

2019

'A lot better than medicine': Self-organised ocean swimming groups as facilitators for healthy ageing

Leesa Costello

Edith Cowan University, L.costello@ecu.edu.au

Marie-Louise McDermott

Purvi Patel

Edith Cowan University, p.patel@ecu.edu.au

Julie Dare

Edith Cowan University, j.dare@ecu.edu.au

Follow this and additional works at: <https://ro.ecu.edu.au/ecuworkspost2013>



Part of the [Medicine and Health Sciences Commons](#)

Recommended Citation

Costello, L., McDermott, M., Patel, P., & Dare, J. (2019). 'A lot better than medicine': Self-organised ocean swimming groups as facilitators for healthy ageing. DOI: <https://doi.org/10.1016/j.healthplace.2019.102212>

[10.1016/j.healthplace.2019.102212](https://doi.org/10.1016/j.healthplace.2019.102212)

Costello, L., McDermott, M. L., Patel, P., & Dare, J. (2019). 'A lot better than medicine' - Self-organised ocean swimming groups as facilitators for healthy ageing. *Health & Place*, 60. Available [here](#).

This Journal Article is posted at Research Online.
<https://ro.ecu.edu.au/ecuworkspost2013/6996>



'A lot better than medicine' - Self-organised ocean swimming groups as facilitators for healthy ageing

Leesa Costello^{a,*}, Marie-Louise McDermott^b, Purvi Patel^a, Julie Dare^a

^a School of Medical and Health Sciences, Edith Cowan University, 270 Joondalup Drive, Joondalup, Western Australia, Australia

^b All Into Ocean Pools Inc, Western Australia, Australia

ARTICLE INFO

Keywords:

Blue space
Healthy ageing
Open-water swimmers
Adventure-based leisure
Focused ethnography

ABSTRACT

Exercise, spending time in nature and feeling part of a supportive community all contribute to better physical and mental health and to healthy ageing. This focused ethnography investigates how participation in self-organised ocean swimming groups contributes to healthy ageing amongst older men and women in the Australian coastal city of Perth. It explores the ways marine life, personal experiences and social connectedness mediate their group use of public blue space, and highlights that group membership promotes participants' enhanced health and wellbeing, and supports development of self-efficacy and resilience. These findings suggest that more inclusive access to ocean swimming and other forms of active or adventure-based leisure activities should be advocated from a public health perspective.

1. Introduction

Group-based participatory activities appear to contribute significantly to healthy ageing (Haslam et al., 2014; Haslam et al., 2016). Positive interpersonal relationships fostered through group-based activities, including physical activities, are appealing to older adults and serve to promote and sustain their participation (Capalb et al., 2014; Dare et al., 2018).

Social prescribing (Brandling and House, 2009; Dayson, 2017; South et al., 2008) and other practices of linking patients with community-based sources of support (Mossabir et al., 2015), often refer people to exercise groups, nature-based groups and other groups that can promote health and wellbeing. However, by placing too great an emphasis on formalised groups, such approaches could overlook the role informal, self-organising, self-sustaining groups (such as informal regular swimming groups) play in helping their members manage healthy ageing through a combination of physical activity, mental stimulation, social interaction and environmental engagement.

Whether pursued as a solo or group activity, recreational swimming can constitute meaning-making leisure (Iwasaki, 2016) beneficial to health and wellbeing (Newman et al., 2013), and capable of serving as a resource for resilience (Nimrod and Shrira, 2016). Informal regular swimming groups can further leverage the physical and mental health benefits through intellectually-stimulating social interaction and

health-promoting engagement within blue spaces ranging from controlled, indoor swimming environments (McDonald, 1992) to the openwaters now prized for 'wild swimming' (Atkinson, 2019).

As the many well-established informal groups of recreational ocean swimmers remain understudied, we conducted a focused ethnographic study with older adult members of several swimming groups operating at beaches in Perth, Western Australia. Our goal was to develop a deeper understanding of how these groups help their members manage healthy ageing. Hence, this paper fills a gap in the study of informal open water swimming groups, and adds to the scholarship on the health significance of wild blue space.

2. Literature review

2.1. Healthy ageing

The World Health Organization (WHO) defined Healthy Ageing as "the process of developing and maintaining the functional ability that enables wellbeing in older age" [original emphasis] (2015, p. 28). Within this construct, functional ability is influenced by an individual's "intrinsic capacity", such as their "mental and physical capacities" as well as socio-environmental factors, including built environments, social relationships, public policies and systems (WHO, 2015, p. 28-29).

* Corresponding author.

E-mail addresses: l.costello@ecu.edu.au (L. Costello), marielouisemcdermott@me.com (M.-L. McDermott), p.patel@ecu.edu.au (P. Patel), j.dare@ecu.edu.au (J. Dare).

<https://doi.org/10.1016/j.healthplace.2019.102212>

Received 15 November 2018; Received in revised form 27 August 2019; Accepted 16 September 2019

1353-8292/ © 2019 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Neither the Healthy Ageing framework, nor socio-ecological models of human development such as Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1981) explicitly acknowledge the role that natural environments play in promoting health and wellbeing. Typically, these models and frameworks construct the ageing process as influenced by interactions between individual characteristics (e.g. sex, functional health and age) and socio-ecological determinants including gender, living arrangements, built environments, family and social relationships, and broader social and cultural norms and values. Balanced against this approach, Phoenix and Orr (2015) argued that the pleasures that physically active lives afforded older persons merit more prominence in discussion of healthy ageing. Facilitating and sustaining physically active lives involves two other aspects that contribute to developing the coping strategies and resilience central to healthy ageing, namely self-efficacy (Sims, 2017) and social support.

Originally conceptualised by Bandura (1977), self-efficacy refers to an individual's belief in their capacity to master a task. According to Bandura, increasing self-efficacy means that individuals are more likely to initiate and persist with a specific task or behaviour. Bandura's work also emphasises that 'mastering' a task can, in turn, help buffer the psychological impact of occasional failures, rendering an individual more likely to 'bounce back' and persist until success is achieved. While self-efficacy is one construct in a suite of resources that individuals can use to cope with life stressors (Lindström and Eriksson, 2010), social support, delivered through groups for example, can also bolster this coping capacity (Super et al., 2015).

Social support, constructed as an individual's belief that they are "valued, loved, and an integral part of a social relationship" (Shearer, 2006, para. Background), underpins a sense of familiarity and security. The capacity of social relationships to moderate or buffer the negative health consequences of psychosocial, physical or mental stressors (House and Landis, 2003) appears particularly important during times of crisis (Westen et al., 2006, p. 586). As Caplan (cited in Hirsch, 1980) noted, during times of stress, social support enables individuals to draw on their psychological resources, helping them manage emotional stressors. Therefore, environments and situations that nurture the formation of social bonds and the provision of social support have special significance for health and wellbeing.

