RESEARCH ARTICLE

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A qualitative exploration of the contribution of blue space to well-being in the lives of people with severe mental illness

Kim Wright[1] | Samantha Eden[2] | Anna Hancox[3] | Danielle Windget[2] | Lewis Elliott[4] | Zoe Glossop[3] | Gordon Johnston[5] | Rose I. Johnston[3] | Fiona Lobban[6] | Christopher Lodge[7] | Jasper Palmier-Claus[6] | Sally Parkin[2] | Piran C. L. White[8] | Sarah L. Bell[4]

[1]Washington Singer Labs, Department of Psychology, University of Exeter, Exeter, UK; [2]University of Exeter, Exeter, UK; [3]University of Bath, Bath, UK; [4]European Centre for Environment and Human Health, Peter Lanyon, University of Exeter, Penryn, UK; [5]Independent Peer Researcher, Clackmannan, UK; [6]Lancaster University, Lancaster, UK; [7]Lancaster University Health Innovation Campus, Lancaster, UK and [8]Department of Environment and Geography and York Environmental Sustainability Institute, University of York, York, UK

Correspondence
Kim Wright
Email: k.a.wright@ex.ac.uk

Abstract

1. The majority of research into the mental health benefits of blue space (outdoor places where water is a central feature) has focussed on the associations between neighbourhood exposure to these spaces and population-level incidence of unipolar depression or anxiety disorder. There has been little exploration of the therapeutic use of blue space by those navigating bipolar, schizophrenia or other psychotic conditions. Knowledge arising from such an exploration could assist in the design and optimisation of nature-based care for people with these conditions, as well as with self-management.

2. We conducted semi-structured online and telephone interviews with 19 adults who self-reported experience of these conditions. Interviews were conducted in the United Kingdom from August to December 2021.

3. We describe four of the key interpretive themes identified via an in-depth inductive thematic analysis of the interview transcripts to highlight how participants sought out moments of affective sanctuary through their blue encounters. Blue spaces were described as having the potential to reset the mind, emotions and body. This was in part due to their socially undemanding nature, and ability to provide respite from a socially stressful world.

4. Participants described developing a blue identity, whereby a sense of attachment to and shared history with these places was articulated as well as incorporating blue spaces into self- and emotion-regulation practices. Finally, participants described experiences of and recommendations for a *therapeutic blue intervention*. The role of biodiversity in contributing to the benefits of blue spaces was implied primarily in terms of perceived soundscapes, but also through visual observations.

Bipolar and psychotic conditions including schizophrenia are often recurrent and together have been estimated to affect over 3% of the population across the lifetime (Perälä et al., 2007). Individuals managing these conditions may experience a great deal of distress and ongoing or intermittent difficulties in functioning, as well as having to navigate society with what can be seen as a stigmatising diagnostic label. Across all mental health conditions, rates of suicide are particularly high amongst those with bipolar or schizophrenia (sometimes termed 'severe mental illness': SMI), as are rates of hospitalisation to manage times of crisis (Baldessarini & Tondo, 2020; Naser et al., 2022).

Typical treatment regimens for bipolar, schizophrenia and psychotic conditions vary across health systems. In many Westernised nations pharmacotherapy is the first line of treatment; this can involve the person taking 'maintenance' medications, such as lithium, for many years. Formal psychological therapies such as Cognitive Behavioural Therapy may also be offered. Nevertheless, neither pharmacotherapy nor psychotherapy are completely effective for all. In addition, some individuals may be intolerant to certain medications or may have concerns about their risk profiles, whilst formal psychological interventions tend to be expensive to deliver thus limiting access in a resource-constrained health system. Lifestyle-based interventions, whereby the person makes changes to their everyday life to manage their condition, are often non-stigmatising, relatively low-cost and accessible. As well as forming part of many people's self-management, information about lifestyle is often included in group-based and online psychoeducation programmes for people with severe mental health difficulties. Alongside physical activity, diet and other lifestyle variables, nature exposure appears worthy of further exploration in this population, particularly given evidence that it can play a role in supporting mental health and well-being amongst people experiencing other mental health difficulties (Tester-Jones et al., 2020).

In this study, we focus specifically upon blue rather than green space. There is much less research on the health benefits of blue space compared with green space (White et al., 2020). A focus on blue space also reduces the heterogeneity of the experiences explored in our interviews, allowing for depth rather than breadth of analysis. Blue space has been defined in various ways, but often refers to outdoor environments in which water is prominent, is either natural or manmade and is accessible to people either through being on or near the water, or able to sense it (Grellier et al., 2017). Commonly included in its definition is the identifiable potential of the environment to promote human well-being (Foley & Kistemann, 2015). In this paper, we extend this work with the novel findings of an in-depth qualitative study exploring how people with SMI, who are often overlooked in this body of research, seek out 'blue' encounters (as defined by them) to manage fluctuating symptoms and promote a sense of well-being, and how these experiences vary across different settings and environmental and social conditions. In doing so, we reflect on the potential for such blue encounters to enable moments of 'affective sanctuary'; supporting empathetic, non-judgemental and undemanding forms of more-than-human connection in a resonant sensory environment (Butterfield & Martin, 2016).

There is evidence to suggest that time spent in or near blue space may enhance mental health and well-being in the general population, for example through providing meaningful opportunities for physical activity, cognitive and emotional restoration or social interaction (Gascon et al., 2017; Georgiou et al., 2021; Smith et al., 2021; White et al., 2020). Cross-sectional population-level studies have identified significant associations between blue space proximity or use and reduced risk of depression (Dempsey et al., 2018), lower perceived stress (Poulsen et al., 2022), lower antidepressant medication prevalence (McDougall et al., 2021), less mental distress (White et al., 2021) and lower likelihood of having a common mental health disorder (Garrett et al., 2019). To try to understand the mechanisms by which blue space might bring about these benefits, in-depth studies have explored experiences in these places that might be contributing to people's sense of mental health and well-being (Foley & Kistemann, 2015). These range from opportunities to gain a sense of perspective, be it *spatially* through encountering the oceanic horizon, for example (Bell et al., 2015; Völker & Kistemann, 2015) or *temporally* through recognising water as always flowing (Coleman & Kearns, 2015; Windhorst & Williams, 2015), offering a reminder of endurance, renewal and transformation (Duff, 2012). Participants in qualitative studies have described the pleasure and relief of losing oneself at the dynamic interchange of sea and sky, listening to the soothing motion of waves and water lapping at the shore and tuning into shifting qualities of light and colour (Lengen, 2015; Thompson & Wilkie, 2021). Sounds perceived as natural also contribute to health and well-being, and a number of studies have identified restorative

properties in relation to the sounds of nature such as bird song, rustling leaves and water (Hedblom et al., 2017; Nicolosi et al., 2021; Ratcliffe et al., 2013; Van Hedger et al., 2019). Furthermore, natural sounds, including geophonic sounds, for example running water and biophonic sounds, for example birdsong, can enhance the restorative properties of visual characteristics of environments (Ratcliffe, 2021; Zhu et al., 2020). Reflecting specific socio-cultural metaphors, people also describe the cleansing sensation of water 'washing' worries or concerns away (Bell et al., 2015; Lauwers et al., 2021; McNamara et al., 2020). These benefits are not, however, universal, with concerns raised about the risks of immersion in polluted waters (Evers & Phoenix, 2022), alongside experiences of blue space exclusion arising through inequalities pertaining to race, gender, class and disability (Olive & Wheaton, 2021).

