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1 **Everyday places to get away – Lessons learned from Covid-19 lockdowns**

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6
7 **Abstract**

8 Being able to get away from everyday stressors and demands, even if close to home and just
9 for a few minutes, is important for wellbeing. During the Covid-19 lockdown periods,
10 people's ability to get away changed significantly. An increase in visits to nearby natural
11 places is well documented. Little is known about other types of places people visited to get
12 away. An online survey was conducted in 2020 ($N = 850$) asking UK households what places
13 they visited to get away during the pandemic, what they did in those places, how place and
14 activity choices were related to each other and to demographic variables, and to recalled
15 hedonic and eudaimonic wellbeing during those visits. Participants visited a rich array of
16 places and engaged in a variety of activities that supported their hedonic and eudaimonic
17 wellbeing needs. Responses were grouped into four types of places (at home outdoors, at
18 home indoors, away from home outdoors, and away from home indoors) and seven activity
19 types (cognitive, walks, nature engagement, social activities, technology use, relaxing, and
20 exercise). Place and activity choices were strongly linked. Visiting outdoor places was most
21 beneficial for wellbeing (and most common), especially when it involved mindful
22 engagement with nature (bird watching, gardening) or exercise. Staying indoors, engaging
23 with technologies (computers, television) was least beneficial and more common among
24 those with no degree or job, living in urban areas, and identifying as male. The findings
25 demonstrate the importance of understanding place-activity interactions to support the
26 wellbeing benefits derived from visits to places to get away for different people.

27 *Keywords:* "being away", spaces, activities, wellbeing, restoration, pandemic

28

Introduction

Everyday life can be stressful, boring, and demanding. Getting away, for a few minutes, a few hours, or a whole day, can be important to feeling happy, relaxed, and positive (Arden, 2010). Being able to get away from everyday environments and visit places that are different, novel, and removed from those in which people work, live and study is important for health and wellbeing (Carpiano, 2009). Getting away and looking for peace and quiet is central to motivations for and experiences of outdoor recreation (Hammit, 2000; Puhakka, 2021) and the extent to which people experience a sense of being away in the places they visit is linked to the wellbeing benefits they derive from those visits (Kaplan & Kaplan, 1989).

During the Covid-19 lockdown periods, travel restrictions and management of health risks meant people's ability to get away was often severely constrained. The home became the primary place for work, leisure, and family life, for many people. Finding places that provided a sense of being away may have been difficult, if not impossible, for many. This situation provided a unique opportunity for researchers to examine the types of nearby places people sought out to get away, what they did there, and how they felt (in terms of hedonic and eudaimonic wellbeing) when visiting those places.

45

Wellbeing

The Covid-19 pandemic and associated lockdowns have been linked to a wide range of negative psychological impacts (Martarelli & Wolff, 2020), including feelings of boredom (Brodeur et al., 2020; Chao et al., 2020), loneliness (Brodeur et al., 2020; Groarke et al., 2020; Marston et al., 2020), crowding (Fornara et al., 2022), and a loss of purpose or meaning due to job losses and restricted interaction with other people (Brodeur et al., 2020). Being able to get away, even if only for a brief period, might have supported a range of different hedonic and eudaimonic wellbeing needs.

(Keyes & Annas, 2009) describe hedonic wellbeing as "feeling well" and eudaimonic wellbeing as "functioning well". Hedonic wellbeing is closely linked to affective restoration or stress recovery (Kaplan & Kaplan, 1989), while eudaimonic wellbeing encapsulates aspects such as a sense of purpose or meaning, connectedness to others, and autonomy (Huta & Waterman, 2014; Ryan et al., 2008). To take a more holistic view of wellbeing, this

59 research examined recalled hedonic and eudaimonic wellbeing in the places people visited to
60 get away during the pandemic.

61 Different theoretical perspectives exist to explain why and how visits to places to get away
62 may contribute to wellbeing experiences. These perspectives tend to focus on either place
63 characteristics or the activities undertaken in those places. Relatively little research has
64 examined both, or how they are related, especially not under constraint conditions such as the
65 Covid-19 pandemic. This research explores what types of places people visited to get away
66 during the pandemic, what they did when they were there, and how place choices and
67 activities contributed to hedonic and eudaimonic wellbeing experienced in those places.

68

69 **Places**

70 Certain types of environments are associated with greater positive place experiences and
71 positive wellbeing than others. A vast and growing body of evidence demonstrates visits to
72 natural places are particularly beneficial for wellbeing (Bowler et al., 2010; Bratman et al.,
73 2019), and can benefit both hedonic and eudaimonic wellbeing (Capaldi et al., 2015).
74 Moreover, numerous studies have shown that natural environments provide people with a
75 sense of being away from demanding and stressful environments (Hammitt, 2000; Panno et
76 al., 2020; von Lindern, 2017), and people often choose natural places, such as parks, gardens,
77 the coast, woodlands and the wider countryside, to get away (Hammitt, 2000).

