

1 **Coastal transformations and connections – revealing values through the Community**
2 **Voice Method**

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4 **Corresponding author:**

5 Dr Timothy G. Acott, University of Greenwich, School of Humanities and Social Sciences,
6 Greenwich, London, UK

7 T.G.Acott@greenwich.ac.uk

8

9 Dr Cheryl Willis, Natural England, Nobel House, 17 Smith Square, London, UK

10 Cheryl.willis@naturalengland.org.uk

11

12 Sue Ranger, Marine Conservation Society, Ross-on-Wye, Herefordshire, UK

13 Sue.Ranger@mcsuk.org

14

15 Dr Gabriel Cumming, Community Voice Consulting, Warrenton, North Carolina, USA

16 gabrielcumming@gmail.com

17

18 Dr Peter Richardson, Marine Conservation Society, Ross-on-Wye, Herefordshire, UK

19 Peter.Richardson@mcsuk.org

20

21 Dr Rose O'Neill, Chief Executive, Campaign for National Parks

22 7 - 14 Great Dover Street, London SE1 4YR

23 rose@cnp.org.uk

24

25 Dr Adriana Ford

26 Imperial College London, Department of Life Sciences, South Kensington, London, UK

27 a.ford@imperial.ac.uk

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29 **Coastal transformations and connections – revealing values through the Community** 30 **Voice Method**

31

32 **Abstract**

33 1. A wealth of evidence suggests an important relationship between nature and human
34 health and well-being and this appears to hold particular resonance for coastal
35 environments. Notably, this relationship has been explored in assessments of ecosystem
36 services, or the benefits that people derive from nature.

37 2. In this paper, we extend the debate to encompass ideas around relational values which
38 considers that human well-being is derived from relationships with nature rather than being
39 solely delivered as the benefits commonly suggested in the ecosystem services literature.

40 3. The paper draws on conceptual ideas around relational values, sense of place, and
41 environmental justice to understand the values and importance of coastal environments for
42 people.

43 4. These value concepts are explored through detailed narratives revealed by participants in
44 two case study UK coastal locations, using a form of civic dialogue and videography
45 approach called Community Voice Method (CVM).

46 5. We find that despite levels of relative deprivation in our case study locations, interviewees
47 express values which are striking in terms of the depth of care felt; values which are ‘time-
48 deepened’ and shaped not only by what people do and are able to do but also by personal
49 histories and memories which remain strong despite material changes and transformations
50 in people’s lives and the places they live.

51 6. The CVM method in addition provides a practical approach for creating deliberative
52 spaces to explore those deeply embodied and shared connections to the coast which are
53 important and should have greater prominence in coastal management policy and practice.

54

55 Key words: coast, well-being, cultural ecosystem services, relational values, environmental
56 justice, sense of place, community voice method

57

58 **Introduction**

59 Globally, human wellbeing and more locally responsive policy making are increasingly seen
60 as critical goals of policy interventions (Atkinson et al., 2012). For diverse populations and
61 governments around the world, wellbeing and marine policy agendas have mostly been
62 segregated (Kelly, 2018). Integrated approaches are needed that make visible the diverse
63 values of coastal environments in ways that connect to both policy makers and the general
64 population. This study was commissioned by Natural England¹ with the aim of using a novel
65 methodology (Community Voice Method) to understand perceptions of the coast from a
66 diverse group of people, particularly those from low-income areas and BAME communities.
67 Using a frame of relational values combined with sense of place and environmental justice
68 the research showcases the power of the Community Voice Method (CVM) for providing a
69 platform for rarely heard voices in natural resource management, voices which are powerful
70 in terms of the emotion and authenticity they convey. The place-based approach taken here
71 has much to offer in enabling an exploration of relational values which shape how people
72 connect with, ascribe meaning to and derive wellbeing benefit from the coastal environment.

73

¹ Natural England is an executive non-departmental public body that advises the government on the natural environment in England ([Natural England - GOV.UK \(www.gov.uk\)](http://www.gov.uk))

74 The first section of this paper explores some background conceptual ideas in relational
75 values, sense of place, and environmental justice. Drawing from these different perspectives
76 helps provide a frame for understanding the values and importance of coastal environments
77 for people. This is followed by a description of the study and the CVM approach. The results
78 section then provides the reader with insights into the rich narratives shared by participants
79 in their own words. Finally, the issues raised are explored and reflected on in the discussion
80 which connects the narratives of individual stories with a wider conceptual framing and also
81 points to the implications of this work for policy around coastal management and connecting
82 people with nature.

83

84 **Background**

85 The coast and sea have value to people who benefit from time spent in, on, under or beside
86 it in a variety of ways (Depledge et al., 2017). Living close to the coast has positive health
87 and well-being benefits (Wheeler et al., 2012) and is a source of therapeutic and restorative
88 experiences including feelings of relaxation, rejuvenation and enhanced positive emotions,
89 mood and self-esteem (Kaplan 1995; Hartig et al. 2001; Kjellgren & Buhrkall 2010, Bell at
90 al., 2015; White et al., 2017). Wynveen et al. (2012) found that those living close to the
91 marine environment held a deep place attachment and for some, these benefits are felt even
92 when they are no longer by the sea.

93

94 Discussions around the kind of environmental settings that give rise to well-being benefits
95 highlight the importance of those involving water and coastal environments in particular are
96 significantly associated with well-being (Wheeler et al., 2012; Bell et al., 2015; Kelly, 2018).
97 Such environments are particular examples of multifaceted, complex places that draw
98 together human and non-humans into a myriad of different relationships such as walking on
99 a beach, fishing, enjoying leisure facilities at a pier, bird watching or amusement arcades.
100 Policy makers, individuals and communities need to understand these myriad ways in which
101 the coast is important to people and gives rise to multiple and overlapping values but
102 exploring these concepts raises many practical and theoretical issues. This is particularly
103 problematic for policy development and decision making given their emphasis on the need
104 for empirical data that increases visibility of some values over others. For instance, the
105 economic value of fisheries is well documented but how to understand the value of fishing
106 for place identity is less well developed (Urquhart & Acott, 2013).