The notion of 'blue care' has developed in response to the growing interest in the mental health and well-being benefits of blue space encounters, defined by Britton et al. (2020, p. 51) as 'blue space interventions: pre-designed activities or programmes (typically physical) in a natural water setting, targeting individuals to manage illness, promote or restore health and/or wellbeing for that group'. Such structured interventions include, for example, the growing momentum behind 'surf therapy' programmes. Initial studies support their potential to facilitate at least short-term mental health improvements (e.g. relating to self-esteem, self-efficacy and social connectedness) amongst military combat veterans with PTSD (Caddick et al., 2015), and vulnerable youth and young adults in Cornwall, UK (Devine-Wright & Godfrey, 2015, 2018) and New South Wales and Victoria, Australia (Drake et al., 2021; McKenzie et al., 2021). Such benefits also seem to extend beyond surf therapy. For example, in a six-week intervention that engaged individuals with wetland nature for the treatment of anxiety and/or depression, Maund et al. (2019) identified significant improvements in mental well-being, anxiety, perceived stress and emotional well-being amongst the 16 participants.

Most research into the benefits of blue space for mental health has focussed upon anxiety and depression (Coventry et al., 2021; Gascon et al., 2017; Hermanski et al., 2022), as well as PTSD (Caddick et al., 2015; Walker & Kampman, 2022). Whilst a small number of studies have examined nature proximity in relation to SMI (Boers et al., 2018; Engemann, Svenning, Arge, Brandt, Erikstrup, et al., 2020; Engemann, Svenning, Arge, Brandt, Geels, et al., 2020; Helbich et al., 2018) these have tended to focus upon residential closeness to nature, rather than the impact of specific interactions with nature. Furthermore, they have tended not to examine more subtle indices of well-being in these populations including symptom levels, quality of life and sense of personal recovery. Finally, no studies have explored *how* blue space might be experienced as helpful by those with SMI, nor have they examined considerations for blue care that might be particularly important for this population. In this paper, we share the findings of an in-depth qualitative study that aimed to contribute such insights by examining the meanings and practices of blue care in the lives of people with SMI in the United Kingdom, specifically bipolar, schizophrenia and psychosis. This study was underpinned by the research question, 'what are the meanings and practices of blue care in the lives of people with severe mental illness?'. Here we adopt a broad definition of 'blue care' to include any use of blue space by the individual that has relevance to their well-being.

1 | METHOD

A qualitative research approach was used, involving in-depth semi-structured online and telephone interviews, to support people with SMI to share their experiences of blue space and blue care in their own terms, at their own pace, focusing on people who considered blue spaces to play a role in their well-being. A qualitative approach allows for the development of rich understandings of the contexts in which blue spaces might benefit this population. It allowed us to draw on but not be limited by existing conceptual frameworks, potentially offering an initial step in the development of interventions in the future. Qualitative research with individuals who experience mental health difficulties raises ethical issues around power, access to research and the communication of individual voices (Carlsson et al., 2017). Recognising this, individuals with lived experience of bipolar or psychosis formed part of the study team and were involved at all stages of the research. All research was conducted in accordance with the declaration of Helsinki (World Medical Association Declaration of Helsinki, 1989) and approved by the University of [name removed to preserve anonymity during the peer review process] research ethics committee (ref: eCLESPsy001492 v2.0).

Seeking information-rich insights, purposive sampling (Patton, 1990) was used to recruit 19 individuals with experiences of bipolar, schizophrenia or psychosis who identified blue space as supporting their well-being. Participants were recruited from across the United Kingdom via university networks of people interested in research, national and local charities such as Bipolar UK, social and traditional media and organisations connected with blue spaces. Participants were required to be aged 18 or over and to have found blue space helpful in supporting their well-being either currently or in the past. In addition, participants were required to self-report a formal diagnosis of either bipolar, schizophrenia or a psychotic condition, or score above the cut off on either the Mood Disorders Screening Questionnaire (MDQ; Hirschfeld et al., 2000) indicating a positive screen for bipolar, or the Prodrome Questionnaire 16 (PQ-16: Loewy et al., 2011) indicating a positive screen for psychosis. The MDQ is a self-report bipolar screening questionnaire that asks 13 yes/no questions pertaining to manic and hypomanic symptoms, irritability, sleep, libido, thinking, attention and energy levels. In line with established thresholds, endorsement of seven or more items combined with a 'yes' to symptoms occurring in the same period, with moderate to serious problems caused, was taken as indicative of a positive screen for bipolar. The PQ-16 is a self-report psychosis screening questionnaire composed of a series of 16 true or false statements referencing positive and negative symptoms of psychosis.

Following established thresholds a score of 6 or above using the distress weighting calculation was taken as indicative of a positive screen for psychosis.

The final purposive sample included 11 women and 8 men. The youngest participant was 25 and the oldest was 68. In terms of ethnicity, 15 participants described themselves as White, three as Asian and one as being of Mixed Heritage. Participant pseudonyms and selected information are given in Table 1 (with care taken to preserve the anonymity of the participants). Eighteen participants lived in England, and one lived in Wales. Nine lived in a major or minor urban conurbation, one in a city/town, six in urban areas with significant rural elements, and three in a largely rural area. Seven described themselves as experiencing significant barriers to accessing blue spaces. Eleven described themselves as competent swimmers. In terms of mental health history, 14 reported having a formal diagnosis of bipolar and a further two had not received this diagnosis but believed it applies to their experiences and screened positive on the MDQ, whilst three reported having a formal diagnosis of schizophrenia or a psychotic condition.