78 Different theoretical perspectives have been proposed to try to explain how place
79 characteristics may contribute to these positive effects. Psychological restoration theories
80 (Kaplan & Kaplan, 1989; Ulrich et al., 1991) suggest that exposure to environments with
81 restorative properties can support recovery from stress and mental fatigue, more than resting
82 without this exposure. For instance, Ulrich et al. (1991)'s Psycho-Evolutionary Theory
83 proposes that exposure to non-threatening natural environments supports stress recovery by
84 providing positive distraction from pain and stress. This is because people are evolutionarily
85 predisposed to respond positively to environments associated with life. Attention Restoration
86 Theory (Kaplan & Kaplan, 1989) suggests that some environments contain features that
87 engage involuntary attention (e.g., ripples in a pond, flickering leaves in the sunshine),
88 thereby supporting recovery from directed attention fatigue (resulting from concentration on
89 demanding tasks). In addition to these *soft fascinating features*, Attention Restoration Theory
90 (ART) proposes three further environmental factors that are important to support restoration

91 from mental fatigue and stress: *extent*, linked to openness, allowing the mind to wander, a
92 sense of *being away* psychologically from the sources of everyday demands and stressors,
93 and *compatibility* between a person's needs and abilities and the environment.

94 Although the theories tend to be used to explain the restorative qualities of natural
95 environments in particular, there is also evidence that other environments can have
96 restorative qualities, such as monasteries (Ouellette et al., 2005) or historical sites in cities
97 (Scopelliti et al., 2019). Moreover, people's self-reported favourite places are often, but not
98 always, natural places (Subiza-Pérez et al., 2021). Favourite places, including every day
99 favourite places can be highly restorative (Korpela & Hartig, 1996; Korpela et al., 2008).
100 They have been found to improve mood and self-esteem (Korpela & Ylén, 2007; Korpela &
101 Ylén, 2009) and support cognitive and emotional self-regulation (Korpela, 1992; Korpela et
102 al., 2001). Favourite places are often, but not always, natural outdoor places. When asked to
103 report their favourite places, more than a third of participants in Newell (1997)'s research
104 mentioned the home. Ratcliffe and Korpela (2016) found that 15% of respondents identified
105 places such as cities, pubs, and homes as their favourite places.

106 To summarise, visiting places where the environment contains restorative properties can
107 benefit wellbeing through restoration of stress and mental fatigue (Kaplan & Kaplan, 1989).
108 Natural environments are particularly restorative, and people often (but not always) choose
109 natural environments to get away (Bowler et al., 2010; Hammitt, 2000). However, what
110 people do in different places may be as important as the places themselves (Staats et al.,
111 2010). Psychological restoration studies may often inadvertently compare restorative qualities
112 of environments as well as engagement in restorative activities. Hartig et al. (2014) propose
113 natural environments can support wellbeing through exposure to clean air, by supporting
114 physical activity and social contact, as well as by helping to reduce stress and mental fatigue
115 (restoration). The ways in which people engage with the environment mediates effects of
116 nature exposure on wellbeing outcomes. What people do in different environments, therefore,
117 may matter as much as the type of environment they visit.

118

119 **Activities**

120 Leisure activities are defined as recreational behaviours that provide people with an
121 opportunity to mentally disengage from productive activities such as work (Sonnetag,
122 2012). Engagement in leisure activities contributes to wellbeing (Mansfield et al., 2020; Sirgy

123 et al., 2017) and different theoretical explanations have been proposed to explain these
124 effects.

125 The experience of flow is often highlighted as one possible explanation for the wellbeing
126 benefits people derive from engaging in leisure activities. Flow is a psychological state in
127 which people lose sense of space and time and are completely immersed in an activity
128 (Csikszentmihalyi, 2014; Csikszentmihalyi & LeFevre, 1989a, 1989b). People experience
129 flow when they are engaged in activities that provide an optimum balance between their skills
130 and the challenges of the activity.

131 The benefits theory of leisure and wellbeing (Lee et al., 2023; Sirgy et al., 2017) proposes
132 that engagement in leisure contributes to wellbeing by satisfying a range of human needs,
133 including basic needs (safety, health, sensory, escape) and eudaimonic or growth needs
134 (symbolic, aesthetics, moral, mastery, relatedness, distinctiveness). These benefits are
135 enhanced when leisure activities match a person's personality (Coughlan & Filo, 2016).

136 In terms of hedonic needs, leisure activities may support wellbeing if they are safe, benefit
137 people's health, are economically attractive and provide positive sensory experiences (e.g.,
138 feeling the sun on your skin), while avoiding negative sensory experiences (noise, smell)
139 (Sirgy et al., 2017). Moreover, leisure activities help satisfy people's basic need for escape.
140 They are freely chosen and provide an opportunity to escape from coercion or obligation
141 (Sirgy et al., 2017) and help people disengage from work demands (Sonnetag, 2012).

142 Leisure activities are also proposed to help satisfy eudaimonic or growth needs including
143 several social needs such as symbolic needs (expressing identity or status) and relatedness
144 (being with, or feeling connected to, others) (Ryan & Deci, 2001). Moreover, certain types of
145 leisure activities may support eudaimonic aesthetic needs (pleasure derived from beauty)
146 (Mastandrea et al., 2019). Finally, some leisure activities can provide people with a sense of
147 mastery or competence (achieving something) (Sirgy et al., 2017; Stebbins, 2016, 2018).

148 Some of these beneficial effects may be associated with place types or features, as well as
149 activities. For instance, environmental stressors (noise, smell) provide negative sensory
150 experiences. Positive sensory experiences may be derived from soft fascinating features, as
151 described in Attention Restoration Theory (Kaplan & Kaplan, 1989). Moreover, beautiful
152 natural scenery can support satisfaction of aesthetic needs. Indeed, perceived beauty in nature
153 has been linked to restorative experiences (van den Berg et al., 2003).