107

108 There is growing interest in the idea of relational values to help frame understanding of the
109 importance of nature. Applied to interactions between people and environments, relational
110 values are a particular value orientation with emphasis on relationships and responsibilities
111 (Chan et al., 2016). Relational values offer a way beyond intrinsic and instrumental values to
112 help understand the diverse reasons nature is important to people. This broadening of
113 values draws in preferences, principles and virtues about human nature relations (Chan et
114 al., 2018). In the context of this paper, relational values are used to bring emphasis to those
115 meaning-saturated relationships between people and the coast. Exploring relational values
116 draws from diverse academic perspectives across the social sciences and humanities and
117 has given greater prominence to the importance of qualitative perspectives (Chan et al.,
118 2018). Relational perspectives provide ways to scrutinise the values of people, places and
119 nature with arguments being made that benefits can arise from human-nature relationships
120 (Fish, 2016). In the words of Chan (2018); '*Relational values are not present in things but
121 derivative of relationships and responsibility to them*' (p1462).

122

123 An emphasis on qualitative work is particularly challenging if value accounting is largely
124 understood as an economic technical exercise that supports decision making (although
125 Schultz & Martin-Ortega (2018) suggest that there is already a lot of quantitative work that
126 explicitly deals with relational values but it uses a different terminology). However, qualitative
127 methods, and approaches rooted in the arts (Edwards et al., 2016), can help make relational
128 values of places more visible. They can also help in developing deliberative forms of
129 valuation (Tadaki et al., 2017) that explore deep connections between people and nature
130 which in turn enables decision makers to design policies or management strategies that
131 achieve socially, ecologically, and economically equitable and sustainable outcomes
132 (Urquart & Acott, 2013; Masterson et al., 2017). In this study, relational values are explored
133 through a form of civic dialogue using a videography approach called Community Voice
134 Method (CVM).

135

136 Sense of place has been explored as an indicator of cultural ecosystem services and as an
137 element of well-being as derived from ecosystems (Masterson et al, 2017). Sense of place
138 research offers perspectives into how meanings, knowledge and relational values are
139 formed (Ryfield et al., 2019) and also how this can influence well-being. Proshansky et al.
140 (1983) for example, assert that place attachment is important to a person's well-being in that
141 it reflects "a sense of belonging and purpose which give meaning to his or her life" (p.90).
142 Place attachment is concerned with the emotional attachments people form with a locale
143 (Urquart & Acott, 2013). This is often referred to as a sense of belonging or rootedness or
144 "the extent to which an individual values or identifies with a particular environmental setting"
145 (Kyle et al. 2003, p250). Sense of place and the importance that people attach to places
146 cannot be understood with reference to economic and instrumental values alone. Relational
147 value perspectives offer ways to understand the diverse reasons why places are important to
148 people.

149

150 Despite evidence that the sea and coast generate many positive values (Gee & Burkhard,
151 2010; Willis, 2015; Bullock et al., 2018) it is apparent that benefits from nature are not evenly
152 distributed amongst the population (Natural England, 2019; Boyd et al.,2018; Clarke et
153 al.,2013). These studies concerned with barriers to nature, converge in their findings that key
154 drivers of infrequent visits to natural spaces include socio-economic status, health and
155 ethnicity. Issues around differential access to nature have found expression within
156 discussions of environmental justice which is concerned with the fair distribution of
157 environmental costs and benefits (Mitchell, 2011). In his review, Mitchell states that whilst
158 we need to be wary of generalisations, issues of environmental injustice do tend to affect
159 deprived communities the most and that people in these areas have less opportunity to
160 access and benefit from a high quality natural environment. This is important because how
161 people relate to places and form values and meanings around them (relational values),
162 influences the well-being benefits they derive and the development of emotional bonds
163 which is related to attitudes and behaviours within those places (Davenport & Anderson,
164 2005). This has important implications for policy in terms of the need for a more developed
165 and holistic model of conservation which incorporates opportunities for connection with
166 nature as a pathway to an array of benefits to people.

167

168 Relational values, sense of place and environmental justice are theoretical perspectives that
169 offer insights into how, why and for whom coastal environments are important for people.

170 The following sections describe the study location and the CVM approach used. This is
171 followed by a presentation of the results and a discussion that uses these theoretical
172 perspectives to help unpack the diverse coastal values articulated and how these can be
173 made visible for policy makers.

174

175 **Study locations and method**

176 In 2019 Natural England worked with Community Voice Consulting, The University of
177 Greenwich and the Marine Conservation Society to develop and implement a CVM study to
178 explore how people value the coast and their general relationships with it in two coastal
179 locations in England (one in the north east (Durham coast) and one in the south east of
180 England (Portsmouth) see Map 1). These locations have both seen considerable economic
181 change with the decline of coal mining (in Durham) and maritime industries (Portsmouth).
182 County Durham is the 75th most deprived area out of 326 single and lower tier local
183 authorities in England (based on the rank of average score). County Durham has a
184 population of 521,000 with only 8,000 identifying as non-white (ONS, 2019). Portsmouth is a
185 densely populated coastal city with a population of 213,000 and is a diverse, multi-ethnic
186 community with some 32,000 identifying with an ethnicity other than White British (ONS,
187 2019). Portsmouth is ranked 84th of 324 local authorities (excluding counties and where 1 is
188 the most deprived).

189

190 These locations were chosen to reflect a range of contemporary socio-economic
191 circumstances, significant socio-economic and environmental change and diverse natural
192 and human features that create the coastline people experience and use. Work with these
193 communities was designed to take account of such diversity by using a novel method to
194 understand values and how they were articulated by people in these two locations.
195 Community Voice Method (CVM) was chosen for this research, as an innovative and proven
196 video interviewing approach (Cumming & Norwood, 2012; Ainsworth et al., 2019; Green et
197 al., 2019) to help explore the multiple views of diverse individuals and as a tool to stimulate
198 discussions in communities on how the coast was valued and barriers to use.

199

200 CVM is a multistep research and engagement process grounded in careful listening to the
201 perspectives and values of a diversity of stakeholders. It is grounded in qualitative social
202 science and uses filmed interviews to create an original documentary film which is based on
203 analysis of interview transcripts. The intention is that all participants' voices and views are
204 reflected in the final cut of the film and the film is then used as a starting point for further
205 community discussion. It is powerful in its ability to facilitate reflection on deeply held values
206 that connect people to places and to articulate shared values and allow for a wider
207 expression of value to be understood and incorporated into coastal management (Ranger et
208 al., 2016). The methodological approach and sample design was strongly influenced by the
209 desire to engage with those voices that are harder to reach, particularly in urban, more
210 deprived locations. However, to ensure balance across a range of stakeholders we also
211 wanted the voice of traditional coastal stakeholders to be included (e.g. birdwatchers, sailors
212 etc). The study was designed to be completed within a nine-month period between August
213 2018 and May 2019.