A number of studies have explored the positive impact on health and wellbeing of green spaces such as natural wilderness areas, parks and gardens (Finlay et al., 2015; Maas et al., 2006). Research highlighting the subjectivity of experiences (Conradson, 2005) suggests the need for more critical analyses of the health and wellbeing impacts of environments that have long been considered therapeutic or salutogenic. Wiles et al. (2017) asserted that an individual's involvement with a place, conceptualised as "participation, commitment, and connectedness" (p. 28) is as important as feelings of familiarity and security associated with that place, in promoting health and wellbeing. As it is the experience of place rather than place itself that is generative of wellbeing (Coleman and Kearns, 2015), no spaces can be considered inherently therapeutic or capable of eliciting the same response from all individuals.

2.2. Health impacts of engagement with blue space

The UK's Blue Gym project (Depledge and Bird, 2009; White et al., 2016) and other research (Finlay et al., 2015; Foley and Kistemann, 2015; Gascon et al., 2015; Thomas, 2015; Völker and Kistemann, 2011; Völker et al., 2016) have explored the aesthetic and affective impacts of being with, on or near water. In addition, a recent systematic review focused on formal therapeutic interventions in blue space and excluded studies that explored the impact of recreational and/or informal engagement with blue space (Britton et al., 2018). However, given that physical function, age, gender, social integration and socioeconomic status all mediate access to blue space (Coleman and Kearns, 2015; Foley, 2015, 2017; Thomas, 2015), marginalised groups may have few

formal, recreational and/or leisure opportunities to engage with public blue spaces such as pools and beaches (Wiltse, 2007; Pitt, 2019).

In Australia, however, swimming is still very inclusive, perhaps because it has been linked to national identity, embedded in primary school curriculums and supported since the early 20th century by "well-publicised large-scale and very popular 'Learn to Swim Programs'" (Phillips, 2008, p. 260). The inclusive nature of swimming in Australia is exemplified in the integration of disability swimming into Swimming Australia's mainstream structures (Hammond, 2019; Phillips, 2008; Spillman, 2018); this serves to celebrate the interests and achievements of non-able bodied people who swim at recreational and elite levels.

Despite the growing popularity of ocean swim groups and events that suggest wild swimming environments represent a setting to promote health and wellbeing, relatively few studies have investigated the health and wellbeing benefits of immersive aquatic activities such as surfing (Anderson, 2012; Caddick et al., 2015; Ford and Brown, 2006; Hignett et al., 2018; Levin and Taylor, 2011; Wheaton, 2017) or swimming (Foley, 2015, 2017). In Australia, the risk of shark attacks (Crossley et al., 2014; Neff, 2012) and drownings associated with rips (Short, 2007) has, since the early 1900s, justified beach safety campaigns urging Australian beachgoers to limit their swimming to 'between the flags' at surf beaches patrolled by lifesavers or lifeguards (Jaggard, 2006; Sherker et al., 2010). In consequence, the experiences of Australia's growing numbers of ocean swimmers - who willingly accept ocean swimming's risks, savour its sensual pleasures, and value its restorative, stress-reducing power (Game and Metcalfe, 2011) - remain less studied than the experiences of surfers (Waitt and Warren, 2008) and surf lifesavers (Jaggard, 2006).

Much of the research on open-water swimmers relates to shark-free, colder seas. Foley's (2015, 2017) studies of Irish swimmers provided critical insights into individuals' embodied experiences of swimming and swimming as an 'accretive practice'. His metaphoric explanation of this phrase is poetically poignant: "the fleeting event of the swim and the milieu in which it takes place, harden into a sort of embodied lacquer of wellness" (2017, p. 45). For Foley, awareness of the risks associated with open-water swimming was central to participants' embodied experiences of swimming, and those risks and resulting fears were pivotal to participants' sense of respect for the ocean, and their willingness to surrender to its greater force. His research did not, however, explore how membership of an informal swimming group mediates these experiences. As such, our paper adds to Foley's examination of accretion by exploring the therapeutic benefits of shared swimming experiences in particular.

Providing a different perspective, Peters' (2012) ethnographic study explored the ocean as an egalitarian health-promoting setting for African-American women to commune, mentor and support each other through a water exercise group. For participants in this group, exercise was a form of play accompanied by laughter, banter and song, and newcomers were readily accepted. The only risk this group confronted was the chilly water, and as Peters noted, "senior members talk to the mentees within their population of water exercisers about the importance of going into the cold salt water to distress, rejuvenate, and revitalize" (2012, p. 220). Like Peters, our study aimed to uncover a similarly rich narrative about the experiences of wild ocean swimming. Our methodology was hinged upon achieving this goal and, as such, is discussed next.

3. Materials and methods

This study was conducted as a focused ethnography that encompassed observer participation and in-person interviews with swimmers. Focused ethnographies are shorter than traditional ethnographies and use intense and varied methods of data collection (Higginbottom et al., 2013; Knoblauch, 2005); this makes them a valid and attractive qualitative tool to investigate "emerging settings of interest" (Wall, 2014, 'An evolving method' para 11).

Representing an evolution of traditional ethnography – as with systematic, interpretive or critical ethnographies (Muecke, 1994) – focused ethnographies have been the subject of criticism in qualitative conversations. This is unsurprising, as methodological maladaptation can occur when non-traditional disciplines ‘sniff’ out a new approach for an ‘easy feed’. Any new adaptation of tradition can expect to be met with objections, especially from those disciplines claiming ownership over the method or seeking to defend its original purpose. By demonstrating its benefits where intimate knowledge of the field is presupposed by the ethnographer, Hubert Knoblauch (2005) helped legitimise the use of focused ethnography. While the ethnographer and lead researcher on this paper did not belong to a swimming group herself, her years observing and engaging with early morning swimmers at her local beach served as the catalyst for conducting this formal study.

Ethics approval was granted from the Human Research Ethics Committee (HREC, Project Code: 15575) at Edith Cowan University. Participants were then recruited from established informal groups of regular ocean swimmers based at three beaches (Cottesloe, Sorrento and Mullaloo) along metropolitan Perth's coastline. Cottesloe, Perth's most iconic beach, is approximately 19 km south of Sorrento, and Mullaloo beach is approximately 5 km north of Sorrento. All three beaches have wide sandy shorelines and limited rocky outcrops or reefs, allowing for uninterrupted swimming. Offering accessible car parks, footpaths and showering amenities, these popular beaches attract visitors from the more affluent suburbs nearby as well as other Perth suburbs.