154 It may not always be easy to determine whether place characteristics, activities, or both,
155 predict wellbeing experienced in places. Some activities will be strongly place dependent. For
156 instance, walking requires (outdoor) space, whereas other activities are (almost) independent
157 of place. For instance, someone can listen to music in a wide range of environments, indoors
158 as well as outdoors. And finally, some activities may enhance wellbeing because of specific
159 environmental properties, and vice versa. For instance, several authors have suggested that
160 activities involving more immersive or mindful engagement with nature maximise the
161 wellbeing benefits derived from being in nature (Macaulay et al., 2022; PANS, 2021;
162 Passmore et al., 2022; Pretty, 2004; Wyles et al., 2017).

163 To summarise, activities in places visited to get away may enhance wellbeing through
164 satisfaction of a range of hedonic and eudaimonic needs and flow experiences. Moreover,
165 activities as well as place types or features are likely to play a role, and these may be related.

166 **Wellbeing, places, and activities in the context of Covid-19**

167 During Covid-19 lockdown periods, many countries saw a significant increase in visits to
168 local natural spaces, including gardens (Corley et al., 2021; Soga et al., 2021). People
169 indicated they visited nature more frequently to help cope with increased pandemic health
170 risks (Lu et al., 2021; Pouso et al., 2021). Moreover, having access to greenspace, including
171 gardens, during the pandemic was associated with greater wellbeing (Dzhambov et al., 2021;
172 Hubbard et al., 2021; Lehberger et al., 2021; Poortinga et al., 2021; Tomasso et al., 2021).
173 However, not everybody had access to natural spaces, either at home or in close proximity.

174 Some people tried to gain a sense of being away in virtual worlds through social media (Xu et
175 al., 2021) and gaming (Barr & Copeland-Stewart, 2021). Relatively little is known about the
176 range of different places people chose to visit to get away during the pandemic, and how they
177 felt (in terms of hedonic and eudaimonic wellbeing) when they were there.

178 During the pandemic, the use and meaning of places will have changed significantly. Many
179 people had more leisure time (time not working or commuting), although for others, work-
180 leisure boundaries were significantly blurred (Lee Ludvigsen et al., 2023). Moreover, many
181 leisure places became inaccessible. Engagement in leisure activities during the pandemic has
182 been shown to benefit positive wellbeing in multiple ways (Chen, 2020). On the other hand,
183 reduced engagement in existing leisure activities during the pandemic has been linked to
184 increased risks of depression symptoms (Kulbin & Kask, 2022). Engagement with different
185 types of leisure activities changed during this time (Kulbin & Kask, 2022). For instance, there

186 is significant evidence of a reduction in physical activity (Stockwell et al., 2021). Moreover,
187 access to spaces such as pubs and cafés were closed, reducing opportunities to support social
188 needs. A special issue in the journal *Leisure Studies* (Lee Ludvigsen et al., 2023)
189 demonstrates how leisure practices changed during the pandemic and how leisure spaces
190 were reconfigured in people’s everyday lives. Where access to some leisure spaces
191 disappeared new leisure spaces emerged and were given new meaning. The places that people
192 visited to get away during the pandemic are likely to also have changed significantly due to
193 the restrictions. However, little is known about these places, what people did in those places,
194 or how places visits affected their wellbeing.

195

196 **This research**

197 Gaining a sense of being away (especially during a pandemic) is important for wellbeing.
198 Being somewhere different, as well as doing something different, are important (Hammitt,
199 2000), and the two are linked. This research examines what places people visited during the
200 Covid-19 pandemic to get away, what they did in those places, and how wellbeing
201 experienced in those places depends on place type and activity.

202 Place choices and activities are likely to vary with demographic factors, such as urban or
203 rural living, age, gender, and socio-economic status. For instance, living near nature (rural
204 areas) is linked to more nature visits (Colley et al., 2022; Lenaerts et al., 2021a). Younger
205 people have been shown to spend more time with technologies and less time outdoors
206 (Michaelson et al., 2020; Richardson et al., 2018). Visits to, and experiences in, natural
207 spaces and gardens are linked to age and gender (Bhatti, 2006; Parry et al., 2005; Saleem &
208 Kamboh, 2013). Knowing how places and activity choices are linked to demographic
209 variables is important, so as to control for spurious relationships between place choices and
210 experiences. It can also provide valuable insight into the ways in which participants from
211 different demographic groups benefit more (or less) from visiting places to get away.

212 The overarching aim of this research is to explore what most benefitted wellbeing when
213 people tried to get away during the pandemic. The following questions guided the research:

- 214 1. What types of places did people choose to visit to get away during the pandemic?
- 215 2. How did place choices differ between demographic groups?
- 216 3. What types of activities did people engage in when visiting these places?

- 217 4. How did activity choices differ between demographic groups?
 218 5. How are place choices and activity choices related?
 219 6. Does recalled hedonic and eudaimonic wellbeing during place visits depend on place
 220 type and activity choices?
 221
 222

223 **Method**

224 **Sample and recruitment**

225 A nationally representative sample was recruited using an online panel company (Prolific
 226 Academic). Participants were paid £8.50 per hour. The survey was completed by 850
 227 participants in 2020, who were similar to the national average of that time in terms of gender,
 228 ethnicity, and income (see Table 1). However, compared to the UK average, the sample was
 229 slightly older, fewer participants had children, participants were more likely to have a degree,
 230 and more likely to live in rural areas.
 231