Individuals who gave informed consent to take part were invited to answer some questions (online or on paper) about demographic characteristics, access to blue space, swimming competency (as this may influence available blue space activities), and their self-reported diagnosis, and were invited to complete the MDQ and PQ-16 as appropriate. Data collection was carried out between August and December 2021. Each participant was invited to participate in a semi-structured interview, conducted online using Zoom or over the phone (in line with participant preference) to minimise physical harm to participants in the context of the Covid-19 pandemic. Although a relatively new development for some people, video-conferencing as a means of facilitating qualitative data collection can be highly acceptable to participants (Archibald et al., 2019). Guidance has emerged in recent years to support the use of this method, including the need to attend to technical, ethical and data security issues (Lobe et al., 2020). Before the interview participants were sent five questions they could reflect on if they wished, in order to help them gather their thoughts in advance and reduce potential anxiety (see Appendix S1).

While open questioning and active listening were prioritised during each interview, an initial interview guide (see Appendix S2) was developed by the study authors in collaboration with individuals with personal experience of SMI to support discussion. A pluralistic approach was taken (Chamberlain et al., 2011), whereby individuals were invited to share an object, photo or memory that reflected a salient dimension of their blue space interactions, to put participants at ease and provide a springboard for enriched accounts of their interactions with blue spaces in the first part of the interview. Sixteen participants brought at least one item to the interview, including photographs (12 participants), objects (stones, blue glass, shells, coral: 2 participants), a self-created painting (1 participant) and an image created by another person (1 participant).

The second part of the interview built on these discussions, enabling participants to reflect and discuss in more detail what blue space is to them personally, the specific blue spaces that feature in their life, in what ways, and what makes these places particularly pleasurable or meaningful. Particular care was taken to explore participants' blue space experiences in relation to specific mood states and states of mind, as well as more generally in relation to feelings of well-being. The interview finished with a range of biographical questions exploring how different blue spaces had been particularly helpful or otherwise at different life stages, any barriers encountered in relation to accessing blue spaces, along with advice for others experiencing similar barriers. The final interview question asked individuals to describe their perfect blue space, which helped to understand some of the most important or desired qualities embodied by the concept of blue space for that participant.

Interviews lasted approximately 90 min (with the option for breaks and to complete over more than one sitting) and were audio-recorded and transcribed. Each anonymised transcript was subject to in-depth, thematic analysis (Gale et al., 2013). This approach involved initial familiarisation and iterative development of an analytical coding framework (sensitised by existing literature whilst prioritising the views, perspectives and experiences described by participants), charting of the data, and then mapping and interpretation of the data. Initial analysis involved contribution of all members of the research team ($n = 12$) who were each randomly assigned a transcript to explore, before meeting as a team to discuss initial themes and ideas. Four researchers (KW, SE, DW and AH) used these discussions and reflections to develop an initial thematic framework. In order to agree the final coding of transcripts, researchers KW and

TABLE 1 Participant pseudonyms and selected demographic information.

Pseudonym	Gender	Self-reported diagnosis/screening outcome
Bilal	Male	Bipolar
Clare	Female	Bipolar
Rob	Male	Bipolar
Zoe	Female	Bipolar
Michelle	Female	Bipolar
David	Male	Bipolar
Sharmin	Female	Bipolar
Yusuf	Male	Bipolar
Naomi	Female	Bipolar
Joe	Male	Schizophrenia/psychosis
Becky	Female	Bipolar
Brian	Male	Bipolar
Alice	Female	Schizophrenia/psychosis
Tom	Male	Bipolar
Vicky	Female	Bipolar
Laura	Female	Schizophrenia/psychosis
Sue	Female	Bipolar
Graham	Male	Bipolar
Donna	Female	Bipolar

AH independently coded each, meeting regularly to discuss similarities and discrepancies in the coding. In addition, the coding pair met with additional members of the research team who acted as 'critical friends', prompting revision of the framework as appropriate. This process was adopted to increase the rigour of the analysis (Smith & McGannon, 2018), and to allow multiple voices within the research team to inform the interpretation and reflection stages. The photos and objects brought to the interviews by participants primarily aimed to facilitate engagement with the topic and enable participants to express and reflect on their emotions and memories relating to blue space during the early part of the interview, and as such were not part of the analysis in their own right.

2 | FINDINGS AND DISCUSSION

Prior to discussing our key interpretive themes, we briefly explain how 'blue space' was described by our participants, and the types of blue activities they engaged in. At the outset of each interview, participants were asked to explain how they would define 'blue space' to ensure a shared understanding between the researcher and participant. Across these personal definitions, participants mentioned various places and settings including the sea, rivers, ponds, lakes and canals. Within their definitions, participants debated the boundaries of this concept with respect to size, colour, perceived naturalness and the extent to which other non-water elements could be present. For example, for some, these spaces included the sky, and several participants remarked that these places were often not blue in colour. Indeed, as noted in Pitt's (2018, p. 162) research around urban waterways and well-being, 'murky, more brown than blue watery environments demonstrate a complexity and ambiguity of relationships to water, finding it attractive and repellent, risky and relaxing'. Whilst some participants perceived blue spaces as the seemingly 'naturally' occurring features of the landscape, others included clearly man-made bodies of water such as canals and even swimming pools, baths/showers and jacuzzis. Participants described how different types of blue space had different effects, and served different functions for them; consequently, their needs at the time sometimes determined which space they chose to visit. These functions are elaborated upon below when discussing the key interpretive themes.

Across the sample, a variety of activities were mentioned in relation to these spaces. Physically active pursuits included walking, running and cycling, as well as activities in or on the water such as swimming, rowing and kayaking. Other activities alongside the water that were mentioned included picnicking, sitting and looking at the surroundings, stargazing, reading or listening to music, socialising or playing with children, and camping. Many described interacting with the water without the full immersion of swimming, for example by paddling, touching the water or throwing pebbles into it, demonstrating varying intensities of sensory engagement. Finally, creative activities were mentioned by some, such as writing about or making sketches, paintings or photographs of the space.

Table S1 (Appendix S3) displays the overall coding framework developed during the thematic analysis of the interview transcripts. In the section below we focus on a subset of key interpretive themes identified through the analysis. In particular, we consider those themes that highlight how varied sensory, social and emotional qualities of blue encounter helped participants to manage specific challenges associated with bipolar or psychosis through enabling moments of 'affective sanctuary' (Butterfield & Martin, 2016); providing opportunities for a blue 'reset', nurturing undemanding forms of more-than-human connection and fostering a blue identity. Recognising the limits to such moments, however, we also reflect on whether or how blue space could be included within therapeutic interventions for people with SMI.