As a participatory technique, the lead researcher swam at these locations with some of the members from these swimming groups, communicated with them by email, and attended some of their social gatherings, taking field notes where applicable. The interviews she conducted were transcribed and coded to create themes and sub-themes alongside the field notes. Her co-authors then undertook a co-coding exercise to ensure consistency and to discuss any discrepancies.

Though one of the groups was men-only, the other two groups had a mix of male and female members. The recruitment process yielded 17 participants, comprising ten men and seven women. There appeared to be little cultural and linguistic diversity amongst the participants, and only one participant mentioned having lived in another country. Their ages ranged from 55 to 80 + years of age. Most participants were married, with adult children and grandchildren. Most participants were also retired, and their occupational backgrounds ranged from teacher, swimming teacher, technician, doctor, nurse, disability worker, chef, electrician, and carpenter, to welder and supermarket/factory worker. Although some were living on tight budgets, all participants lived in the affluent coastal suburbs of Perth, and most had sufficient means for interstate and overseas holidays. Several participants engaged in other water-based and off-water health and fitness activities (such as walking, cycling, golf, tennis, badminton and gym workouts), in some cases as members of formalised clubs. Several participants reported living with specific health issues including sinus, lymphoedema, depression, and were recovering from injuries, operations and adverse life events.

4. Findings and discussion

This section considers three overarching themes in relation to the theoretical framework of healthy ageing, and with reference to relevant literature:

- the wild swimming environment,
- health and wellbeing benefits, and
- group membership as a facilitator for healthy ageing.

Detailed discussion of each of these themes follows:

4.1. The wild swimming environment

Our study's participants resided in a city praised for its world-class beaches, so it was perhaps not surprising that the interviews revealed evidence of a specific form of hydrophilia (Foley et al., 2019) or love of water; our participants expressed a strong affinity with the beach and the ocean, and enjoyment and appreciation of ocean swimming. As with the older surfers interviewed by Wheaton (2017), some of our participants also described their experiences in the ocean as spiritual, and as feeling at ‘one with the water’:

I'm just intoxicated by the water ... I sort of feel like a dolphin or something or mermaid ... when I dive in, I just feel like it's beautiful. (Isabelle, aged 55).

Participants' explanations for preferring a wilder swimming environment to the controlled environments of Perth's many private and public pools, portrayed the beach and ocean as promoting wellbeing, and as offering a healthier and more natural swimming environment:

This is what I prefer, the sea ... I always say that combination of the sun, the sand and the salt is ... it's a magic recipe. (Ben, aged 62).

I much prefer to swim in the ocean and that is stunning, just that beautiful freedom and the beautiful salt water and ... I find the ocean very calming. (Rhonda, aged 57).

It's much healthier to swim in the ocean than chlorine. (Amber, aged, 68).

Non-human nature influenced the use, value and meaning of their treasured blue space. Participants perceived the wildness and changing moods of the ocean offered more interesting and challenging swimming than the calm, temperature-controlled public pools:

Because every day is different ... You go to the pool, all you do is that black line, up and down, rather boring and honestly, it's not boring at the beach ... you get different experiences, sometimes like the water's rough in the winter-time and there's big waves. It's really quite exhilarating. (Paige, aged 58).

The weather changes, the winds change and everything changes. (Aaron, aged 68).

The wilder environment also afforded the shared pleasures of playing in the waves with fellow swimmers:

You feel like a child as well, you just sort of romp. (Isabelle, aged 55).

I mean we laugh a lot ... the other day I made everybody see how many people we could get on one wave, so there's eight of us, so we got eight out of eight, we all caught it, we all got it so we're aiming for higher numbers now. (Sasha, aged 67).

As ocean swimming afforded connection with the marine environment and life forms, some participants swam with goggles and snorkels to better focus on the seabed and fish:

Lot of schools of fish ... in the ravine, the rocks ... you don't get that in the pool ... We all just circle around and watch them, the little tropical fish ... all laughing. (Sasha, aged 67).

If we see fish (chuckling), we all say, come and have a look at the fish. (Amber, aged 68).

Infrequent encounters with dolphins, seals and whales were experienced as special pleasures:

I've had experiences of swimming with dolphins, seals ... all that down at the beach ... it's magical ... we had a group of dolphins ... they just swam around us, jumped out of the water and we could have touched them, they were so close to us. (Paige, aged 58).

It's good when the seals come up ... they come up to your face and they like ... 'Hello' and like you start talking to it, 'cause it looks like it wants to talk to you and then it goes off and does a somersault and I go 'Well, I can do that too!' (Sasha, aged 67).

While highlighting participants' affinity with marine mammals specifically, these descriptions also seem to reflect an anthropocentric view of their swimming practices. In contrast to an ecocentric perspective of valuing the natural environment in its own right, anthropocentrism is generally understood as a dominant (often western) ideology that values the environment for what it provides for humanity (Passmore, 1974).

Aside from the anthropocentric pleasures associated with the ocean, and in contrast to participants' pleasurable and playful experiences with dolphins and seals, one particular form of marine life was perceived as threatening. Like most Western Australians, these swimmers were well aware of increased shark attacks in local waters in recent years. This awareness, fueled by widespread and often sensationalised media attention, had, over time, modified their ocean swimming practices:

I won't go in if there's packs of seaweed and I always swim very close to shore now ... because of the sharks ... I used to swim out deep before and now I don't. (Jodie, aged 69).

Fears of shark attack promoted group cohesion, as staying close to other swimmers was seen as reducing the risk of shark attack and mitigating its consequences:

They [sharks] are a bit [on my mind] because if we venture out too far and somebody gets away and leaves me out there, I feel a little bit nervous. (Jimmy, aged 72).

The group that I was swimming with were a little bit ahead of us and I had a shark go completely underneath me ... I swam really hard to catch up with the other group. (Paige, aged 58).

I'm always at the back of the group, so I'm always thinking [gosh], if a shark's coming along behind, I'm a prime target ... And I wonder if the guys are going to grab me ... and drag me out onto the beach. These things go through your head. (Fredrick, aged 66).

Significantly, although many participants reflected on how they now minimised their risks of shark attacks by swimming closer to the shore and to other group members, none expressed any desire for shark controls or more formalised structures for their swimming groups, to address issues of risk and safety. This suggests that a shared love of the ocean may overcome - or at least unconsciously suppress - fears of sharks inhabiting Australian coastal waters. It was apparent that our participants rose above their shark fears and harnessed their affinity for ocean swimming in terms of their own health and well-being. The next section addresses this theme.

4.2. Health and wellbeing benefits

Reflective of previous research (Foley, 2015, 2017; Game and Metcalfe, 2011), many of our participants perceived swimming as an appealing low-impact outdoor exercise, available when engagement in other forms of physical activity was prevented by age, injury and health concerns. This study's participants were also keen to highlight the health benefits gained through their regular swimming practice, and credited it with helping them maintain healthy weight and blood pressure, maintain or improve their fitness and general health, minimise or avoid the need for medication, and assist with health issues and adverse life events:

I used to catch colds and stuff like that. Well, I haven't had a cold for years so obviously, it does do something for you and you do feel better for it. (Paige, aged 58).