232 **Table 1**

233 *Sample demographics.*

	Sample	ONS* statistics 2020
Age	$M = 46, SD = 16$	Mean age = 40
Income**	Average £30-£40K	Average income = £37,100
Gender	51% women	51% of the population
Children	28% with children	45% of families with dependent children
Work	68% work or study	75% employment rate
Degree	52% have a degree	34% of those 16 and over
Ethnicity	83% white	85% white in England and Wales
Living conditions	91% own garden	88% have garden in Great Britain
	26% live rural	17% of population in England living in rural areas

234 *Note.* *ONS (Office for National Statistics) data: <https://www.ons.gov.uk/>; **Income: $M =$
235 4.04 ($SD = 2.22$) on 10-point scale: 1 = < 15K, 4 = 30-40K, 5 = 40-50K, 10 > 150K

236

237 **Measures**

238 *Need and ability to get away*

239 The first section of the survey was used to prime participants to reflect on what it was like to
240 get away during the pandemic for them. They were asked to think about the height of the
241 pandemic (Spring 2020) and recall “How often do you remember feeling the need to get
242 away from the following: the people you lived with, the strains and demands of everyday life,
243 and the monotony and tediousness of everyday life (1 = (*almost*) *never*, 5 = (*almost*)
244 *always*)). They were also asked “How easy or difficult was it for you to get away from those
245 things during lockdown?” (1 = *very difficult*, 5 = *very easy*).

246 *Places to get away and activities once there*

247 Two open-ended questions were used to assess people’s place choices and activities
248 undertaken in those places. The questions were worded as follows: “Take a second to think of
249 ONE place where you typically went during the Covid-19 lockdown to get away. You can
250 think of any kind of space: small (a corner of a room), large (a woodland), it could be indoors
251 or outdoors, and even virtual (a game)”, then “In a couple of words, please describe this place
252 (for example, your bathtub, the local park, your armchair, your back garden, your spare room,
253 a nature reserve)”. After that they were asked “What did you tend to do in this place when
254 you were there? (For example, walking the dog, listening to music, sitting down and
255 watching the birds, playing games etc.)”.

256 *Recalled wellbeing in visited places*

257 Hedonic experiences were measured with six items to cover a range of emotions as identified
258 in the circumplex of affect (Russell, 1980). These items have been used previously to assess
259 affective appraisals of environments (Russell & Lanius, 1984). Participants rated how often
260 (1 = (*almost*) *never*, 5 = (*almost*) *always*) they felt relaxed, stressed, bored, excited, happy,
261 and sad when they were in that place. One scale was created to capture positive hedonic place
262 experiences by reverse coding negative emotions and calculating the mean across the six
263 items ($\alpha = .84$).

264 Although numerous measures of eudaimonic wellbeing exist (Cooke et al., 2016), no short
265 place-specific measure was found. Thus, a short, five-item measure was created, based on
266 Waterman’s PEAQ (Personally Expressive Activities Questionnaire) (Waterman & Schwartz,
267 2024). Questionnaire items from the PEAQ were modified so wording reflected recalled
268 wellbeing during place visits. Each item reflected a different underlying concept of the PEAQ
269 (e.g., feeling alive, a sense of meaning). For instance, participants were asked to indicate on a
270 5-point scale (1 = *(almost) never*, 5 = *(almost) always*) to what extent they agreed that “Being
271 in this place gave me the greatest feeling of really being alive”, “Being in this place gave me
272 the strongest feeling of who I really am”, and “When I was there, I felt more complete or
273 fulfilled than I did when I was somewhere else”. One scale was created to capture positive
274 eudaimonic wellbeing in place ($\alpha = .90$).

275 **Procedure**

276 The survey was administered through Qualtrics in October 2020 [available on Open Science
277 Framework: <https://osf.io/y6uwf/>]. The survey consisted of two parts; the first part (the focus
278 of this paper) included questions about getting away, and the second part (findings published
279 elsewhere) focused on visiting natural spaces. It took, on average, 15 minutes to complete the
280 whole survey ($M = 15.03$, $SD = 8.44$). The recruitment material, survey introduction, and
281 information sheets made no specific reference to natural environments. After reading the
282 information sheet and providing informed consent, participants were asked to think about the
283 height of the pandemic (Spring 2020) and recall how often they felt the need and ability to
284 get away. They were then asked where they would normally go to get away, what they did
285 there, and how they felt when they were there. The survey ended with demographic
286 information questions. The study was self-assessed for ethical considerations in line with the
287 University’s ethical review procedures (Reference: 640816-640807-65813897).

288

289

Analyses and results

290 Table 2 summarises the analyses. It outlines what data were used and created in each step to
291 answer the different research questions. This section first explores participants’ reported need
292 and ability to get away during the pandemic (prime check). It then describes the three-step
293 approach that was used to help answer Research Questions 1 and 3 (identifying place and
294 activity types) and to create new variables for further analyses. Finally, it describes the
295 findings for Research Questions 1 and 2 (place choices and demographic differences), 3 and

296 4 (activity choices and demographic differences), 5 (relationships between place and activity
 297 choices), and 6 (wellbeing related to place and activity choices).