2.1 | Theme 1: A blue 'reset'

In describing the experience of being in a blue space, participants referred to various challenges associated with bipolar or psychosis that they tended to bring to these spaces. Negative emotional states such as feeling low or anxious were mentioned. However, in the sample as a whole, pertinent challenges were often described with respect to mental activity or a whole-body sense of energetic imbalance. Mental activity included a sense of racing thoughts, connected with either mania/hypomania or anxious worrying, and separately, ruminative thinking. There were also descriptions of sensed lack of mental clarity ('brain fog'). In addition, the content of thoughts was referred to, most commonly with regard to depressive or negative themes but also paranoid ideas and the experience of hearing voices. In the body, participants described both having too much energy, as well as feeling depleted. A sense of mental and physical overwhelm was also directly mentioned or alluded to by several participants.

In the interviews, we explored participants' sense of how blue spaces helped them to manage these challenges. Several participants directly employed the metaphor of a 'reboot' or 'reset', whilst many others appeared to describe an experience of this nature. This was often related to the idea that blue spaces could be cleansing, helping to absorb stress, mental overwhelm, excess energy or mental clutter. The result of this 'reset' was described as a feeling of mental space, increased clarity and dispersal of overwhelm or negativity:

> if you're feeling overwhelmed....emotionally overwhelmed, it's a kind of a, it feels like a refresh button. You know yeah you release some of the negativity and then you feel like you can start again. (Joe)

> It makes my head not go in a rat race. It clears my thoughts out of my head. It gets me to focus and also sometimes makes me kind of see reality as reality, and it kind of gives me a clear mind. (Yusuf)

For many participants, physical contact with, or immersion in, bodies of water (including the sea and lakes) was mentioned in relation

to the experience of being reset; some participants described having reset experiences whilst walking near natural or urban water bodies. From participants' accounts, certain types of blue spaces appeared to possess sensory qualities that facilitated this sense of a reset. The flux of many blue spaces seemed to engage attention and draw thoughts away from their familiar cognitive pattern. This was evidenced most often with respect to sights of moving water, but geophonic sounds related to moving water were also mentioned:

> I think partly it is the sound that it generates because I find that very restful and I suppose it gives you something to occupy your brain as well, by looking, it is another thing that helps you switch off. If you are looking at water that is relatively stagnant there comes a point where you think well I have looked at that water now, whereas water that is constantly changing, like the sea, it's always worth looking at and being absorbed in because it is always changing. (Michelle)

In addition, there was a sense that this changeability sits within predictable repetitive parameters, meaning that the unpredictability tends to feel contained and unthreatening. This aspect may be welcomed by some individuals with severe mental health difficulties; psychosis in particular can be characterised by heightened anxiety and threat-sensitivity (Underwood et al., 2016). The predictable aspect of the sensory environment provided by such blue space sanctuaries was described as contributing to the reset effect:

> And like you can watch the waves coming in, and then you hear the noise of them breaking and then dragging back out. And you can just set your thinking, in a way, to it. It's sort of like… I mean—it'll probably be your next question—about like when you're really manic, there's some- well when I am anyways or when I have been in the past, I find this … rhythm, like being able to get into some sort of rhythm in my head, or listening to something with a rhythm, like that can really … set my …thinking by it. It's sort of a calming thing, if you know what I mean. (David)

Previous studies have discussed the meditative potential of these repetitive rhythmic aquatic qualities; both through having to stay present while moving rhythmically through the water (McDougall et al., 2022; Walker & Kampman, 2022) and in feeling mesmerised by the reflective dynamic interchange between water and sky, punctuated by moments of intensity with shifts in light, weather or other sensory stimuli (Bell et al., 2015; Ryan, 2012). Intense sensation was described by some of our participants as facilitating the reset process. This tended to be as a result of loud sounds or the impact of full embodied aquatic immersion:

> it was just amazing to stand under this waterfall and just it was like because of the power of the, the thing.

> It was like somebody kind of boring a hole through your head through your body. And, and kind of clearing out all of the psychic detritus you know. (Naomi)

In the quotation below the participant discusses the impact of being near a small dam upon their experience of dissociation, this being the sense that one is disconnected from the body and the world around them:

> I think if I'm struggling with dissociation, and if I'm starting to verge more towards the psychotic kind of spectrum, then I think there's something about the weir and the sort of, the sense of your emotions, your thoughts and feelings being overwhelmed by the noise. There's something about that, I think that just helps to kind of reground me again, that I don't get from the silence and the quietness. There's something about that that just makes me reconnect to myself again for some reason. (Joe)

Whilst participants often described feeling calmed by their contact with blue space, and there was a sense of the space absorbing or dissipating excess energy, there were also descriptions of blue spaces increasing energy levels in an invigorating uplifting way:

> There is an energetic exchange between that powerful a body of something natural…at that particular point in time I got nothing left in me, and in order to kind of top up my internal cup, then I can, I need to take it from somewhere. And I find it useful to take it from those sorts of places and in terms of elementally, water's my guy. (Naomi)

These accounts highlight the varied ways in which participants found opportunities to 'reset' through unthreatening blue space encounters, across a variety of mental and emotional states. Opportunities for restoration from directed attentional fatigue are widely discussed in the blue space literature (Bell et al., 2015; Gidlow et al., 2016; White et al., 2013), and experiences of aquatic immersion have been described as a 'daily hard reset' (Throsby, 2013). More specifically, nature exposure has been found to be associated cross-sectionally with reduced rumination and in turn reduced negative affect in the general population (Bratman et al., 2021). However, few studies have highlighted the potential for such blue encounters to realign mental and physical energy, or counter repetitive ruminative cycles, mania or dissociation amongst people with severe mental illness. Furthermore, amongst our participants, descriptions of a 'reset' function were notably prominent, relative to the importance this concept is given in the blue space literature more generally.

Beyond such realignment, participants also talked about the potential for blue spaces to bring about important shifts in perspective. The vastness of the environment in terms of both time and space appeared to facilitate this, as did the presence of nature and its

perceived physical power, promoting a sense of being insignificant yet connected:

> because I am so immersed in nature, and because of the, the big space, if you like, blue, green, white, grey, whatever color it actually is, makes me as I say both feel insignificant but part of it all and also helps contextualize any of the things that I might be concerned about, actually don't matter in the grand scheme of things. (Tom, talking about walking in a mountainous environment)

> as much as it stays the same, incrementally it's changing ....it makes us think quite deeply about sort of the future, and the past and, a lot of things really. (David, talking about a local beach near built structures)

For some of our participants, encounters with certain blue spaces that had the quality of vastness in time or space (such as expansive coastal areas or large, flowing rivers) brought a sense of connection with something bigger, and at the same time a sense of being insignificant, which was in all cases perceived positively. This seemed to be because it made worries and concerns feel less important. As illustrated below, these concerns may reflect feeling unable to meet the expectations and preoccupations of society:

> part of the difficulty is that we live in a culture where we are supposedly meant to matter...but if we're unable to play the game as depression often is that debilitating affect, it makes things worse, ... it feeds on itself because if you're depressed you can't engage with what is deemed normal. And then that becomes a self-fulfilling activity. By being in massive open space you realize that actually this thing that people think you should be part of is effectively bu*****t and irrelevant to many things, more than ever, now because I think the planet is telling us that you know our trivial concerns are leading us down a path of nowhereness so it's that, it's the sense of putting myself in perspective that I am a microscopic infinitesimally small piece of stardust in this wonderful thing, called the universe, some relief. (Tom)

Although rarely explored in the context of people with SMI, this sense of perspective is often discussed in the wider literature around nature and health. For example, in a photographic essay capturing experiences of nature following a traumatic head injury, Ottosson (2001, p. 167) describes the sense of perspective and reassurance gained through encountering a lichen-clad stone in the hospital gardens: 'the untouched stone with its blanket of lichen and moss in various shades of green and grey gave him a sense of security through its timelessness, its calm and harmony... His

own situation became less important. The stone had been there long before the first human being had walked past. Countless generations, each with lives and fates of their own, had passed by'. The physical expanse of blue settings with broad horizons has also been highlighted as promoting an internal feeling of spaciousness (Bell et al., 2015; Conradson, 2005), as well as the ongoing flux of waves, rivers and waterfalls in offering a sense of temporal endurance and stability (Windhorst & Williams, 2015).

2.2 | Theme 2: A socially 'undemanding' blue

Many people with bipolar or schizophrenia encounter some degree of stigma in society, which can exacerbate feelings of loneliness, exclusion and the demands that they have to negotiate on a routine basis (Degnan et al., 2021; Lim et al., 2018; Temesgen et al., 2018). As such, it is perhaps not surprising that several participants directly described or alluded to social pressures as being an important challenge in managing their condition. This included concern about failing to meet normative social expectations and demands, the impact of overstimulation from contact with others, and concern about upsetting others when unwell due to behaviours deemed 'unusual'.

Almost all participants reflected a sense of blue spaces providing an antidote to this social pressure through not demanding anything from them; offering opportunities for non-judgemental forms of more-than-human connection and interaction with the world. Often this was described in direct contrast to the demands made by, or anticipated from, other people, whether they be friends and family, colleagues or strangers. In the quotation below the geophonic or biophonic sounds of the environment, and its appearance, are described as an unconditional gift from the natural space, in contrast to the demands she experiences in the presence of people:

> It is giving you beauty and the sounds and it is not asking anything of you. It is not like a person who you know you have to work out how to behave with them and remember to ask them questions and that kind of thing, it is just being there for you to enjoy and it doesn't ask anything of you. (Michelle, describing walking by a nearby urban stream)

Furthermore, some participants commented that when others are encountered in these spaces, they tend to follow a convention of giving you no or minimal recognition, thus imposing low social demands.

> I mean that's the thing you do tend to find people are just there to relax and so some people don't bother you. (Becky, talking about being at a beach)

The relative solitude that blue spaces can offer was described as allowing one to relax without having to hide aspects of the self or monitor oneself constantly. It also appeared to provide respite and refuge from the stimulation associated with social interaction:

...there's a risk that I come across as a complete fool or a mad raving lunatic or I'll say something inappropriate, none of which I would wish and they're not my personality, but, I'm very aware that it is a risk. I talked boom out of my mouth without any filter, yeah I have to work hard every waking hour to keep that filter in place. If I go to a big blue space I don't need the filter, not that it means I'm necessarily ranting like a nutcase at the sea or something. I just don't have to worry, there's no one I'm going to upset. (Tom)

Sometimes it's like I've had enough of interacting with people, I'm just like 'I don't want to talk to anyone!', I just want to be out. And especially if you've had a lot of people activity, because there's only so much of that I can cope with. So it's like, I can do it to a certain extent, and then it's like I need timeout and not to do stuff with people. (Sue)

Existing studies have highlighted the importance of these simple, calming relationships with nature (Bell et al., 2018; Severin et al., 2022), including the potential to externalise emotions freely at the coast without social judgement, for example through 'screaming, crying, or singing' (Severin et al., 2022, p. 7), and the value of nature settings deemed to receive and absorb people's moods (Adevi & Mårtensson, 2013). This aspect of our participants' accounts was striking, however, in that allusions to blue spaces as a refuge from the social world dominated, relative to descriptions of blue spaces as places for social connection. Psychiatrist Searles (1960, p. 87) argued that non-human nature encounters can offer people with schizophrenia 'peace, stability, companionship' when human encounters are more challenging. He suggested the simplest relationships exist with seemingly inanimate objects (such as the lichen-clad stone noted above), the most complex relationships occur with people, and in between lie relationships with plants and animals. For our participants, this responsive simplicity extended to relationships with water, provided they could control the social element of these interactions. For example, by choosing to visit them at quieter times of the day or the year, or by inviting particular like-minded or 'safe' people to share the space with them.

Although experienced as socially undemanding, blue spaces were nevertheless portrayed by participants as having a valued responsive quality rather than being inert or indifferent to their presence. This was sometimes described in terms of the physical response of the surroundings to the actions of the participant, for example ripples appearing on a lake after a stone was thrown in. In other instances, this more-than-human responsiveness manifested as personification of the space, such that the space was viewed as having uncomplicated human qualities or described as a friend:

...just nature is like, for me it's like someone touching you or hugging you, it gives you that grounding of reminding you of where you are, who you are in the space. (Sharmin)

As a result of the social and sensory qualities noted above, for some people blue space had come to offer an emotional, embodied refuge, leading them to feel safe, held, contained, grounded and protected:

...depression is very, very isolating and you can just feel incredibly lonely and incredibly, incredibly disconnected from the world and that floating just allows me to feel—a bit like you know when I was saying we go to [rural pond] and it's like protected? It's that feeling, it's that... held. I felt—you feel held. (Becky)

In offering this sense of refuge and uncomplicated experiences of more-than-human relatedness, the blue space experiences sought out by participants provided moments of affective sanctuary in the context of severe mental illness (Butterfield & Martin, 2016). In this way, such encounters offered participants informal opportunities for blue care (Britton et al., 2020) that did not rely on the existence or provision of structured, group-based interventions that can be challenging to participate in when navigating the unpredictability of life with bipolar or psychosis. We return to such therapeutic implications below.