214

215 **Research phases**

216 There were five phases to the research. First, a sample of 41 participants were recruited,
217 identified through peer referral and a snowballing process to provide a diverse and

218 illustrative sample of interviewees. An interview guide was designed to explore people's
219 perceptions, views and values (Annex 1). There were six parts to the interview guide
220 including background information; sense of place (wider setting), place identity (referring to
221 the coast and sea); preferred places; access issues and issues pertaining to the England
222 Coast path. This research is reporting on the first five interview themes. A semi-structured
223 interview approach was used whereby interviewees were asked a series of questions about
224 their own views of the sea and coast (for a more detailed description of the methods, see
225 Acott et al., 2019). Ethical permission was given through the University of Greenwich ethics
226 committee (REF: UREC/18.1.6.i.iv). At the start of the interview the ethics of the research
227 was explained to participants and they were required to sign a consent form.

228

229 Second, the interview data were analysed to identify emergent themes and narratives
230 through which stakeholders articulate their values, concerns, and visions. The analysis was
231 based upon a detailed reading of the interview scripts and coding them into final thematic
232 categories using NVivo (v11) qualitative analysis software. A combination of deductive and
233 inductive coding was used (Acott et al 2019 for a full description of the coding process).
234 Deductive (pre-existing) coding typologies drew upon a three- dimensional wellbeing
235 framework, which has emerged as a complement to more traditional and material ways of
236 conceptualising and measuring human wellbeing (McGregor 2007). This framework, which
237 incorporates material, subjective and relational dimensions of well-being, was applied
238 specifically to assess benefits derived from accessing and using the coast in a range of
239 different ways (Ranger, unpublished PhD research). This multi-dimensional approach to
240 understanding well-being is useful because it incorporates aspects which relate specifically
241 to the material circumstances of people's lives as well as the structural and institutional
242 forces that shape what people have, what they can do with what they have, and what they
243 feel about what they have. This enables a detailed appreciation of people's diverse lived
244 experiences in coastal areas. Inductive coding was used to supplement the deductive
245 framework by reflecting thematic patterns that emerged across the interview data. These
246 analyses were used to identify patterns of responses among different categories of coastal
247 users. Thirty-five deductive coding categories were used; each was divided into as many
248 subcategories as needed to fully reflect the diversity of interviewee views.

249

250 Representative interview excerpts were then identified in which key themes from the
251 analysis were voiced, during the third phase of the process, and these excerpts were
252 incorporated into two films (one for each case study area²). In addition to representing the
253 data analysis, the films were designed to include every interviewee, thereby reflecting the full
254 diversity of the participants. Fourth, the films were shown at a range of different public
255 screening events and workshops. CVM films are intended to imbue workshops with the
256 reflective qualities of the interviews. Workshop participants respond to the film through
257 structured dialogue, respectfully discussing the issues under consideration. Results were
258 used to inform the fifth phase, the final reporting of the project and insights from the
259 interviews and workshops have been included in the following results and discussion.

260

261

• ² Portsmouth CVM film: <https://youtu.be/jJB94V2g7LY>. Durham Heritage Coast CVM film: <https://www.youtube.com/watch?v=CmCdqdLoVww>



Map 1: Case Study Locations

Results

41 people were interviewed in 33 interviews across the two areas (19 in Portsmouth and 22 along the Durham Coast with four interviews including two people each). Interviews included 26 people who were 'active coastal users' and 15 who were 'limited users'. Active users were defined as those who access the coast at least weekly on average and limited users defined as those who access the coast less frequently (based on general responses rather than a result of a direct question). 23 women and 18 men were interviewed, 4 interviewees were Asian/Asian British, 1 interviewee was Black/African/Caribbean/Black-British and the remainder were White.

Overall the analysis of interviews from the Durham Coast and Portsmouth reveals communities that care deeply about the coast and sea in a variety of ways. Drawing from the interview analysis and the subsequent workshop presentations (more fully described in Acott et al 2019) the following section discusses selective emergent themes that reveal how people value the coast and how value concepts including sense of place and relational values are revealed through these narratives.

Key themes and participant voices

Well-being

Interview data were analysed to understand the various types of personal well-being that residents of the Durham Coast and Portsmouth derive from the coast and sea. Participants in this study reflected on how the coast influences their well-being which are summarised in the following five categories (Acott et al., 2019):

- Physical and mental health: health benefits of time spent on the coast
- Aesthetic: appreciation for the beauty of the coast and sea

- 309 • Connection to others: the social experience of enjoying the coast with family, friends,
310 and community
- 311 • Connection to nature: the direct, often sensory, experience of the natural
312 environment
- 313 • Restorative: the calming, relaxing, revitalizing effect of time by the coast
314

315 For Frank in Durham, the health benefits of the coast were transformative:
316

317 *“The health benefits to actually living on this coastline and using the coastline... It*
318 *transformed my life and health. You don't just do it and think, ‘this is good for me’--it's just*
319 *fantastic to do anyway, so it makes it easy. Usually when the doctor says you have to do*
320 *this, you have to pack in smoking or you have to stop the drink or whatever, it's usually, ‘oh,*
321 *I've got to put up with that,’ but to actually... go walking, you know, it's amazing the*
322 *difference to your health. I've got no problems now with the doctor” (Frank, male, Durham*
323 *Coast, age: 60s).*
324

325 For Jane the ‘white horses’ she watched with her grandfather were an aesthetic moment to
326 capture with a camera:
327

328 *“White horses: my grandfather and I used to describe the waves as white horses galloping*
329 *towards you, so sometimes the sea and the view can be different over twenty four hours.*
330 *You can have a calm sea, you can have a choppy sea, and then you can have a fierce sea*
331 *where the waves are galloping in and out and they're crashing against the wall and it's*
332 *amazing to see. You take photographs, even when you've seen it 20 times before, you think,*
333 *‘oh, I have to capture this moment.’” (Jane, female, Durham Coast, age: 50s).*
334

335 There were contrasting ways that the coast was experienced by people, and also the
336 features from which people drew their experiences were quite diverse. One impression that
337 emerges from the interviews is that of an individual, even solitary, experience of the coast,
338 the enjoyment of walking by the sea or staring out at it, awed and refreshed by the beauty of
339 the expanse, the sound of the waves, and the smell of the salt spray. The psychologically
340 and physically rejuvenating experience of a direct connection to nature which includes a
341 sensory experience of the natural environment. Anthony describes it as:
342