298

299 **Table 2**

300 *Overview of different data and analytical techniques used to answer the research questions.*

Research questions 1 and 3				
	Data	Analyses	Output	New variables
Step 1				
	Participant answers: Where did you go? What did you do there?	Basic content analysis in NVivo	32 places codes 38 activity codes	70: one for each code (0 = not mentioned) (1 = mentioned)
Step 2	Place and activity codes	Manual thematic analysis	4 place themes 11 activity themes	15: one for each theme (0 = not mentioned) (1 = mentioned)
Step 3	Place and activity type variables: 4 place types and 10 activity types (crying excluded)	Two-step cluster analysis in SPSS	4 place clusters 7 activity clusters	2: one for place clusters and one for activity clusters
Research questions 2 and 4				
	Place and activity cluster variables Demographic variables	χ^2 test and ANOVA in SPSS	n/a	n/a
Research question 5				
	Place and activity cluster variables	χ^2 test in SPSS	n/a	n/a
Research question 6				

Place and activity cluster variables	MANCOVAs in SPSS	n/a	n/a
Reported hedonic and eudaimonic wellbeing			

301

302 **Perceived need and ability to get away (prime check)**

303 Perceived need and ability to get away were rated moderate (just above the mid-point of the
 304 5-point scale). Participants were less likely to express a need to get away from other people
 305 ($M = 2.79, SD = 1.55$), than from strains and demands ($M = 2.94, SD = 1.20$) and tediousness
 306 and monotony ($M = 3.10, SD = 1.22; F(2,745) = 120.83, p < .001, \eta p^2 = .245$). They felt
 307 slightly more able to get away from strains and demands ($M = 2.77, SD = 1.13$) than from
 308 monotony ($M = 2.60, SD = 1.14$), or other people ($M = 2.61, SD = 1.19; F(2,664) = 8.72, p <$
 309 $.001, \eta p^2 = .026$).

310

311 **Analysing place and activity choices**

312 Although participants were asked two separate questions to identify place choices and place
 313 activities (as outlined above), many participants referred to place features and activities in
 314 response to both questions. Therefore, the open responses were first combined into one data
 315 set for further analyses. The open text data were analysed in three steps.

316 *Step 1.* The first step aimed to identify the variety of different places and activities mentioned
 317 by participants. The combined open responses dataset was analysed in NVivo 12, using basic
 318 content analysis with an inductive approach (Drisko & Maschi, 2016). Because of the large
 319 number of participants, the data were split between coders. Coder A reviewed responses from
 320 the first 468 participants and developed two working lists of codes, one relating to places and
 321 the other relating to activities. Data consisted of the presence (1) or absence (0) of a code in
 322 the responses of each participant. Participants could mention more than one activity or place
 323 in their response, and so codes were not mutually exclusive. Two other coders (B and C) then
 324 used these codes to analyse responses from the first 85 participants (10% of responses).
 325 Findings were discussed with Coder A, who subsequently refined the coding lists. The inter-
 326 coder reliability was calculated (in SPSS 28) between each pair of coders, for each code in
 327 the 85 responses, using a series of Cohen's Kappa analyses (123 analyses). The resulting

328 Kappa values ranged between 0.49 and 1.00 with 82.9% of codes reaching almost perfect
329 agreement, 15.4% substantial agreement, and 1.6% moderate agreement (Landis & Koch,
330 1977). Given the high level of agreement between coders, Coder B then analysed the
331 remaining dataset using the refined coding lists. The final codes are discussed later in this
332 results section and can be found in Tables 3 (place choices) and 5 (activities).

333 *Step 2.* In Step 2, the two sets of codes (one for places and one for activities) were further
334 grouped at a thematic level. Four distinct place types were identified and eleven distinct
335 activity types. These types (with the specific codes they are based on) can also be found in
336 Tables 3 and 5 and are discussed below. Based on this analysis, four dichotomous place type
337 variables and 11 dichotomous activity type variables were created and entered into SPSS (0 =
338 *did not*, 1 = *did mention* the place/activity).

339 *Step 3.* Many participants mentioned multiple places or place types and multiple activities. As
340 a result, it is not possible to use the variables created in Step 2 for the later analyses. For
341 instance, wellbeing in place may differ between participants who do and do not mention
342 walking. However, those who do not mention walking may mention a whole range of other
343 activities instead, making it difficult to know what is being compared. Therefore, two
344 segmentation analyses were performed using two-step cluster analyses which helped to
345 segment the sample into distinct groups based on their place choices and their activity
346 choices. The two sets of dichotomous variables described in Step 2 were used as input for
347 these two analyses. Two-step cluster analysis was used, as it can handle dichotomous data
348 (Tkaczynski, 2017). It first explores the optimum number of clusters in the dataset using a
349 distance measure and then tests the validity of this solution using a probabilistic approach.
350 The results of the cluster analyses are discussed below.

351

352 **Place choices (RQ 1)**

353 All participants mentioned at least one nearby place where they got away during the Covid-
354 19 pandemic. Table 3 shows the wide variety of nearby places that participants identified.
355 These included smaller (a bathtub), larger (mountains), indoor (garage), and outdoor (parks)
356 places. The responses were grouped at thematic level into four place types: outdoor places
357 *away from* home, outdoor places *at* home, indoor places *at* home, and indoor places *away*
358 *from* home. A couple of answers were excluded from further analyses at this point, as they
359 could not be grouped into any of the four themes. For instance, some participants referred to

360 driving – which could be classified as indoor (inside the car) as well as outdoor (outside the
 361 house), others referred to visiting places where it was not clear whether they would be
 362 indoors or outdoors (e.g., monuments).

363 For all other responses, a clear distinction between indoor and outdoor places, and places at
 364 home versus those that were away from home could be made. Half of participants (50%)
 365 mentioned an outdoor place away from home, such as parks. Outdoor places at home
 366 (gardens, patios, balconies) were mentioned by about a quarter of the participants. A similar
 367 number (24%) mentioned indoor places at home, such as specific rooms. Not surprisingly,
 368 due to pandemic restrictions, few people (2%) mentioned indoor places away from home.