My lymphoedema ... swimming in the water just helps ease that.

(Janice, aged 69).

I know when hubby died, I found it really hard to swim, but the more I swam the better I got ... And I think that's a lot better than medicine. (Amber, aged 68).

Echoing Foley' (2015) research with Irish open-water swimmers, our participants saw the physical practice of swimming as a respite from everyday stressors:

You just feel exhilarated at the end of the swim ... you feel so good ... your mind's had a rest. (Matty, aged 59).

I went through a hell of a lot of stress, really, really big stress and what helped me was the swimming every evening, I'd swim a kilometre ... and it just sorted my stress out every day, I'd get out ... with not a bit of stress in my mind ... And then I realised I was into something good. (Ben, aged 62).

As with the swimmers studied by Foley (2015, 2017) and Game and Metcalfe (2011), some saw their swimming practice as equivalent to a drug or medicine for their mental health:

I've just found that swimming is ... it's better than a pill and it's better than going to the doctor and sort of saying you're depressed ... I don't feel depressed if I'm swimming. (Rhonda, aged 57).

Interviews and observations revealed how participation in a group contributed to the development of self-efficacy, sense of performance accomplishment and personal mastery amongst participants:

You just feel you can still do stuff, like you know then you're not incapable and you can do this ... it's quite a big confidence-builder. (Sasha, aged 67).

Sometimes like the water's rough in the winter time and there's big waves. It's really quite exhilarating and you do get that sense of achievement ... for me, because I'm not used to the sea ... for me it's a challenge and I've conquered [it]. (Christine, aged 66).

Ben summed up the interconnectedness of physical, mental and psychosocial dimensions of healthy ageing that accrued through his daily swim:

I was sleeping better, eating better, feeling more ... better self-esteem and I started doing these swims like 2 K [kilometres] swims, one mile, two mile, I did a 5 K [kilometres] down the river ... and so progressed and I just felt better and better, I felt better psychologically, more self-confidence ... I started doing those longer swims and I suddenly had a sense of accomplishment and achievement. (Ben, aged 62).

As Bandura (1977) acknowledged, self-belief can develop vicariously by watching others perform an activity successfully, or by receiving encouragement from others (verbal persuasion) to master a task or apply greater effort. The swimming group's capacity to facilitate self-efficacy through a mix of mentoring, vicarious experiences, persuasion and personal mastery, is apparent in the following comments from two male participants who reflected on their increased ability to swim long distances:

They took me down a 100 m at a time. Oh let's do 100 m backstroke, let's do 100 m sidestroke, counted it all out, got me down to the buoy and did it back and they just sort of mentored me all the way. (Arthur, aged 71).

When I arrived here, you wouldn't have told me I could swim to Rottneest Island [19 kilometres off the Perth coast] ... And I've done the last three years. Because it was impossible and then it became improbable, when you started training and swimming longer distances and then because you're mixing with people ... it actually becomes inevitable, you will do it. (Ben, aged 62).

The oldest swimmer, Patty (aged 81) described how she had completed several English Channel swims, and was in training for her final one at the time of her interview. Patty took much pleasure in showcasing her awards which were proudly framed and mounted in the hallway of her home. She described how she enjoyed “mentoring” the other swimmers in her group to improve their swimming styles, especially those who appeared to be weaker. Oliver, part of the all-male group, also considered himself a mentor, highlighting the power of the group to promote self-efficacy, and the mutual enjoyment gained by mentors and mentees:

To see those guys, not swimming people, and now to be able to achieve what they achieve, it's just fantastic ... we rubbished them 'til they started swimming properly and then they started swimming ... And now they're first in ... they now are more persistent than some of the others ... to me, that's magic ... and it was just a combination of the group that did that. (Oliver, aged 68).

Swimming was not the only core activity and pleasure for the groups examined in this research, as participants accorded at least equal importance to other group interactions. The social and psychological benefits of group participation are therefore examined next.

4.3. Group membership as a facilitator for healthy ageing

Post-swim feelings of relief, exhilaration and euphoria, satisfaction and relaxation contributed to participants' enjoyment of post-swim group ‘catch-ups’. Wide-ranging, intellectually engaging chats over coffee allowed them to share their thoughts on a range of issues:

It's grounding in terms of your place in the world. Just talking and socialising ... the most important point of the whole thing is the social aspect ... sitting around having coffee, not a care in the world, really ... if everyone had to go at the end of the swim, say bye, off and then went off, I'd be hugely disappointed ... what I really look forward to, is that going there, sitting, having a chat and the longer it's drawn out, the better for me. (Ben, aged 62).

I'm pretty much by myself and I think it's really good that you have that interaction with people and going to swimming and the beach gives me that and we talk about a whole diverse lot of things. (Rhonda, aged 57).

The valued diversity within the groups contributed to the stimulating pleasures of conversation:

It's just such a diverse group that you get the stimulation and you get the physical benefits. (Arthur, aged 71).

There's good intellectual stimulation, because we all read papers or we all have opinions ... Mentally, you get stimulated because you're talking about so many different things. (Al, aged 69).

For some, such as Aaron, these conversations facilitated personal development and extended social networks and horizons:

Meeting a lot of different people and their different ideas ... how they think and all that sort of stuff and what they say and how they say it, then it tends to make you more tolerant. (Aaron, aged 69).

Several men reported their swimming group provided valuable post-retirement intellectual and social stimulation:

After you've retired, because you're not out in the working force anymore, you don't mix as much with people and you could easily become, you know, reclusive. (Matty, aged 59).

The swimming groups provided members, particularly the retired men, with a prized non-work identity and a sense of focus and purpose to their lives. This accords with conceptual understandings of healthy ageing that emphasise the importance to older adults in experiencing a “purposeful and meaningful existence” (Sims, 2017, p. 26):

It's very social. It's good for men our age, who often retire and don't have any men to go right to, it's very good. (Al, aged 69).

Just having a group to go to and to talk about things like when we were working ... A real purpose in life ... particularly now I've been retired ... I don't do much apart from going for the swim. (Matty, aged 59).

In Foley's work, structure and routine are discussed as the mechanisms through which accretive therapy is produced (2017). He summarises this concept by noting that “it is precisely the ways in which the fleeting [swim] accumulates across routine, everyday, sedimented and affective encounters that produces a therapeutic accretion” (2017, p. 45). While we see this affective aspect of everyday wild encounters in the experiences of our participants, our study expands the notion of routine – from an individual perspective – to one that is hinged upon commitment to a group. By providing meaning and purpose, daily participation in their swimming group helped structure the men's days and lives:

It forces you to get up out of bed ... you're waking up with a purpose, with a goal every morning and you don't want to be late and miss out, otherwise your whole day is ruined, so you have to be there. (Ben, aged 62).