343 *“It's just that sense of fulfilment afterwards and... not knowing what you're going to see.*
344 *Everyone thinks, ‘oh, you just see a bit of water,’ but because you're along the coast... you'll*
345 *see seals, or sometimes around Farlington Marshes in Langstone Harbour, you might see*
346 *ospreys on their migration route, for example, various birds of prey... jelly fish in the*
347 *springtime, for example, and things like that” (Anthony, male, Portsmouth, age: 40s).*
348

349 Another experience of the coast is a social one, the enjoyment of the seaside with family,
350 friends, and everyone else. This is the coastline of bustling piers, kids splashing around, and
351 fish and chips.
352

353 *“It's one of those things you can enjoy with the family pretty much all year round.*
354 *Summertime on the beach, building sandcastles or plodging [paddling] along the coast”*
355 *(Trevor, male, Durham Coast, age: 40s).*
356

357 The connection to others also goes beyond a social experience and can have significant
358 positive impacts for mental health. As Michael describes:

359

360 *“I’m at home and I’m not feeling very good and I get on the scooter and get down the front*
361 *and within half an hour down here, meeting people and talking to people, I can go home and*
362 *I can feel a hundred percent better” (Michael, male, Portsmouth, age: 60s).*

363

364 Connected to issues of mental health are the restorative values of being at the coast. Emma
365 suggests:

366

367 *“When you sit there and you’re watching the sea and you’re calming down, and you’re*
368 *looking at this... bit of water, and these stones, and they’ve been here for thousands of*
369 *years, it helps put you back in your place... It’s not that things don’t matter—you’ve still got to*
370 *pay the rent, you’ve still got to pay your bills, you’ve still got to put food on your table, you’ve*
371 *still got to do your family arguments—but in the grand scale of the world you’re just a small*
372 *tiny piece of it. And that’s humbling and very... calming for me” (Emma, female, Portsmouth,*
373 *age: 30s).*

374

375 These are deep, emotional relational values being expressed by the interviewees, showing
376 the importance of the coast and encounters with it as fundamental aspects of their lives. All
377 respondents valued the restorative, social and health benefits of time spent by the coast. All
378 these different types of coastal experiences are loved. In many cases, they are loved by the
379 same people. Together, they characterise the coast for people in these communities and the
380 well-being benefits derived from their encounters which go beyond notions of instrumental
381 values, although these may also be important.

382

383 **Coastal features**

384 Interviewees expressed preferences for particular features in coastal place ranging from
385 beaches, natural scenery, seaside businesses, visitor facilities, wildlife and maritime traffic.
386 This reinforces how the coast is meaningful to different people for multiple reasons.
387 Relational values emerge from interactions with things that are a mixture of humans and
388 nature. For instance, Beverley from Durham said:

389

390 *“I prefer the more natural look, so the coastline the way it is. The wildness of it, if you like,*
391 *not so built up and, I suppose, less amenities.... I love to see the beach banks. I like to see*
392 *the pathways, the dene area with the trees” (Beverley, female, Durham Coast, age: 50s)*

393

394 Similarly, Mary described her experience of the sea as something that takes you away from
395 modern life:

396

397 *“Being near the sea is to hear the sea and... the smell as well.... It’s sort of, tranquil, really.*
398 *Just takes you away from the modern life into something that’s natural” (Mary, female,*
399 *Portsmouth, age: 40s).*

400

401 A different response can be seen from Marie in Portsmouth who emphasised the importance
402 of the facilities on offer;

403

404 *“Old Portsmouth is quite nice... you can sit in the pubs round there and have a drink and*
 405 *relax and watch the world go by. That’s a good area. Around here, where there’s the D-Day*
 406 *museum and the ground is flat, having children... they can run around and not hurt*
 407 *themselves and enjoy, tumble around, that is nice... I like the green space and the castle and*
 408 *the museums and the play area for everybody” (Marie, female, Portsmouth, age: 80s).*

409

410 The difficulties of providing a range of coastal experiences were also noted. Trevor from the
 411 Durham Coast talked about wanting both seclusion and also amenities;

412

413 *“You want it to be secluded.... But then, you want amenities as well.... You always want your*
 414 *fish and chips, so you want some sort of local amenities nearby. Facilities for washing and*
 415 *cleaning, as well, and bathroom facilities that’s accessible for all would be an ideal world”*
 416 *(Trevor, Male, Durham Coast, age: 40s).*

417

418 There were clear differences between the two locations, Portsmouth interviewees were more
 419 likely to mention historic sites, green spaces, and maritime traffic than their counterparts on
 420 the Durham Coast. The tension between an appreciation of the “wild,” natural coastline and
 421 a desire for amenities while visiting the coast was evident in both sites but was more
 422 pronounced on Durham Coast. The contrast between wild coasts and places with lots of
 423 amenities speaks to how coastal features can invoke a different sense of place which
 424 describes both the subjective feelings people have for a place, but also, as Stedman (2003)
 425 argues, the physical environment also matters in this. The preferences for different types of
 426 coast being described here can be understood in terms of relational values co-constructed
 427 between people, nature and place.

428

429 **Sense of Place**

430 Ainsworth et al (2019) suggest that sense of place is dynamic and can change and be
 431 influenced by social and environmental factors. Whilst this is undoubtedly true, our research
 432 shows a strong and enduring sense of place associated with and strengthened by the coast.
 433 In both locations, there was a strong sense of place, as articulated through a range of
 434 relational values where sea and the coast have a special role and provide constants in an
 435 ever-changing world. The sea was referred to in conversations as a ‘leveller’ and something
 436 that people could identify and connect with despite whatever else was going on in their lives.
 437 The assertion from Ainsworth et al (2019) that contributions from marine environments can
 438 support ‘fulfilled human lives’ (p1) certainly appeared to play out through participants’ stories,
 439 and memories about the specialness of their local coast, the history and heritage of it and
 440 how it plays a part in both individual and collective identity.

441

442 Everyone we interviewed had a story to tell about how they feel connected to the coast.
 443 People’s identities were wrapped up in their relationship to the coast, both in their specific
 444 location but also to the coast more generally, which contributed to both a sense of belonging
 445 and to individual well-being. Although it is possible to twist the descriptions of the importance
 446 of the coast into an instrumental value perspective, the values articulated fit better with a
 447 relational frame that stresses the heartfelt connections experienced.