2.3 | Theme 3: Developing a blue identity

Many participants expressed a longstanding emotional and cognitive connection to blue spaces, often starting in childhood. Multiple descriptions were shared of positive early blue memories, sometimes involving special days out or holidays, but more often reflecting a sense of blue space contact having been woven throughout early and later life for some participants:

I was born near the sea, my family are from near the sea, my family in [location] are near the sea, I'm near the sea here—it's, yeah that's, the most important one, and, I have so many memories that are tied up with the sea. (Clare)

In some cases, this sense of connection extended to being part of blue space communities such as swimming or environmental groups. Whether as a result of early connections with and memories of seas, rivers or lakes, or the value of repeatedly accessing them later in life, for many participants blue space engagement appeared to have become part of their identity, indicating deep emotional place attachments. Such experiences reflect both *cognitive* forms of place connection—a sense of 'place identity', whereby time spent in blue space allowed people to express and affirm their self-concept alongside feelings of self-worth, esteem and agency (Twigger-Ross & Uzzell, 1996)—and *emotional* forms of connection, with affective attachments to settings evoking feelings of belonging, refuge and comfort (Kyle et al., 2004; Stedman, 2002). Place attachment was in part evidenced by expressions of gratitude: participants articulated thankfulness for the ability to access particular spaces and for the opportunity to witness their beauty, as well as experience awe in

the presence of nature (linked to the feelings of perspective noted earlier):

> the first thing I saw was the beach itself, it was just in sight and I just thought 'wow of all of our time living on this earth I've never seen something so nice', and the first thing that me and this chap did is we went to the beach and we just stared out for like for hours. (Rob)

Emotional attachment was also evident in participants' sense of ownership of particular places. In the wider blue space literature, such ownership has been expressed in the context of anticipated or experienced changes to cherished coastal areas, for example with coastal developments which threaten the rich cultural heritage and natural significance of local environments perceived as pristine (Kearns & Collins, 2012), with the social risks and uncertainties arising during the COVID-19 pandemic (Jellard & Bell, 2021) and with the tensions of coastal localism (Olive, 2015). Participants in our study often connected their sense of ownership with the desire for control over social contact described previously, perhaps reflecting a form of self-protection or self-care:

> It's very much become my special place. Like I always think 'no don't come up here anybody else, this is my patch!'. (Sue)

With regard to place identity, participants talked about changes in their relationship to blue space over time, in some cases articulating the evolution of what was always viewed as an important relationship:

> I think it might have done a bit of a curve? If that makes sense? To being a very.... I think a very—a space where you go with family and friends and have lots of laughter and stuff, as a child. Then probably anger. And, other emotions, as a young—as a teenager into a young adult being unwell. And then now where it is, where it's a good place again. And... but nothing—it never stopped me going, even when I went through that middle section, there was never, I was never gonna not go. Because it was still somewhere that made me feel better. (Clare)

For others, realisation of the significance of these spaces arose at times of 'heightened need' in their lives (Butterfield & Martin, 2016, p.700) or with respect to specific 'milestone' or transformative experiences (Manzo, 2005), often in connection with important moments in the management of the condition:

> when I first had the psychiatrist intervention, and you know I got out of control and it was like I just went biking up the coast in the dark and then I came back

home, packed all my stuff and disappeared off to camp somewhere and that was kind of I think the first time I realized that it could be a helpful thing. (Sue)

It has been argued that natural spaces can play a role in self and emotional regulation (Korpela, 1989; Korpela et al., 2001); this may also be considered an expression of what has been termed 'place dependence' whereby there is a functional reliance upon a place to perform particular activities or attain particular goals. Our participants gave numerous examples of blue space practices that enabled them to achieve self or emotional regulation. Many had incorporated helpful blue space experiences into their lives, both by cultivating strategic blue routines and through reactive use of these spaces. We use the term 'strategic routine' to refer to instances where blue space visits were woven into the participant's day or week intentionally, in order to maintain or restore a sense of well-being:

> And then the other side is when I would need a bottle of milk or something like that, I would purposely walk through the park, go around the pond, and then go to get the bottle of milk and then walked the same back. (Yusuf)

In contrast, visits to blue space were also commonly described as being reactive, in other words occurring in response to certain mood states. In some instances, this was described as a conscious decision, in order to regulate mood:

> ... [after] a very stressful day, I'll just go to my partner's house and go 'take me to the beach', and go for a walk. (Laura)

In others, participants described a sense of being inadvertently drawn to these places in particular mood states (as discussed further below):

> I think sometimes there is an unconscious decision, I feel there's a lot going on my head there's just too much and I just need to get away, and I'll go to a peaceful space and it happens to be a lake or a pond or a canal. (Yusuf)

For many participants the places selected seemed to vary according to their self-regulatory needs at the time: one particular blue space may not be able to provide the full range of cognitive and affective benefits:

> So like if I was to take the sea, what it feel like to swim in the sea, it feels quite exhilarating and it's quite exciting, you know it gives you a rush. Whereas going swimming in a lake, is I'd say more of a calming activity. (Zoe)

Overall participants described rich and multifaceted relationships with blue space, whereby a range of such places had been able to

fulfil various roles in their lives, often evolving over time. Specific blue space sanctuaries sought out by participants acted both as repositories of emotional memories, and as a resource to transform mental, emotional and physiological state. They provided participants with links to their personal and family history, as well as to communities brought together by shared interests or concerns. These aspects of our participants' accounts are reminiscent of existing concepts and findings in the literature that apply to the wider population; nevertheless, it is possible these functions of blue space take on added significance in individuals who frequently struggle with intense emotional, energetic and social difficulties.

2.4 | Theme 4: A therapeutic blue intervention

With growing recognition of the potential health benefits of blue space engagement, there has been increasing policy interest in 'blue prescribing'; linking people with particular health needs to specific blue space activities run by the voluntary sector and community organisations, from surfing to scuba diving, swimming or wetland conservation, for example, to support their health and well-being (Juster-Horsfield & Bell, 2022; Maund et al., 2019). The priorities of people with bipolar or psychosis are yet to be considered in this body of work. Our interviews indicate that if affective blue space practices are to be embedded within a formal therapeutic or treatment context, be it through blue prescribing or alternative care pathways, there are key considerations to address.

First, participants described a number of barriers to engaging with blue space in a beneficial way in situ. These included practical constraints such as availability and cost of transport, time constraints and mobility. Barriers could also be environmental or seasonal, such as weather conditions, land ownership and pollution. The importance of having blue space close to home was a recurring feature across the interviews. This proximity not only enabled the incorporation of these spaces within strategic routines (as discussed above) but also facilitated reactive use of these spaces. Participants observed that, in addition to practical and environmental barriers, features of their condition could make it difficult to access these spaces. Low mood, energy and motivation, and heightened anxiety meant that the space needed to be as accessible as possible in order to increase the chance that the journey to the blue space would take place:

> and even if I'm not feeling so good, I can just sort of do—if I'm well enough to go out, I can do it as a quick walk. (Alice)

Related to barriers to access, participants referred to the risks than can be associated with these spaces, such as drowning, unfenced or unmarked areas of danger such as train lines, as well as risks from other people using the space. Amongst these, some risks were specific to the mental health difficulties participants had experienced,

for example, one person expressed concern about the potential for vigorous activity (such as walking to the space) to increase hypomania. Memories of visiting blue spaces with the intention of taking their own life were mentioned by some. At the same time, participants described experiences of blue spaces bringing comfort and a change of perspective even when arriving with suicidal intentions:

> I would say that sitting on that little peninsula throwing pebbles in probably saved my life. Quite easily, yeah. Because it was just... Because I went there... to drown myself. And then I didn't and it was, it was just because I was throwing pebbles and I just was like 'what am I doing?'. (Becky)

Any proposed therapeutic intervention would need to recognise and manage the flux from blue refuge to risk and find ways to overcome barriers to beneficial access.