It does create some sort of routine in your day, in the sense that there's a commitment you have and you want to keep and the times are pretty strict in the sense that if you're not there by the required time, everyone heads off swimming, so you want to be there. (Tony, aged 64).

In this sense, participating in the group swim *became* a priority, even in cold and rainy weather and when participants – male and female – felt unwell. Most of our participants had been swimming for so long that they described themselves as ‘veteran swimmers’, and their swimming practice was habituated by their involvement in the group and their commitment to other group members. This sense of ‘commitment to the collective’, as expressed in the following comment, contrasts with the individualism and hedonism evident in Wheaton's (2017) account of surfing amongst middle-aged and older surfers:

Because there's a group of us we go, because if I don't go my friend doesn't have a partner to swim with so because I think it's a group we turn up. (Amber, aged 68).

A similar sense of group identity is evident in Paige's comment. Even though she had been swimming for several years, as one of the group's newer members, she recalled how the group facilitated and expedited this new (now habitual) routine:

Even if you woke up and you didn't feel too good and you think ‘oh, I can't be bothered going down in the cold’, you would think ... you feel you're letting the crew down ... there've been many times, perhaps when it's cold and ... you're not really feeling like it, but you know that there's others there and we rely on each other. (Paige, aged 58).

Foley's (2017) discussion of how accretion is manifested along a continuum of time, “backwards and forwards” (p. 45), is particularly relevant here. Paige's comment above illustrates that participants recalled their early days, casting their minds back to cold mornings/staying in bed versus letting the ‘crew’ down. Where Foley's discussion of backward accretion was related to recollections of the swim itself, our interviews revealed that swimming quickly became a habituated practice because of the participants' affective obligations to the group. Hence, commitment to the group is seemingly the mechanism through which some of the “deep initial layering” (Foley, 2017, p. 45) – to form the metaphoric lacquer of accretion – took place.

The daily routine of early morning swimming meant that group members became attentive to other members' changing moods; this

arguably enabled them to offer support in a timely way:

Because we see each other each day, we do sort of like confide in each other ... you can tell when someone's not quite right ... being a support is what we do ... we do know each other's troubles and we do try to help each other. (Paige, aged 58).

If someone hasn't appeared for a few days ... 'where's Bill, or what's happened there?' Someone will check. (Grant, aged 63).

Beyond the routine morning swims, socialising with their swimming group helped fill members' days and weeks. Their beach-based socialising and celebrations included breakfast barbecues, birthday and Christmas celebrations, and some participants also got together to walk, cycle, swim, fish, play golf, share meals, go to football matches or take trips and holidays. These extended interactions provided further opportunities to develop a strong network of social support beyond members' shared morning beach ritual. Reflective of previous research that identified even the perceived presence of social support "may be protective in providing an indication of being loved and valued" (Stewart and Clarke, 1995, p. 164), some participants referred to being able to draw on the group for emotional support should they need it:

If I wanted to talk about something in private, I could talk to any of them and I think that's pretty important. Not that I do, but I could if I wanted to, if I felt I needed to. (Fredrick, aged 66).

Exchanging confidences and support in a trusting environment was obviously important to group members:

Even though people don't get down and get all emotional on each other, we know what's going on with each other, we touch on things. (Matty, aged 59).

There was also strong evidence of men and women happily and routinely providing off-beach support and care for people connected to their swimming group. The swimming groups provided companionship for members who were unable to participate in the daily swims due to injury or ill health. In general, men tended to assist with technical issues or provide manual labour, while women provided meals and transport, though both men and women provided emotional and social support:

I've had two knee replacements and I'd be sitting here and there'd be two or three guys around and the next ... afternoon someone else'd come and the next day one or two others. (Al, aged 69).

As participants perceived participation in their swimming group delivered a host of benefits, any inability to swim produced withdrawal symptoms.

If we don't go, we just feel strange, you just don't feel like you've done right. (Matty, aged 59).

If we go away ... I always look forward to coming home and joining that crew again ... it only took me two and a half weeks [after knee operation] before I could go back down again to it ... I just couldn't wait to get back down into the water and see all the guys again. (Aaron, aged 69).

In contrast to the swimmers studied by Foley (2015, 2017) or Game and Metcalfe (2011), our participants were so invested in their group that they found it hard to envisage a pleasurable or meaningful life that did not incorporate their group ocean swim:

Life would be very empty ... to have that whole thing taken away would just be devastating ... you rely on it. You know, you rely on seeing these guys all the time and I couldn't imagine it. (Matty, aged 59).

I'd be absolutely shattered ... if it was taken away from me, I actually think my health would suffer ... No family or anything like that would make up for it. (Amber, aged 68).

These comments are also reflective of other research with older people that identified while individuals may initially join a group because of interest in the activity, their continued attendance is often dependent on their sense of belonging to the group (Dare et al., 2018; Hartley and Yeowell, 2015).

Participants regarded physical, mental and psychosocial benefits accrued through their daily swimming practice as largely contingent on their participation and embeddedness in their informal swimming groups. Without the enjoyment, motivation and social support that came from being part of a group, some participants reported they would succumb to sedentary suburban lifestyles and struggle to be physically active:

Without that type of friendship, peer pressure, whatever you call it, I may not even go swimming ... I probably wouldn't go on my own. And I have no doubt that without going and doing it, I'd probably become a lot more lethargic ... my fitness level would be a lot lower. (Tim, aged 64).

I would certainly miss it ... part of my routine would be gone, my health, my fitness, I probably wouldn't do the exercises I do now. So I wouldn't be as fit, I wouldn't be as healthy. (Fredrick, aged 66).

While our participants believed their groups offered many health benefits, and were happy to invite and welcome others to join them for a swim to experience their ocean swimming practices, they acknowledged that daily ocean swimming remained unappealing, even to most beachgoers and swimmers. The groups appeared able to sustain themselves, but could only retain swimmers who fitted with the existing group's values and practices. While groups gained members through on-beach or personal connections, expanding their membership or activities to bring their healthy ageing practice of ocean swimming to more Perth residents was not a priority.

5. Conclusion

All the ocean swimming groups studied were united by their routine of beach swimming, by their love of the ocean, and their conviction that their ocean swimming practice as part of a group was beneficial for their social connectedness, wellbeing and physical and mental health. Marine life, personal experiences and social connectedness clearly mediate their swimming groups' use of wild, public blue space to enhance, restore and maintain their physical, mental and psychosocial health and wellbeing. These swimmers were acting consciously and responsibly to maintain and enhance their health and wellbeing. Their happy, playful swimming was meaning-making leisure that served as a resource for self-efficacy and resilience.