448

449 *“I think if I moved away, I would really miss it. I don’t know if I could live anywhere that’s not*
 450 *close to the coast now... if I come out in the morning you’ve got a gorgeous sunrise coming*

451 *up over the sea... it kind of starts the day off with a bit of tranquillity” (Scott, male,*
 452 *Portsmouth, age: 30s).*

453

454 *“I fish three, four times a week off the cliffs here, or off the bottom down there, which is part*
 455 *of my psyche, really. I’ve been brought up with it, all our lives, haven’t we? Part of life” (Joe,*
 456 *male, Durham coast, age: 60s).*

457

458 Relational values help to describe the importance of identity and sense of place which
 459 contribute to a sense of belonging and well-being;

460

461 *“I get to some point on the train [approaching Portsmouth] and I just relax. I think it’s [when]*
 462 *you get that first glimpse of the sea, coming in, it’s that first glimpse of home” (Emma,*
 463 *female, Portsmouth, age: 30s).*

464

465 However, as discussed in one workshop in Hartlepool where all the participants were British
 466 Asian, connecting with the coast was interpreted in a different way. They highlighted that for
 467 some of their group, they have a much shorter relationship with the sea and so do not
 468 necessarily feel a deep sense of connection to it. Nonetheless, they articulated the well-
 469 being benefits of being at the coast and discussed it as a space to connect with each other.

470

471 This study included locations from diverse income areas and yet the care and love people
 472 expressed for the coast was universal, with all respondents demonstrating strong positive
 473 feelings towards the coast. This is notable given that participants included both active
 474 coastal users and those who rarely use the coast and those without obvious association with
 475 it. This importance of the coast to people is not limited to contemporary values, there is a
 476 dynamic relationship between people and the coast that changes over time. The values that
 477 emerge from people’s relationships to place are time thickened, with memories providing an
 478 anchor for how people feel now. A relational perspective between past and present helps
 479 understand how places become emotionally charged for people.

480

481 Both case study locations have undergone extensive periods of change and transformation,
 482 resulting in different narratives today describing connections to the coast from those in the
 483 past. In the late 80’s and early 90’s huge social, economic and environmental change took
 484 place in the North East of England. One after another of the six coal mines were closed, with
 485 the last at Easington colliery being closed and demolished in 1993³. By this stage the area
 486 was described as an ecological disaster zone after 100 years of tipping from the 6 nearby
 487 coal pits. With impacts evident 7km out to sea. People at this time suffered economic
 488 hardships and coal picking became common practice, memories of which for some provide
 489 an enduring connection to the local coast;

490

491 *‘When I was a child I went to the mining strike in Horden and we spent many an evening or*
 492 *day or weekend going down to the picking coal and that’s memory that’s always stuck in*
 493 *mind, like, that, you know, I had it hard when I was a child, because we had no money and*
 494 *we used to go down to Horden Beach and, you know, as little as I was I would have a ruck-*
 495 *sack full of coal. But that was our fuel, that was our heating, so yes, when I do go down to*

³ [Industry - Heritage Coast \(durhamheritagecoast.org\)](http://Industry - Heritage Coast (durhamheritagecoast.org))

496 *Horden Beach it does bring back those memories of going down with my mum, dad and my*
 497 *brother, picking coal' (Alison, female, Durham Coast, age: 60s).*

498
 499 *'It just feels like home. I mean, when the colliery was there, the colliery waste used to go out*
 500 *to sea in the buckets, the waste from the colliery used to go out. And my brother and his*
 501 *friends used to climb in them and see how far they could get out before they chickened out. I*
 502 *used to sit and watch them, and I used to think, I want to do that. I never did, but, like, I don't*
 503 *know, when you're on the beach banks and you're watching the sea, it's clean now where*
 504 *before it was coal, the sand was black, but it's all cleaned up now and it's refreshing to just*
 505 *sit there and watch it all go by' (Maureen, female, Durham Coast, age: 70s).*

506
 507 Underpinning many of the interview responses was a deep heartfelt association with the
 508 coast that often extended back in time to childhood memories. At times responses were
 509 emotional and passionate. One Portsmouth interviewee broke down crying when recounting
 510 early memories of living near the coast. One Durham Coast interviewee described some of
 511 her best memories as those with her children on the local beach. There was a sense of
 512 nostalgia as people described themselves as children being able to visit the coast
 513 independently. This contrasted with their views of young people today who were described
 514 as not tending to visit the coast alone. This observation is supported in the MENE report that
 515 shows a decline in the time children spend outside without adults (Natural England 2019a).

516
 517 **Access and safety**

518 In both case study locations, access and safety issues were cited as important in connecting
 519 with the coast and participants expressed concern when they felt that access was
 520 insufficient. For some, access was about challenges in physically reaching the coastline,
 521 despite living relatively near to it. Issues of transport for example or being able to park
 522 sufficiently near the coast were cited. For others, concerns were about being able to
 523 comfortably use aspects of the coastline (e.g. physically challenging trails or areas with
 524 limited seating).

525
 526 In Portsmouth, participants in the Paulsgrove council estate (one of the most deprived areas
 527 of the city) spoke about how they remembered when the estate was once coastal. This was
 528 before the building of the M27 motorway in the 1970s which completely cut the estate off
 529 from the sea. There is no longer accessible coast from Paulsgrove and people spoke of
 530 having to go to the seafront 8 miles away, entailing multiple bus rides. Terry describes his
 531 frustration with the change of bus routes that make a journey to the seafront more
 532 complicated;

533
 534 *"In the bus company's wisdom they've decided to change all the bus routes, especially in our*
 535 *area. If I wanted to go down to the seafront I would have to catch three busses.... the older*
 536 *generation here is so used to going out on the bus, maybe go down to Southsea. They can't*
 537 *no more because there's no bus" (Terry, male, Portsmouth, age: 60s).*

538
 539 Haneka expressed concern about the use of dangerous stairs to get access to a beach:

540
 541 *"The stairs down there is really dangerous. The path is completely overgrown... you can't go*
 542 *down to the beach, come back and have a picnic, because you can't get to the beach... I'd*

543 *love to take my kids down there, but you just can't get down there, it's too dangerous"*
 544 *(Haneka, female, Durham Coast, age:20s).*

545

546 Access to the coast is also linked to personal mobility and in some cases, this becomes
 547 harder through life's journey. Although Portsmouth is a coastal city, for people with limited
 548 mobility, even living a short distance from the seafront can be a significant barrier to access.
 549 One interviewee with impaired mobility and poor health talked about the importance of the
 550 coast for his mental and physical health. For him, being able to drive down to the pier on his
 551 mobility scooter was a source of vitality and social engagement.