Second, participants gave multiple examples of deriving benefits from settings or objects that do not fall under the strict bounded definition of 'blue space', including as 'stepping stones' to more intensive blue encounters when otherwise unable to access them. These included looking at photos or paintings of blue space, watching nature documentaries, visiting swimming pools, having a bath or shower, standing in the rain, visiting garden or urban water features such as fountains, listening to wave sounds, dancing and having blue home décor or blue glass objects.

Third, participants expressed views on the role of blue space in relation to other aspects of their treatment and care. For some, engaging with blue space was seen as an integral part of their ongoing self-care and self-management. A number of participants considered blue space in relation to medication: some viewed blue space as preferable to medication and, for them, almost like a medication in its own right. Others found blue space visits to complement medication rather than to represent an alternative:

> There might be a point say where if I am feeling that I am starting to go a bit up in the air, then I'd maybe go somewhere like that [blue space]. But that would probably include making sure with my meds and things like that. So it is like, there is kind of more going on then you know in sort of managing it as a problem rather than you know suddenly going 'oh wow blue space' kind of thing. (Graham)

As noted above, one mechanism by which it may be possible to facilitate blue space access is that of nature-based or 'blue' social prescribing. Indeed, without referencing this initiative explicitly, some participants evoked the concept of prescribing when talking about how blue space could fit into their care plan:

> if you say, give me a prescription for a seaside then I'll probably do it because I'm so motivated and it calms me. (Sharmin)

At the same time, our participants' accounts sound a note of caution about the potential for social prescribing to offer optimal blue space engagement for all, including risks of medicalising people's blue 'lifelines' in this way. As described previously, the need for reactive (not just pre-planned) visits to these spaces was emphasised across many participant accounts. Linked to this, local and often humble places such as a nearby stream, seemed as important as expansive, remote awe-inspiring locations because they could be visited with minimal effort and when the person was otherwise overwhelmed by symptoms. Our participants expressed feeling burdened by social pressures, norms and expectations and tended to view blue space as an escape from these. It is possible that for some people this valuable aspect of blue space visits could be compromised by a perceived necessity or pressure to 'get better' that might be attached to formal prescription of these visits as a treatment, or by the need to visit a busy space and interact significantly with others. Indeed, findings from an international study found that, in people with common mental health conditions, pressure to visit nature was associated with reduced intrinsic motivation to visit, reduced happiness during the visit and increased anxiety (Tester-Jones et al., 2020).

As an addition, or alternative, to the offer of prescribed nature visits, it may be possible to weave opportunities to engage with nature therapeutically throughout the care pathway and explore interactions between formal therapies and nature exposure (Adevi et al., 2018). For example, one participant described how they regularly met their therapist outdoors and the natural setting was used to support their work. In the quotation below, the participant refers to Eye Movement Desensitisation and Reprocessing therapy (EMDR) whereby the patient is typically invited to attend to external bilateral visual, auditory or tactile stimuli whilst bringing to mind traumatic or emotionally charged material, to facilitate its reprocessing:

> He [therapist] was amazing and he used to meet me in [urban] park every session so we never sat in his uh, consultancy room....he explained it to me...as sort of like a natural sort of...EMDR exercise. (Naomi)

Several participants talked about the potential of bringing blue space into inpatient settings, either in the form of sensory rooms or outdoor water features, or through visits to natural rather than urban places outside of the hospital.

> oh yeah it'd have made me feel much better [as an inpatient], to have like a little fountain or something there, you know the noise of the water, just running water. (Laura)

Further work is needed to determine the most fruitful avenues for enhancing care in this way, recognising the need to support people in creating their own affective blue sanctuaries without imposing standardised interactions or creating new risks or demands.

3 | CONCLUDING REMARKS

The accounts shared by our participants paint a picture of a multifaceted relationship between blue space and their well-being. In this paper, we have focused on the themes that highlight how varied sensory, social and emotional qualities of blue encounter helped participants to manage specific challenges associated with bipolar or psychosis through enabling moments of 'affective sanctuary' or refuge; providing opportunities for a blue 'reset', a socially undemanding blue and a blue identity. Recognising the limits expressed by some of our participants in terms of opportunities to engage with blue space, we have also reflected on whether or how blue space could be included within therapeutic interventions for people with SMI.

Although our participants did not generally mention nature or biodiversity specifically as contributing to their blue space experiences, the sounds of non-human nature, specifically geophonic sounds of water and biophonic sounds of animals, and to a lesser extent visual experiences, underpinned experiences across all four themes. Biophonically noisy natural environments tend to be those with diverse communities of organisms, and bioacoustic monitoring is increasingly applied for monitoring biodiversity in terrestrial (Sugai et al., 2019) and aquatic (Lindseth & Lobel, 2018; Linke et al., 2018) habitats. These positive perceptions of the sounds of nature in promoting mental health suggest that biodiversity may play a role in enhancing the quality of blue spaces for promoting well-being for people with SMI.

For the range of mental health benefits identified by our participants, the role of biodiversity may be direct or indirect. Research on the health benefits of green spaces has shown that the perceived biodiversity of a green space, considered in terms of species richness, correlates with the well-being benefits from the use of that space, although perceived species richness may (Southon et al., 2018) or may not (Dallimer et al., 2012) reflect actual measured species. In these situations, the biodiversity of a place contributes directly to the nature experience within it through direct sensory or emotional experiences, whether by sight or sound. In some blue spaces, especially marine habitats, biodiversity may not be so immediately experienced as it is in green spaces. In these situations, it may be the indirect role of biodiversity through enhancing the quality of the ecosystem more generally, in terms of maintaining the integrity of the ecosystem and its associated structure and processes (Cardinale et al., 2012) that is of greatest importance. Through ongoing threats to blue spaces such as pollution (Grellier et al., 2017) and anthropogenic noise (Rountree et al., 2020), we may be inadvertently reducing their capacity for mental health benefits. The direct and indirect mechanisms through which biodiversity contributes to the quality of blue and green space, the experiences they provide, and their health and well-being benefits, and the links to nature conservation, therefore have important implications for policy and management, and should be a focus for further research (Marselle et al., 2021).