369

370 **Table 3**

371 *The number and percentage of participants mentioning each being away place.*

Place Themes (in bold) and Place Codes	<i>N</i>	%
Outdoors away from home	426	50.0
Public park - park, urban park, public gardens, university campus, recreational or playing field, pitches	147	17.3
Paths, footpaths, walking routes, cycle path or bike ride, lanes, bridleways, byways, horse gallops, bus lanes, trails, small roads	51	6.0
Fields, grassy areas, meadows, moors, moorland	41	4.8
Beach, coastline, seaside, harbour, marshes, quayside, headland	40	4.7
Countryside, country, country park, common, golf course	39	4.6
River, riverside, stream, canal	34	4.0
Settlement – village, town or city (incl. going around the block, neighbourhood, housing estate, street)	26	3.1
Nature reserve, nature park, National Park, nature path	19	2.2
Lake, loch, reservoir, pond, body of inland water	15	1.8
Hills or mountains	14	1.6
Outside, outdoors, nature (where nonspecific about place)	8	0.9
Farm, farmyard, stables	7	0.8
Greenspace	5	0.6
Graveyard or cemetery	3	0.4

Outdoors at home	203	24.0
Private garden - garden, back garden, back yard, vegetable garden, greenhouse, allotment, shed, summer house, hot tub, driveway	190	22.4
Porch, balcony, fire escape area, conservatory (zone between house and outdoors)	14	1.6
Indoors at home	191	23
Bedroom, bed, own room	83	9.8
Lounge, living room, sitting room, den, front room, sofa, armchair	28	3.3
Bath, bathtub, bathroom	21	2.5
Digital Environment – in a game, virtual world	20	2.4
Home office, study, computer room, music studio	18	2.1
Spare bedroom, spare room	7	0.8
Garage	5	0.6
Home, own house, flat	5	0.6
Sewing room, sewing zone, craft room	5	0.6
Kitchen	4	0.5
Home gym – exercise machines, running machine, turbo trainer	2	0.2
Indoors away from home	15	2.0
Work	4	0.5
Supermarket, shops	11	1.3
Place of worship	1	0.1
Excluded*	13	1.5
Driving – being in car/scooter, carpark, (going) driving around	11	1.3
Monument or landmark building (e.g. lighthouse)	2	0.2

372 *Note.* Themes (place types) and codes (specific places) are not mutually exclusive. Therefore,
373 numbers do not add up to 100%. * Some places were excluded as they could not be clearly
374 classified as indoor or outdoor, near or far away from home.

375

376 Two-step cluster analysis segmented the sample based on participants' place choices. A 4-
377 cluster solution was identified as optimum. Fit statistics (Schwartz's Bayesian criterion:
378 BIC), showed a steady increase in model fit for each additional cluster (from 1 (minimum) to
379 4 (maximum with 4 variables). The Silhouette measure of cohesion and separation was very
380 good: 1.0 (-1.0 – 0.0 = poor, > 0.5 – 1.0 = good). However, the ratio of cluster sizes was poor

381 (4.77, ideally it would be < .2). Although a 3-cluster solution had a better ratio (2.09) with a
 382 good Silhouette (.9) it revealed less meaningfully distinct clusters (including multiple places
 383 within different segments) and so a 4-cluster solution was used to segment the sample based
 384 on their place choices.

385 The four clusters (or segments) largely reflected the four place themes. The largest cluster (N
 386 = 391) included 92% of those who had chosen an outdoor place away from home. Very few
 387 people in this cluster mentioned other place types. The second largest cluster ($N = 193$)
 388 included 95% of those who had chosen an outdoor place at home. A similarly sized cluster (N
 389 = 183) included almost all (96%) of the participants who had chosen an indoor place at home.
 390 The smallest cluster ($N = 82$) grouped together participants with a range of different place
 391 choices. This cluster included all ($N = 15$) participants who had chosen an indoor place away
 392 from home. However, it also included some participants who had mentioned each of the other
 393 three place types.

394

395 **Place choices and demographics (RQ 2)**

396 Table 4 shows how place choices were linked to demographic variables, showing the
 397 percentage of people in different demographic groups for each place choice cluster or
 398 segment for the categorical variables (ethnicity, rural-urban level, education, and
 399 employment) and age differences between places for this continuous variable. A place at
 400 home outdoors appears to be chosen more often by those who identify as white, who live in
 401 rural areas, and those who are older. Places at home indoors are more likely to be chosen by
 402 those who identify as non-white, those who live in urban areas, and those who do not have a
 403 degree. The average age in this segment is also lowest. A place outside away from home is
 404 more often chosen by those with a degree, and those who are employed. Places away from
 405 home indoors appear less related to demographic variables; they are chosen least often
 406 overall.