552

553 The multiple narratives around access to the coast challenges the idea that living in a
 554 coastal place means users are satisfied with their access to the coastline. Depending on
 555 personal circumstances, even relatively small distances (from a few miles to a few meters)
 556 can create significant barriers to use if the appropriate facilities are not in place. While
 557 coastal places are often lauded for their naturalness and the ecosystem services they
 558 provide, accessibility barriers may still exist for people living near or actually on the coast.
 559 Physical safety while on the coast was also frequently raised as an issue, especially along
 560 the Durham Coast, where the rugged coastal topography presents safety risks.

561

562 **Discussion**

563 Relational values can be used to frame understanding about why environments are
 564 important to people as opposed to trying to resolve everything into the dichotomy of
 565 instrumental and intrinsic value, even if these value orientations still have salience in some
 566 circumstances (Klain et al 2017; Chan et al 2016; Knippenberg et al., 2018; Stålhammar and
 567 Thorén 2019). Relational values offer the opportunity to have open ended conversations with
 568 people about why environments matter (Tadaki et al 2017), and in this study the community
 569 voice method provided the approach to enable conversations with interviewees but also
 570 subsequently with others via focus groups. The previous section has presented results
 571 across four themes with each theme relating to different dimensions of relationality (Table 1).

572

Theme	Relational value dimensions	Insight
Well-being	Health Benefits Aesthetic Connections to others Connections with nature Restorative	Multiple dimensions of value were articulated that referred to relationships with the coast and a sense of wellbeing
Coastal features	Contemplation Tranquillity Leisure	Challenging an ontological dualism, relationality facilitates understanding coastal features that are human / nature hybrids
Sense of place	Belonging Attachment Identity Memories Care Love	Relational values help to describe the bonds people make to place. Many of which are deep heartfelt responses, not captured in an intrinsic / instrumental dichotomy

Access and safety	Danger Inconvenience Limited mobility Barrier	Human / nature relationships can be negative as well as positive. Examples of relations that reduce positive values of the coast.
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573 Table 1: Themes and dimensions of relational values

574
575 Across both case study locations everyone interviewed spoke of strong connections to the
576 coast and articulated many different reasons why coastal places were important to them.
577 Relational values help to understand these narratives and can provide leverage points for
578 policy development (Mattijssen et al., 2020). In our study the deep, often emotional
579 connections people described emerge out of relationships with the coast that in some cases
580 have been developing since childhood. While instrumental and intrinsic ideas of value help
581 to explain some aspects of valuing nature (Klain et al., 2017), they fail to encapsulate how
582 value develops from personal connections being made with both human and non-human
583 elements of coastal places. Many of the values described were not expressed in a language
584 of valuing something because of its utility (instrumental value) or because of value in itself
585 (intrinsic value). Rather they were rich descriptions of how places made the interviewees feel
586 and how ongoing connection was important for them and how the coast created a sense of
587 well-being. The multiple dimensions of relational values (table 1) help to explain the range of
588 reasons coastal places were important for people from a well-being perspective. This is
589 important, as Bell et al (2015) suggest ‘there is a need for greater acknowledgement of
590 people’s emotional, deeply embodied and often shared connections to the coast within
591 coastal management policy and practice” (pg. 56). The CVM in our study provides a practical
592 approach for creating deliberative spaces to explore those deeply embodied and shared
593 connections.

594
595 In both study locations, connections with the coast are strong and tied up with a sense of
596 identity, belonging, love and care that people feel towards the coast, even in situations
597 where people are less able to physically interact with it. Understanding a sense of
598 relationality with diverse coastal features is a departure from thinking about nature and
599 people in a dualistic sense, as in the dominant framing of ecosystem services as nature
600 providing benefits to people. A relational frame is a way to articulate the importance of
601 features that are both natural and artificial. Thinking about relational values is important in
602 terms of methods (the mutual consideration of social and natural entities) but also as a
603 foundational ontology that promotes process and heterogenous associations (West et al.,
604 2018). The coastlines in Portsmouth and Durham County are a hybrid mixture of natural and
605 societal elements and relational values help to frame an understanding of the importance of
606 the coast that recognises this ontological relationality, rather than forcing the use of a
607 dualism.

608
609 The depth of feelings towards the coast, the powerful emotional responses that people have
610 for these spaces is evident through the rich narratives presented. The exact causal
611 pathways between coasts and well-being benefits have limited discussion in the literature
612 but are interesting to consider here as it is clear that both direct and indirect connections to
613 the coast drive well-being and even where participants were unable to physically connect to

614 the coast, they were still able to derive benefits through their memories and deep sense of
615 identity, sense of place and belonging to the coast. Marselle et al (2021) offer a conceptual
616 framework which is useful here and suggests that exposure and experiences with natural
617 features are important pathways to well-being. Through the narratives presented in this
618 study, it is clear that these pathways play out differently for different people and exposure for
619 some may not always be possible. However, our study illustrates that experience of coastal
620 features does not necessarily need to occur in the present for overall well-being effects to be
621 felt.

622

623 For many participants, their relationship and sense of place and belonging to the coast
624 remains firm and values appear to have become 'time-deepened' through memories, despite
625 profound changes in environmental, socio-cultural or individual contexts in the study
626 locations. For others, the lack of direct contact or exposure to the coast because of access
627 or mobility issues is rather more problematic as interactions are often enabled by facilities
628 such as paths, seating or car parking. The infrastructure facilitates the ability of the
629 environment to provide benefits to people. Participants spoke about the lack of, or difficulty
630 with, transport options as well as the safety concerns about paths and steepness of steps in
631 reaching the coast. Many access issues are much harder to overcome for those with low
632 incomes and this raises the issue of environmental justice and differential patterns of access
633 of natural resources (Mullin et al., 2018). This concept provides a useful perspective for
634 considering the implications of differential access to environments and a firm starting point
635 for coastal management.