And while it is not all good news – think rips and sharks – the intrinsic danger of the ocean swimmers' preferred blue space was both part of its appeal and a significant contributor to group cohesion and health and wellbeing impacts. Group members shared pleasures, exercise, helped the less skilled and confident to become better swimmers, enjoyed each other's company and engaged in voluntary, pleasurable and mutually beneficial caring and support activities. In this context, gender identity appeared less important than swimmer identity, and the most gendered behaviour related to the forms of off-beach support provided to group members. The retired men especially valued their groups for providing mental stimulation and social connection in addition to physical activity.

While swimming is a relatively inclusive activity, ocean swimming is less accessible for people who do not live close to the beach and/or are on limited incomes. In this regard, we advocate for alternative types of active leisure which have the potential to deliver the social support and self-efficacy benefits reported on in this paper. One initiative worth noting here is Parkrun (www.parkrun.com), a semi-formal activity which enables locals to meet for weekly runs in their own communities,

delivering both physical and social benefits for participants (Reece et al., 2019). The Australian ocean swim experience most equivalent to Parkrun is probably the Bold & Beautiful Swim Squad Manly that swims daily from Sydney's Manly Beach, and involves thousands of swimmers (Bold and Beautiful Swim Squad Pty Ltd, 2019). Other initiatives are also delivering more adventurous forms of leisure, perhaps akin to the appeal of ocean swimming for our participants. For example, several local councils in Australia have launched the GOLD program – Growing Old Living Dangerously – which incorporates a raft of “exciting and challenging” social activities for older adults (City of Wanneroo, 2019).

In terms of blue space settings, there are other opportunities and innovations that could deliver some of the therapeutic benefits afforded by ocean environments. These include incorporating man-made blue spaces in urban design (Čákyová and Vranayová, 2018), such as fountains, water playgrounds and other interactive structures. Using virtual reality or other types of media which provide visual access to blue space might mimic at least some of the salutary aspects of wild swimming described by our participants. The use of virtual reality has gained some attention in the literature on green space, but has growing potential for blue space settings (White et al., 2018).

Our ethnography revealed that the blue space setting afforded swimmers a unique, shared experience. It was the informal nature of their swimming groups that provided this distinction, in that they were only known to people who had links to members and those who witnessed their swims; hence, the swimming groups remained small and cohesive. Taking on more than a few new swimmers at a time would arguably alter both the character of the group and its ability to provide the valued skills development and support, and a framework for healthy ageing. This notwithstanding, providing broader promotion and support for ocean swimming and more equitable access to ocean swimming for all of Perth's residents appears justifiable on public health grounds.

While more systematic promotion of these informal swimming groups (e.g. via websites such as OceanFit, 2019a and OceanSwims.com, 2019) risks overwhelming the existing groups, a scheme offering informal mentoring by experienced ocean swimmers or readily affordable access to more formalised programs, such as the Can Too Foundation's learn to ocean swim program (Pinkstone, 2018) or OceanFit (2019b) Swim School, could encourage more people to take up ocean swimming as a low cost, low-impact leisure activity. Promoting such opportunities within group settings would, in addition, deliver opportunities to enhance self-efficacy and resilience by providing a socially supportive space for healthy ageing.

Declarations of interest

None.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Acknowledgements

We would like to acknowledge the participants who cheerfully offered their time and insights for this research and warmly welcomed Dr Leesa Costello to their swimming fold.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.healthplace.2019.102212>.

