if the participants are unable to continue beyond course completion (Marshall et al., 2019).

Conclusion

This study set out to establish whether BSH could be considered an effective therapeutic intervention for women who have experienced domestic and sexual violence. It did so through the collection of original research on a surf therapy pilot project. I would suggest that the data collected supports the hypothesis that BSH may be effective, and that further research is required to establish both the validity of the approach and the means by which it may be integrated into social work practice. Wilson et al. state a need within social work for a "renewed focus on developing services that support survivors' needs and goals… and that attend to survivors' mental health" (Wilson et al., 2015, p588). The transcriptions provide evidence that the surf therapy course placed the needs and voices of the participants at the centre of its practice, offering them unconditional acceptance and validation. These values underlie all social work ethics and best practice methods (BASW, 2014). Establishing BSH as an intervention for survivors of DA also increases social inclusion, removing barriers that may normally prevent this client group from equal access to both the environment and the activity. This aligns with social work's social justice roots and core equality values.

For social work to effectively support the communities it seeks to support it must be open to continual adaptation and development as new support methods are established. The thematic analysis identified the positive impact the intervention had on the participants' physical and mental wellbeing, their sense of community and their empowerment through liberation. The research and findings both highlight the importance of social connectedness and a sense of identity. As professionals in social care work to rehabilitate survivors of domestic trauma and support them to live healthy, independent lives, it can be argued that all forms of therapeutic intervention found to be effective should be considered in order to provide a truly client-focused service. This study, and others that seek to understand the impact of time spent in aquatic environments, does not suggest that BSH should displace other effective approaches (Nichols, 2014). As Britton say, "as a tool for social good, surfing by itself does not create social change. Rather, it opens a space of possibility, a space that didn't exist before" (Britton, 2018, p803) and this is a space the social work profession should seek to explore further. Britton goes on to discuss how BSH can lead to 'social rupture' and create opportunities for greater relationships with "our bodies, selves, others and our environment" (Britton, 2018, p803). More research is necessary but, as I believe this study shows, initial findings suggest the impact is positive and the future of social work practice, particularly when considering green social work theory, has a responsibility to the communities it serves to consider the theories around BSH and its further integration into practice.

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Glossary of Terms and Abbreviations used in Text

ART	Attention Restoration Theory
BASW	British Association of Social Workers
BSH	Blue Space Health
CBT	Cognitive Behavioural Therapy
DA	Domestic Abuse
DVPNs	Domestic Violence Prevention Orders
EMDR	Eye Movement Disensitisation and Reprocessing
EU	European Union
GAD7	Generalised Anxiety Disorder Assessment
GSW	Green Social Work
ISA	International Surfing Association
ISTO	International Surf Therapy Organisation
NDADA	North Devon Against Domestic Abuse
NHS	National Health Service
PHQ9	Patient Health Questionnaire
PTSD	Post-Traumatic Stress Disorder
SOPHIE	Seas, Oceans and Human Health in Europe
SRT	Stress Recovery Theory
TIC	Trauma Informed Care
WEMWBS	Warwick-Edinburgh Mental Wellbeing Scales
WHO	World Health Organisation