636

637 Studies indicate that deprived communities are exposed to much greater levels of
638 environmental 'harms' including pollution, fly-tipping, neighbourhood noise etc and that they
639 enjoy poorer access to environmental goods and services (Lucas et al., 2004). The
640 cumulative impacts for communities with both poor local environments and restricted access
641 to nature rich places has a detrimental effect on quality of life for members of those
642 communities which often tend to be minority and economically disadvantaged groups (Mullin
643 et al, 2018). However, research also suggests that the negative health effects of socio-
644 economic deprivation might be mitigated to an extent by proximity to the coast (Wheeler et
645 al.,2012). While the research is not conclusive, the stress-reducing value of the sea is
646 thought to be an important factor, although Lucas et al (2004) remind us that issues are not
647 only about proximity but also about access and other diverse issues raised by study
648 participants.

649

650 These issues are all important in considering policy responses to ensure greater access to
651 nature is assured even for those in more deprived areas. This is critical because developing
652 natural spaces alone won't be enough to address the complex underlying causes and issues
653 underpinning the unequal distribution of ecosystem services which affects certain groups.
654 Greater attention should therefore be paid to improving the pathways to well-being, through
655 targeted interventions to help address the inequalities in access to coastal spaces.
656 Connecting more people to nature in a place may not only lead to greater individual well-
657 being but also to the development of social capital, community cohesion and a sense of
658 belonging which may be associated with pro-environmental behaviours through developing
659 more of a sense of care and love (West et al, 2018). In this regard, Boyd et al (2018) point
660 out that 'a richer understanding of the values, cognitions and emotions experienced by

661 diverse populations is needed during the landscape design process to optimise societal level
662 benefits' (p104).

663

664 For policy, insights on relational connections through time are important in developing
665 understandings of the need for conservation strategies that sit hand in hand with
666 considerations of access to nature and human health and well-being, in one integrated
667 framework. CVM holds great promise for exploring the diversity of values at the coast and for
668 facilitating a route into decision making processes. It can help to redress the imbalances
669 which often occurs when those who are in some way marginalised fail to get their voices
670 heard. CVM builds on an interviewing approach by creating a film that allows all interview
671 participants to be included in a curated narrative that underpins a shared deliberative space
672 and facilitates stakeholder engagement in ongoing civic dialogue (Cumming & Norwood
673 2012). The experience of running CVM projects is that using a film as a starting point for a
674 workshop helps to foster tolerance and empathy amongst the participants. It effectively
675 demonstrates the ability to transcend people's usual capacity to take part in consultation
676 processes. This was highlighted through the participants interviews as a particularly
677 important aspect of the research, such that people felt they were actively involved and '*being*
678 *heard*' and '*I think people do feel like they've made an impact*' (female participant at the
679 Durham coast).

680

681 Aligned with the interests of environmental justice, place-based and values-led approaches
682 to managing the natural environment for wellbeing presents huge opportunities. People's
683 use of and connection to the natural environment for example, is not only linked with
684 physical features but also with a host of attitudinal, behavioural and experiential factors as
685 well as the proximity, quality and quantity of natural capital. Therefore, simply providing
686 greater access to the coast in itself may not necessarily increase levels of use and access to
687 benefits amongst less engaged audiences and much more needs to be done to understand
688 and address the nuance in reasons for not engaging with the coast. There are clear
689 opportunities to promote emphasis on how experiences and understanding relational values
690 at the coast can be part of the regeneration and health agenda in seaside towns, particularly
691 in lower income areas.

692

693

694 **Conclusion**

695 In relation to the coastal and marine environment, global trends show a decline in the quality
696 of coastal regions (Garmendia et al., 2010) and in the UK, a range of historic and current
697 pressures are recognised to have resulted in the degradation of the marine environment
698 (Ranger et al., 2016). Despite all the challenges, coastal places have a special quality that
699 can have positive implications for well-being and understanding the coast as a therapeutic
700 landscape challenges marine conservation discourses that focus solely on altruistic
701 perspectives (Kelly, 2018). This paper has reported on how CVM was used with a range of
702 diverse people to elicit why the coast was important to them where they live. Their
703 responses are reported under four themes: Wellbeing; Coastal features; Sense of Place;
704 Access and safety. Each of these themes explores different ways that values are rooted in
705 relational encounters between people and the coast. According to Chan et al., (2016), how
706 people relate to nature, and with others, through preferences, principles and virtues are
707 relational values. Relational values can provide a frame to understand why nature is
708 important and how human well-being can be derived from relationships with nature rather

709 than just delivered as benefits as suggested in much of the ecosystem services literature
710 (Jax et al., 2018). In the context of this research, relational values, sense of place and
711 environmental justice have helped make visible the myriad connections people make with
712 coastal places and why particular places are important to them. The process of conducting
713 CVM has the potential to create new dialogues where the public and policy makers can
714 reflect on why coastal environments are important. CVM is a particularly powerful approach
715 as it can be used to help make visible relational values not easily seen using quantitative,
716 economic approaches.

717

718 Alongside the elicitation of coastal values, it is important to be able to tell new and emerging
719 stories of people's engagement with the coast. This research reflects the potential for the
720 CVM films to validate plural and potentially conflicting views and generate an atmosphere
721 which is conducive to social learning (Ranger et al., 2016). The CVM films provided a means
722 for the voices of diverse people to be heard and begins to build a picture of communities that
723 care deeply about their local coastal environment. The deep connection that many
724 interviewees expressed towards the coast is particularly interesting given the study targeted
725 groups who would perhaps not normally be identified as interested in nature or wildlife. While
726 it is impossible to discount any form of self-selection, the study overwhelmingly
727 demonstrated that people care deeply for the coast even in situations where they have
728 limited opportunities to access it. Environmental justice helps highlight how privilege exists to
729 make access to the coast and its wellbeing benefits more difficult to some groups of people.
730 It is important that policy makers understand that some deeply felt relational values at the
731 coast are not easily quantified and require subtle, nuanced approaches like CVM to help
732 make them visible. An important challenge is how to ensure the relational values revealed by
733 such approaches are able to be included in decision making and policy development. This
734 opens up questions about the ability of institutions to utilise qualitative, creative approaches
735 that describe relational values of the coast.

736

737

738

739

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- 885

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894 **Data availability statement:** Our ethics agreement for the Living Coast project does
895 not allow us to make the raw data available in a public archive. Our permissions
896 clearly state that the data will be used as part of the Living Coast project but we do
897 not say that data will be made available in a public archive. The Community Voice
898 Method is involved with filming people and making those films publicly available so
899 the process does not allow for confidentiality or anonymity. As we are hearing some
900 of the words spoken by people in the film this means that any subsequent
901 anonymised transcript could still be identified to a particular person. It is therefore not
902 appropriate to place data in a public archive unless consent is explicitly provided.