References

- Anderson, J., 2012. Relational places: the surfed wave as assemblage and convergence. *Environ. Plan. Soc. Space* 30, 570–587.
- Atkinson, S., 2019. Wellbeing and the wild, blue 21st-century citizen. In: Foley, R., Kearns, R., Kistemann, T., Wheeler, B. (Eds.), *Blue Space, Health and Wellbeing: Hydrophilia Unbounded*. Routledge, Milton Park, UK, pp. 310–3331.
- Bandura, A., 1977. Self-efficacy: towards a unifying theory of behavioral change. *Psychol. Rev.* 84 (2), 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>.
- Bold and Beautiful Swim Squad Pty Ltd, 2019. Bold and Beautiful Swim Squad Manly. <https://www.boldandbeautifulmanly.com.au/>.
- Brandling, J., House, W., 2009. Social prescribing in general practice: adding meaning to medicine. *Br. J. Gen. Pract.* 59 (563), 454–456. <http://doi.org/10.3399/bjgp09X421085>.
- Britton, E., Kindermann, G., Domegan, C., Carlin, C., 2018. Blue care: a systematic review of blue space interventions for health and wellbeing. *Health Promotion International*, pp. 1–20. <https://doi.org/10.1093/heapro/day103>.
- Bronfenbrenner, U., 1981. *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press, Cambridge, MA Retrieved. <https://ebookcentral.proquest.com>, Accessed date: 12 December 2018.
- Caddick, N., Smith, B., Phoenix, C., 2015. The effects of surfing and the natural environment on the well-being of combat veterans. *Qual. Health Res.* 25 (1), 76–86. <http://doi.org/10.1177/1049732314549477>.
- Capalb, D.J., O'Halloran, P., Liamputtong, P., 2014. Why older people engage in physical activity: an exploratory study of participants in a community-based walking program. *Aust. J. Prim. Health* 20 (1), 74–78. <http://doi.org/10.1071/PY12090>.
- Čákyová, K., Vranayová, Z., 2018. Impact of blue space in architecture and possibilities of using. *MATEC Web of Conferences*, vol. 174. pp. 10137. 2018. <https://doi.org/10.1051/mateconf/201817401037>.
- City of Wanneroo, 2019. Growing Old Living Dangerously. Retrieved from. http://www.wanneroo.wa.gov.au/info/20004/community/209/growing_old_living_dangerously_gold.
- Coleman, T., Kearns, R., 2015. The role of bluespaces in experiencing place, aging and wellbeing: insights from Waiheke Island, New Zealand. *Health Place* 35, 206–217. September. <https://doi.org/10.1016/j.healthplace.2014.09.016>.
- Conradson, D., 2005. Landscape, care and the relational self: therapeutic encounters in rural England. *Health Place* 11 (4), 337–348. <https://doi.org/10.1016/j.healthplace.2005.02.004>.
- Crossley, R., Collins, C.M., Sutton, S.G., Huvener, C., 2014. Public perception and understanding of shark attack mitigation measures in Australia. *Hum. Dimens. Wildl.* 19 (2), 154–165. <https://doi.org/10.1080/10871209.2014.844289>.
- Dare, J., Wilkinson, C., Marquis, R., Donovan, R.J., 2018. “The people make it fun, the activities we do just make sure we turn up on time.” Factors influencing older adults' participation in community-based group programmes in Perth, Western Australia. *Health Soc. Care Community* 26 (July) 87–81. <http://doi.org/10.1111/hsc.12600>.
- Dayson, C., 2017. Policy commentary - social prescribing “plus”: a model of asset-based collaborative innovation? *People, Place Policy Online* 11 (2), 90–104. <http://doi.org/10.3351/ppp.2017.4839587343>.
- Depledge, M.H., Bird, W.J., 2009. The blue gym: health and wellbeing from our coasts. *Mar. Pollut. Bull.* 58 (7), 947–948.
- Finlay, J., Franke, T., McKay, H., Sims-Gould, J., 2015. Therapeutic landscapes and wellbeing in later life: impacts of blue and green spaces for older adults. *Health Place* 34 (July), 97–106. <https://doi.org/10.1016/j.healthplace.2015.05.001>.
- Foley, R., 2015. Swimming in Ireland: immersions in therapeutic blue space. *Health Place* 35, 11–12. September. <http://doi.org/10.1016/j.healthplace.2014.09.015>.
- Foley, R., 2017. Swimming as an accretive practice in healthy blue space. *Emot., Space Soc.* 22, 43–51. <http://doi.org/10.1016/j.emospa.2016.12.001>.
- Foley, R., Kearns, R.A., Kistemann, T., Wheeler, B. (Eds.), 2019. *Blue Space, Health and Wellbeing: Hydrophilia Unbounded*. Routledge, Milton Park, UK.
- Foley, R., Kistemann, T., 2015. Blue space geographies: enabling health in place. *Health Place* 35, 157–165. September. <http://doi.org/10.1016/j.healthplace.2015.07.003>.
- Ford, N., Brown, D., 2006. *Surfing and Social Theory: Experience, Embodiment and Narrative of the Dream Glide*. Routledge, London.
- Game, A., Metcalfe, A., 2011. ‘My corner of the world’: bachelard and bondi beach. *Emotion. Space Soc.* 4 (1), 42–50.
- Gascon, M., Triguero-Mas, M., Martínez, D., Davdand, P., Forn, J., Plasència, A., Nieuwenhuijsen, M.J., 2015. Mental health benefits of long-term exposure to residential green and blue spaces: a systematic review. *Int. J. Environ. Res. Public Health* 12 (4), 4354–4379. <http://doi.org/10.3390/ijerph120404354>.
- Hammond, A., 2019. The mainstreaming of disability swimming in Australia. *Sport. Tradit.* 36 (1), 43–62.
- Hartley, S.E., Yeowell, G., 2015. Older adults' perceptions of adherence to community physical activity groups. *Ageing Soc.* 35, 1635–1656. <https://doi.org/10.1017/S0144686X140004646>.
- Haslam, C., Cruwys, T., Haslam, S.A., 2014. “The we's have it”: evidence for the distinctive benefits of group engagement in enhancing cognitive health in aging. *Soc. Sci. Med.* 120, 57–66. <http://doi.org/10.1016/j.socscimed.2014.08.037>.
- Haslam, C., Cruwys, T., Milne, M., Kan, C.H., Haslam, S.A., 2016. Group ties protect cognitive health by promoting social identification and social support. *J. Aging Health* 28 (2), 244–266. <http://doi.org/10.1177/0898264315589578>.
- Higginbottom, G.M.A., Pillay, J.J., Boadu, N.Y., 2013. Guidance on performing focused ethnographies with an emphasis on healthcare research. *Qual. Rep.* 18 (9), 1–16.
- Hignett, A., White, M.P., Pahl, S., Jenkin, R., Le Froy, M., 2018. Evaluation of a surfing