407 **Table 4**

408 *Place choices and demographic variables.*

	Home outside	Home inside	Away outside	Away inside
--	-----------------	----------------	-----------------	----------------

			%	%	%	%
Ethnicity	$\chi^2 = 14.17,$ $p = .003$	White	24	19	47	10
		Other	17	33	43	7
Rural	$\chi^2 = 19.12,$ $p < .001$	Urban	20	24	47	9
		Rural	31	14	43	12
Degree	$\chi^2 = 17.50,$ $p < .001$	Yes	23	18	52	7
		No	23	25	40	12
Employed	$\chi^2 = 17.89,$ $p = .002$	Yes	21	20	51	9
		No	26	25	38	12
			<i>M(SD)</i>	<i>M(SD)</i>	<i>M(SD)</i>	<i>M(SD)</i>
Age	$F(3,846) = 16.50,$ $p < .001$		52(14) _a	42(16) _b	45(15) _c	49(15) _a

409 Note. After applying Bonferroni correction $p < .005$, no significant differences were found
410 between men and women ($\chi^2 = 11.05, p = .01$), between those with or without children ($\chi^2 =$
411 $0.59, p = .898$), and there was no difference between clusters in household size ($F(3,846) =$
412 $2.51, p = .058$) or income ($F(3,800) = 3.45, p = .016$). Bold percentages signify differences
413 between demographic groups in the top half of the table. Means with different subscripts in
414 the bottom part of the table were found to be significantly different in post hoc tests ($p < .05$).

415

416 Activity choices (RQ 3)

417 Table 5 shows the wide range of activities mentioned. It is notable that participants associated
418 being away with such a wide range of activities. Walking was one of the most often
419 mentioned activity (by 31%). Activities such as listening to music (radio or podcasts) were
420 mentioned by 14%, and almost 18% mentioned some form of relaxing. Most of the activity
421 codes, however, captured only small numbers of people; this highlights the variety of distinct
422 activities mentioned.

423 The reported activities were grouped at thematic level, into eleven distinct activity types:
424 nature engagement, walking, cognitively stimulating activities (arts, crafts, reading), relaxing,
425 technology use, exercising, socialising, drinking (and smoking), work (and study), shopping,
426 and crying. Crying was subsequently excluded as it could not be grouped clearly into one of
427 the other ten categories and was the only example of a specific act of emotional expression.

428 Walking was mentioned by nearly a third of participants. Similarly, nearly a third mentioned
 429 an activity which involved intentional engagement with natural (non-human and not built or
 430 synthetic) entities, including engaging with pets, gardening, listening to birds, and watching
 431 sunsets. Just under a third of the participants mentioned cognitively simulating activities. This
 432 involves activities which require attention or concentration to engage with (but not physical
 433 activity) such as arts and crafts or reading. A quarter of the participants mentioned activities
 434 associated with relaxation (resting, seeking peace and quiet). This was often mentioned
 435 alongside other activities, such as going for a relaxing walk. Almost 20% mentioned social
 436 activities (helping others, socialising). Clearly, despite the Covid-19 restrictions, social
 437 interaction was still feasible and valuable for many people. Fourteen percent of the
 438 participants mentioned using technology when trying to gain a sense of “being away”. This
 439 includes computer use, watching TV, and gaming. The theme exercise includes physical
 440 activities such as running, cycling, exercising, and playing sports, and was mentioned by 89
 441 participants (11%). A small number of people (6%) mentioned drinking or smoking; this was
 442 almost always mentioned alongside other activities such as walking or relaxing. Finally, a
 443 small number of participants (3.5%) mentioned work or study and just over 1% mentioned
 444 shopping.

445

446 **Table 5**

447 *The number and percentage of participants mentioning each activity.*

Activity Themes (in bold) and Activity Codes	<i>N</i>	%
Nature engagement	313	36.8
Pets – walking, watching, cuddling, playing with, caring for (dogs, cats, horses)	86	10.1
Gardening – caring for plants, watering, planting or collecting flowers, admiring, maintaining garden fencing or furniture, landscaping, doing things or being in garden e.g. BBQ, firepit	84	9.9
Nature, fauna – watching, feeding, acknowledging, talking to, animals, birds, insects	66	7.8
Nature, flora – looking at, observing, contemplating, engaging with, at one with, enjoying	59	6.9
Natural sounds - listening to birds, trees	30	3.5

Views or scenery – taking it in, appreciating it, observing	27	3.2
Weather – enjoying, experiencing, observing, being in (warm, hot, sunny), sunbathing	27	3.2
Being outside, getting or enjoying fresh air	23	2.7
Watching sunset, sky, stars, night sky	7	0.8
Exploring	3	0.4
Touch – feeling natural elements e.g., feet in mud	2	0.2
Walking	267	31.4
Walking - walking, strolling, stretching legs, pacing	267	31.4
Cognitive	232	27.0
Listening to music, podcasts, radio	119	14.0
Reading – books, digital books, newspapers	86	10.1
Art, crafts, sewing, drawing, painting, creative tasks, playing or recording music, DIY, maintenance of house, garden, car	33	3.9
Photography, taking photos, videography	19	2.2
Relaxing	213	25.0
Resting - resting, sitting down, relaxing, lounging around, chilling, unwinding, doing nothing, being quiet or at peace, lying down, napping, sleeping	149	17.5
Thinking, contemplating, reflecting, planning, meditating, mindfulness	40	4.7
Peace and quiet – enjoying, appreciating, being in calm, quiet, tranquillity, experiencing quiet in the environment	21	2.5
Taking time to self, alone time, hiding away, being alone	15	1.8
Escaping, switching off, immersing self in something else	9	1.1
Bathing	4	0.5
Technology use	115	14.0
Gaming— video gaming, console gaming, playing on computer, board games	63	7.4
Watching TV, films, movies, videos on any medium	48	5.6
Phone, computer, tablet – internet, social media, browsing, playing on phone	28	3.3
Exercise	89	11.0