903 **Conflicts of interest:** No conflicts of interest

904

905 **Authors' Contributions:** Dr Acott led the Portsmouth interviews and filming and was the
906 lead writer for the paper. Dr Willis and Dr O'Neil were the lead researchers from Natural
907 England, supervising and guiding the main research aim, objectives and outcomes. Ranger
908 led the editing of the CVM films. Dr Richardson led the Durham interviews and filming. Dr
909 Cumming led the analysis of the interviews. Dr Ford assisted with the Portsmouth filming
910 and the design of the interview guide.

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Final – 23rd October 2018

LIVING COAST INTERVIEW GUIDE

Checklist for Interviewer:

- Briefly **introduce yourself** and the project.
- **Consent:** Go over the consent form with the interviewee and obtain consent. Give the interviewee a copy of the consent form to keep. Retain the signed part of the consent form.
- Ensure interviewee is comfortable and go through interview protocol (i.e. no swearing; pre-record so not dependent on first take; clearly state if they do not want us to use one of their answers; interview can be stopped at any time; frame the answer with the content of the question).
- Questions in **BOLD** are anchor questions. Prioritise these if you don't have time to ask all the questions.

Ensure camera is switched on, shot is set up and camera is recording.

Check sound levels by asking interviewee to say their name and what they had for breakfast.

START INTERVIEW

Interviewer says their own name, the date and location of the interview.

1. Background

1 a) Please could you say and spell your name (if possible) - if not deal with this using consent form

1 b) How old are you and how long have you lived in the Durham/Solent area? Depending on answer might want to prompt here e.g. if recent, why did you move here?

1 c) Are you in employment/education at the moment?

(if employed) **What do you do for a living?**

(if a student) Where do you go to school? (If relevant) what are you studying?

(if retired) What did you do for a living?

2. Sense of place (wider setting)

2 a) What is it like living here? How would you describe the community here?

2 b) Is there anything you particularly value about the Durham/ Solent Area? What do you like/dislike about living/being here? What are interesting or special things about this place?

Do you spend much time outside here? If so, where and doing what?

3. Sense of place/place identity (Coast & sea - general)

3 a) What do the words 'coast' and 'sea' make you think of?

3 b) How would you describe your relationship with the coast and sea around here? Do you feel connected or attached to it in any way? Is the coast or sea important / unimportant to you?

3 c) Are there any particular memories that come to mind when you think about the coast and sea around here?

4. Preference – characteristics of preferred place (what features would incentivise visits)

4 a) Are there any particular places that come to mind when you think about the coast and sea around here? If so, what is it about those places that brings them to mind?

If you had your pick, are there particular types of places by the coast and sea near here that you like to visit? Are there other places by the coast and sea that you prefer to visit? What makes them different from places around here?

5. Access and (perceived) benefits /disbenefits (coast path specific)

5 a) How much time do you spend by the coast and sea near here?

What do you usually do when you are by the coast and sea here?

5 b) Do you visit the coast around here as often as you would like? Ask for explanation of positive or negative responses. What would make you want to visit more?

5 c) How would you describe your nearest or most accessible bit of coast or sea? What’s there? What does it look like? Is there any wildlife there? Do you visit there?

5 d) If not specified: Do you ever go for walks by the coast / access coastal paths? If so, where/which ones?



5 e i) How do you feel when you are using a coastal path (walking / other types of access)?	5 f i) Is there any reason why you don't access coastal paths (more often)?
5 e ii) How do you feel after you have spent time there?	5 f ii) What do you think the coast path around here to be like?
5 e iii) Does spending time on coastal path have any impact, either positive or negative on your frame of mind or mental wellbeing ? How/why?	5 f iii) Do you think you could benefit from accessing the coast path more? How (or why not?)
5 e iv) Does spending time on the coastal paths impact upon your physical health in any way?	5 f iv) Do you think other people benefit from the coast path more than you do? Or in different ways?
5 e v) Is there anything you dislike about coastal paths around here?	
5 e vi) Would you like to access coastal paths more often than you do? If yes, why is that?	

6. The England Coast Path

6 a) Before we contacted you about this interview, did you know anything about the England Coast Path? Do you know if any of the bits of coast you access are part of the ECP?

“Read short para describing vision for the ECP once complete”

A new England Coast Path is being created around the entire coast of England. When it is complete it will be the longest waymarked coastal path in the world at over 2,700 miles, giving hikers, walkers and joggers new public access rights to foreshore, beaches, dunes and cliffs. The new path will provide a great opportunity for people to experience and enjoy all of our wonderful coastal landscapes and to get closer to nature.

6 b) What do you think about this proposal? Will you access the resource? Will the community access the resource? Will it bring benefits? What sort of benefits? Do you think that the local community will have a role in looking after the path and the coastline along it?

6 c) Imagine 10 years from now and the ECP has been open for some time. In an ideal world, what would you like the path and the local coastline to be like? What changes would you like for the local community?

6 d) What do you imagine it will actually be like?

Thank you. Was there anything else you wanted to say or ask about your local coastline and the project?

Stop recording and switch off camera.

Plain Language Summary

Using a video and interview method to understand people's connections to the coast

Being in nature generally is good for us but there seems to be something particularly special about the coast for our health and well-being. In this research, we wanted to find ways to capture what the coast means to people in their own words. We used an approach called Community Voice Method which films people being interviewed. The interviews are analysed and a short film made that represents all the key themes discussed. The film is then used in workshops to start a conversation amongst the original interviewees and a broader collection of people.

In this study we interviewed a total of 41 participants who ranged from people using the coast regularly to more limited users across two case study areas in Portsmouth and along the Durham coast. In both places people's relationship to the coast was important to them and endured through time. For some, they love the coast because they can get out and about and enjoy the diverse places coastal environments offer. For others, attachment to the sea happened through memories rooted in deep heartfelt emotions of past experiences. The people interviewed expressed a range of important issues including a sense of belonging to the coast, the features of the coast that were important to them, difficulties of access and the well-being benefits they felt.

The films that were made provided a way for the voices of different people to be heard and helps to show how communities care deeply about their local coastal environment. The deep connection that many interviewees expressed towards the coast is particularly interesting given the study targeted groups who would perhaps not normally be identified as interested in nature or wildlife. An important challenge is how to ensure the voices revealed by approaches like the community voice method are able to be included in decision making and policy development. This opens up questions about the ability of institutions to utilise qualitative, creative approaches that describe different ways people feel the coast is important.