- programme designed to increase personal well-being and connectedness to the natural environment among 'at risk' young people. *J. Adventure Educ. Outdoor Learn.* 18 (1), 53–69. <http://doi.org/10.1080/14729679.2017.1326829>.
- Hirsch, B.J., 1980. Natural support systems and coping with major life changes. *Am. J. Community Psychol.* 8 (2), 159–172.
- House, J.S., Landis, K.R., 2003. Social relationships and health. In: Salovey, P., Rothman, A.J. (Eds.), *Social Psychology of Health: Key Readings*. Psychology Press, New York, pp. 218–226.
- Iwasaki, Y., 2016. Contributions of leisure to “meaning-making” and its implications for leisure studies and services. *Ann. Leis. Res.* 5398, 1–11. May. <http://doi.org/10.1080/11745398.2016.1178591>.
- Jaggard, E. (Ed.), 2006. *Between the Flags: One Hundred Summers of Australian Surf Lifesaving*. UNSW Press, Sydney, Australia.
- Knoblauch, H., 2005. Focused ethnography. *Forum Qual. Sozialforsch. Forum: Qual. Soc. Res.* 6 (3), 44. <https://doi.org/10.17169/fqs-6.3.20>.
- Levin, B.J., Taylor, J., 2011. Depression, anxiety, and coping in surfers. *J. Clin. Sport Psychol.* 5 (2), 148–165. <http://doi.org/10.1126/science.274.5292.1527>.
- Lindström, B., Eriksson, M., 2010. *The Hitchhiker's Guide to Salutogenesis*. Tuo-kinprint Oy, Helsinki, Finland.
- Maas, J., Verheij, R.A., Groenewegen, P.P., de Vries, S., Spreeuwenberg, P., 2006. Green space, urbanity, and health: how strong is the relation? *J. Epidemiol. Community Health* 60 (7), 587. <https://doi.org/10.1136/jech.2005.043125-92>.
- McDonald, M., 1992. *Put Your Whole Self in*. Northcote Selfhelp Hydrotherapy and Massage Group, Penguin, Ringwood, Australia.
- Mossabir, R., Morris, R., Kennedy, A., Blicke, C., Rogers, A., 2015. A scoping review to understand the effectiveness of linking schemes from healthcare providers to community resources to improve the health and well-being of people with long-term conditions. *Health Soc. Care Community* 23 (5), 467–484. <http://doi.org/10.1111/hsc.12176>.
- Muecke, M.A., 1994. On the evaluation of ethnographies. In: Morse, J.M. (Ed.), *Critical Issues in Qualitative Research Methods*. Sage Publications, Thousand Oaks, CA, pp. 187–209.
- Neff, C., 2012. Australian beach safety and the politics of shark attacks. *Coast. Manag.* 40 (1), 88–106. <http://doi.org/10.1080/08920753.2011.639867>.
- Newman, D.B., Tay, L., Diener, E., 2013. Leisure and subjective well-being: a model of psychological mechanisms as mediating factors. *J. Happiness Stud.* 15 (3), 555–578. <http://doi.org/10.1007/s10902-013-9435-x>.
- Nimrod, G., Shrira, A., 2016. The paradox of leisure in later life. *J. Gerontol.* 71 (1), 106–111. <http://doi.org/10.1093/geronb/gbu143>.
- Oceanswims.com, 2019. Swim Groups. Retrieved from. <https://www.oceanswims.com.au/swim-groups.html>.
- OceanFit, 2019a. Ocean Swimming Groups. Retrieved from. <https://oceanfit.com.au/ocean-swimming-groups>.
- OceanFit, 2019b. Swim School. Retrieved from. <https://oceanfit.com.au/swim-school>.
- Passmore, J.A., 1974. *Man's Responsibility for Nature: Ecological Problems and Western Traditions*. Duckworth, CA.
- Peters, D.M., 2012. “Take Me to the water”: community and renewal among aging women: a case study of social interaction and exercise among the “Polar Bears” of Martha's Vineyard. *J. Women Aging* 24 (3), 216–226. <https://doi.org/10.1080/08952841.2012.639668>.
- Phillips, M.G., 2008. *Swimming Australia: One Hundred Years*. UNSW Press, Sydney, Australia.
- Phoenix, C., Orr, N., 2015. The multidimensionality of pleasure in later life physical activity. In: Tulle, E., Phoenix, C. (Eds.), *Physical Activity and Sport in Later Life*. Global Culture and Sport Series. Palgrave Macmillan, London, pp. 101–112.
- Pinkstone, M., 2018. *Overcoming Your Fears: Learn to Ocean Swim*. Retrieved from. <https://www.cantoo.org.au/blog/overcoming-your-fears-learn-to-ocean-swim>.
- Pitt, H., 2019. No ducking, no diving, no running, no pushing: hydrophobia and urban blue spaces across the life-course. In: Foley, R., Kearns, R., Kistemann, T., Wheeler, B. (Eds.), *Blue Space, Health and Wellbeing: Hydrophilia Unbounded*. Routledge, Milton Park, United Kingdom, pp. 236–265.
- Reece, L.J., Quirk, H., Wellington, C., Haak, S.J., Wilson, F., 2019. Bright spots, physical activity investments that work: Parkrun; a global initiative striving for healthier and happier communities. *Br. J. Sports Med.* 53, 326–327. <https://doi.org/10.1136/bjsports-2018-100041>.
- Shearer, N., 2006. Social support promoting health in older women. *J. Women Aging* 18 (4), 3–17.
- Sherker, S., Williamson, A., Hatfield, J., Brander, R., Hayen, A., 2010. Beachgoers' beliefs and behaviours in relation to beach flags and rip currents. *Accid. Anal. Prev.* 42 (6), 1785–1804. <http://doi.org/10.1016/j.aap.2010.04.020>.
- Short, A.D., 2007. Australian rip systems - friend or foe? *J. Coast. Res.* 7–11 (Special Issue 50).
- Sims, J., 2017. Healthy ageing. *Aust. Fam. Physician* 46 (1–2), 26–29.
- South, J., Higgins, T.J., Woodall, J., White, S.M., 2008. Can social prescribing provide the missing link? *Prim. Health Care Res. Dev.* 9 (4), 310–318. <http://doi.org/10.1017/S146342360800087X>.
- Spillman, K., 2018. *Buoyant: A History of Swimming in Western Australia*. Swimming WA, Leederville, Australia.
- Stewart, J.A., Clarke, V.A., 1995. The role of social support in ameliorating stress in separated women with children. *Aust. J. Psychol.* 47 (3), 164–170.
- Super, S., Wagemakers, M.A.E., Picavet, H.S.J., Verkooijen, K.T., Koelen, M.A., 2015. Strengthening sense of coherence: opportunities for theory building in health promotion. *Health Promot. Int.* 31 (4), 869–878. <https://doi.org/10.1093/heapro/dav071> %J. (Health Promotion International).
- Thomas, F., 2015. The role of natural environments within women's everyday health and wellbeing in Copenhagen, Denmark. *Health Place* 35, 187–195. September. <https://doi.org/10.1016/j.healthplace.2014.11.005>.
- Völker, S., Kistemann, T., 2011. The impact of blue space on human health and well-being – salutogenic health effects of inland surface waters: a review. *Int. J. Hyg Environ. Health* 214 (6), 449–460.
- Völker, S., Matros, J., Claßen, T., 2016. Determining urban open spaces for health-related appropriations: a qualitative analysis on the significance of blue space. *Environ. Earth Sci.* 75 (13), 1–14. <http://doi.org/10.1007/s12665-016-5839-3>.
- Waitt, G., Warren, A., 2008. Talking shit over a brew after a good session with your mates': surfing, space and masculinity. *Aust. Geogr.* 39 (3), 353–365. <https://doi.org/10.1080/00049180802270549>.
- Wall, S., 2014. Focused ethnography: a methodological adaptation for social research in emerging contexts. *Forum Qual. Sozialforsch. Forum: Qual. Soc. Res.* 16 (1) Art 1. <https://doi.org/10.7939/R3GF0N27T>.
- Westen, D., Burton, L., Kowalski, R., 2006. *Psychology: Australian and New Zealand Edition*. John Wiley & Sons, Milton, Australia.
- Wheaton, B., 2017. Surfing through the life-course: silver surfers' negotiation of ageing. *Ann. Leis. Res.* 20 (1), 96–116. <https://doi.org/10.1080/11745398.2016.1167610>.
- White, M.P., Pahl, S., Wheeler, B.W., Fleming, L.E.F., Depledge, M.H., 2016. The 'blue gym': what can blue space do for you and what can you do for blue space? *J. Mar. Biol. Assoc. U. K.* 96 (01), 5–12. <http://doi.org/10.1017/S0025315415002209>.
- White, M.P., Yeo, N.L., Vassiljev, P., Lundstedt, R., Wallergård, M., Albin, M., Löhmus, M., 2018. A prescription for “nature”: the potential of using virtual nature in therapeutics. *Neuropsychiatric Dis. Treat.* (14), 3001–3013. <https://doi.org/10.2147/NDT.S179038>.
- Wiltse, J., 2007. *Contested Waters: A Social History of Swimming Pools in America*. Chapel Hill. University of North Carolina Press, NC.
- Wiles, J.L., Rolleston, A., Pillai, A., Broad, J., Teh, R., Gott, M., Kerse, N., 2017. Attachment to place in advanced age: a study of the LiLACS NZ cohort. *Soc. Sci. Med.* 185, 27–37. <http://doi.org/10.1016/j.socscimed.2017.05.006>.
- World Health Organization (WHO), 2015. World report on ageing and health. <https://www.who.int/ageing/events/world-report-2015-launch/en/>.