Many aspects of the participant accounts and our themes mirror concepts from the literature on blue space and well-being in other

populations. For example, the development of a place-based identity, and the shift in perspective on one's own situation that can be experienced through spending time in a vast, seemingly natural space. At the same time, themes and subthemes were identified that seem more particular to this group of individuals, often because they relate specifically to experiences that are unique to, or magnified within, those with bipolar or psychosis. For example, the 'blue reset' theme describes the potential of these spaces to compete with or even obliterate intense mental activity that can feel overwhelming, whether in the form of depressive rumination, worry, racing thoughts or the experience of hearing voices. It may well be the case that blue space can function in this way for individuals without these mental health difficulties, however, the prominence of this theme within our participants' accounts is striking. Future research could seek to elaborate upon this emerging construct and explore who is most prone to experiencing it, perhaps setting aside diagnostic boundaries; for example, whether it is more prevalent amongst those who report having particular emotional difficulties, or who are more susceptible to rumination or worry generally. Furthermore, future research could explore whether and how this phenomenon occurs across a range of blue space settings with varied forms of sensory input.

A second novel aspect of our findings was the characterisation of blue spaces by participants as providing a socially undemanding space. Again, in the general population nature-based settings can provide an opportunity for peace and pleasant solitude (Cheesbrough et al., 2019), however, in our sample this potential was described quite distinctively. Blue spaces were characterised as providing respite or sanctuary from what is sometimes, or often, an almost overwhelmingly demanding social world, exacerbated by the experience of their condition. Specifically, participants spoke of the potential for blue spaces to limit their exposure to stimulation, particularly social stimulation. At the same time, these spaces allowed them to suspend concerns about failing to meet social expectations and therefore being judged negatively or causing upset to others. This has important implications for the blue space settings most likely to be of therapeutic benefit. Interactions that are offered as part of a group visit, whilst potentially helpful for some, may alienate others or fail to capitalise on the full potential of these spaces, unless the group is experienced as socially undemanding. Some participants described their blue identity partly in terms of connection with blue space communities such as conservation groups. The potential benefits of being part of a community that 'gives back' to these spaces have been discussed elsewhere (Buser et al., 2020; Maund et al., 2019; Olive, 2023); future research could explore the acceptability of this form of nature-based social contact for those seeking to balance solitude with connection within blue spaces.

Finally, when designating a role for blue space in formal and informal care, our data speak to some considerations worthy of attention. First, for a given individual different blue spaces may serve different self-regulatory functions. It is therefore unlikely that there will be one particular type of space that is optimal in terms of its therapeutic benefit across individuals, or even within

one individual across time (c.f. Dobson et al., 2021). Second, because mood, energy, self-confidence and motivation can be a barrier to travel, capitalising upon blue spaces that are very close to home should be given particular consideration, as should the potential to use objects or settings that act as a proxy for blue space when travel is not possible; this is particularly relevant to the possibility of bringing blue space features into inpatient settings as suggested by some of our participants. This might be achieved through the creative potential of the imagination or sensory memories (Andrews, 2004; Bates et al., 2020; Kearns et al., 2015), or the integration of digital nature. For example, 'natural' soundscapes can enhance cognitive restoration, and feelings of calm, awe and nostalgia inspired by digital nature scenes (Smalley et al., 2023). This reflects growing research interest in the potential for 'virtual' forms of nature to promote aspects of well-being when access adjustments will not otherwise be sufficient to enable people to experience nature outdoors (Depledge et al., 2011; White et al., 2018), although noting that this technology can itself be associated with access barriers. Third, the dynamic risks posed by accessing these spaces in particular mental states should be acknowledged and considered when planning blue care. Fourth, whilst social prescription of blue space visits may have potential, researchers and services should explore varied opportunities to weave exposure to blue space through the care pathway. Last, contemporary thinking about treatment for people with severe mental health difficulties acknowledges that patients have therapeutic goals beyond symptom change, such as increased self-confidence, improved relationships with others and increased sense of purpose and belonging, By describing what blue spaces offer them, our participants' accounts highlight therapeutic needs they have that may not be entirely met by conventional treatments.

Notably, it was not the aim of this paper to distinguish between the specific experiences and benefits associated with blue rather than green space: future research might seek to understand commonalities and differences in the therapeutic potential of different types of nature exposure for this population. Furthermore, ours was a small and predominantly white British sample selected because they experience blue space as supporting well-being. Therefore we cannot expect to capture here all of the ways in which blue space may interact with well-being; exploration of this relationship should continue, particularly during the development and evaluation of any blue space-based interventions. In addition, the activities our participants described within blue space were varied, and thus the pathways by which they impact upon well-being are also likely to be varied, and unlikely to be captured comprehensively within one small study. Finally, interviews were conducted around 18 months after the start of the COVID-19 pandemic restrictions in the United Kingdom and the significant lifestyle changes experienced by participants over this period may have influenced the accounts they gave us of their relationship with nature. More broadly, our focus was upon the experience of being in blue space in relation to well-being, rather than upon exploration of the broader socio-cultural contexts in which this occurs. Nevertheless, the benefits of blue space described by our participants speak to

arguments for preservation and protection of these spaces, including those that may be considered 'mundane' (Dobson et al., 2021). Furthermore, beyond the affective sanctuary that blue space may provide people living with bipolar/psychosis, it is possible that such direct experiences of nature may foster pro-environmental intentions and behaviour (Soga & Gaston, 2023). In conclusion, our participants described their interactions with blue space as rich and multifaceted experiences, overlapping with and distinct from other forms of care in terms of what it offers. Future research could seek to build on key insights from this work, with the objective of deepening our understanding of what aspects of blue spaces work for whom. The ultimate aim of this would be to enable people in a diversity of life circumstances experiencing severe mental ill health to experience the multiple benefits that blue space can provide.

AUTHOR CONTRIBUTIONS

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CONFLICT OF INTEREST STATEMENT

KW occasionally receives payment from Universities and professional societies for delivering workshops on the psychological treatment of people with bipolar disorder.

DATA AVAILABILITY STATEMENT

The data generated by this study will not be made publicly available in order to protect the anonymity of participants. Anonymised data may be shared with other suitably qualified researchers upon reasonable request.

ORCID

Kim Wright https://orcid.org/0000-0003-3865-9743

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

Appendix S1: Pre-interview questions sent to participants for reflection.

Appendix S2: Interview topic guide.

Appendix S3: Coding framework.