Cycling or bike ride	30	3.5
Exercising, getting fit, playing sports, kicking a ball	32	3.8
Running or jogging	32	3.8
Social activities	78	9.2
Socialising, spending time, being with, seeing, waving to, talking to friends, family, children, spouses, others – either physically, virtually, or on phone	58	6.8
Children - playing, children's activities, watching, running around, building dens, climbing trees	13	1.5
People watching	7	0.8
Helping others, litter picking	3	0.4
Drinking and smoking	53	6.0
Drinking, eating, snacking – alcohol, tea, coffee, other beverages	40	4.7
Smoking or vaping	14	1.6
Work and study	30	3.5
Working, studying, writing	24	2.8
Housework – cooking, tidying	8	0.9
Shopping	11	1.3
Shopping – buying groceries or essential items, retail therapy	11	1.3
Exclude*	2	0.2
Crying	2	0.2

448 *Note.* * Crying was excluded from further analyses as it could not be grouped clearly into one
449 of the other categories and was the only example of a specific act of emotional expression.

450

451 Based on the two-step cluster analysis, the sample was segmented into seven distinct groups
452 based on activity choices. Fit statistics (BIC) showed a steady increase in model fit with each
453 additional cluster. However, a plot of BIC change showed a clear dip at 7 clusters suggesting
454 an optimum solution was found and improvements in model fit declined after 7 clusters. The
455 average Silhouette measure of cluster cohesion and separation was fair (.40) and the ratio
456 measure of cluster sizes was satisfactory (2.06).

457 The seven segments captured people with different types of activity patterns. The largest
458 segment ($N = 179$) included people who indicated they engaged with *cognitive activities*.

459 Participants in this segment all mentioned cognitive activities (this was 77% of all those who
460 mentioned it) and they did so in combination with walking (mentioned by $N = 47$), relaxing
461 ($N = 49$), or nature engagement ($N = 44$). The second largest segment ($N = 157$) captured
462 people who tended to mention *relaxing outdoor walks*. All participants in this segment
463 mentioned walking, with some mentioning it in combination with relaxation ($N = 31$) or
464 nature engagement ($N = 50$). The third largest cluster ($N = 123$) captured people who
465 mentioned *nature engagement*. People in this cluster did not mention any other activities. The
466 fourth ($N = 112$) segment captured those who engaged in different types of *social activities*. It
467 included most people (90%) who mentioned *social activities* and all of those who mentioned
468 drinking and smoking. Participants in this segment also often mentioned a range of other
469 activities alongside these two including walking ($N = 39$), relaxing ($N = 28$), nature
470 engagement ($N = 44$), or cognitive stimulation ($N = 34$). The fifth cluster ($N = 104$) was
471 labelled *indoor activities* and included all of those who mentioned work or study and many of
472 those ($N = 67$) who mentioned technology use. The sixth segment ($N = 88$) captured people
473 who mentioned *other relaxing activities*. All participants in this segment mentioned relaxing.
474 The most distinctive feature of this cluster was the mention of relaxing in combination with
475 technology use ($N = 20$), although some also mentioned nature engagement ($N = 32$). The
476 smallest segment ($N = 87$) included all those who mentioned *exercise*; some of these
477 participants also mentioned walking ($N = 24$).

478 **Activity choices and demographics (RQ 4)**

479 Activity choices were related to demographic variables (Table 6). Engagement with cognitive
480 activities was more likely among females than males. Walking was more common among
481 middle-aged people (compared to younger people) and those in employment. Engaging with
482 nature was more common among those in full- or part-time employment. Engaging with
483 social activities was more common among older participants and those living in households
484 with fewer people (living alone). Engaging with indoor activities (generally involving use of
485 technology) was more common among men, those with no degree or employment, and
486 younger participants. Physical activity was slightly more common among men.

487

488 **Table 6**

489 *Activity choices and demographic variables.*

			Cognitive	Walk	Nature	Social	Indoor	Relax	Physical
			%	%	%	%	%	%	%
Gender	$\chi^2 = 38.29,$ $p < .001$	M	20	19	13	10	15	8	15
		F	30	18	16	16	9	12	6
Degree	$\chi^2 = 18.55,$ $p = .005$	Y	23	20	14	15	9	8	11
		N	19	17	15	12	16	13	9
Employ	$\chi^2 = 21.72,$ $p = .001$	Y	23	23	12	13	10	10	11
		N	18	14	18	13	16	11	9
			<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>
			(<i>SD</i>)	(<i>SD</i>)	(<i>SD</i>)	(<i>SD</i>)	(<i>SD</i>)	(<i>SD</i>)	(<i>SD</i>)
Age	$F(6,843)=9.20,$ $p < .001$		44 (16)	48 _b (15)	43 (15)	53 _b (14)	41 _a (17)	44 (14)	48 (20)
Nr people	$F(6,843) =$ $3.50, p = .002$		1.91 (1.34)	1.76 (1.38)	2.11 (1.48)	1.59 _a (1.09)	1.79 (1.22)	2.10 (1.35)	2.30 _b (168)

490 Note. M = Male, F = Female, Y = Yes, N = No, Nr = Number. After applying Bonferroni
491 correction $p < .005$, no significant differences were found between those who do or do not
492 report having children ($\chi^2 = 14.12, p = .028$), between those living in rural or urban areas (χ^2
493 $= 10.12, p = .120$), or between those who identified as white or not ($\chi^2 = 14.74, p = .022$).
494 There was no difference between clusters in income ($F(6,797) = 2.41, p = .026$). Bold
495 percentages signify differences in the top half of the table. Means with different subscripts in
496 the bottom part of the table were found to be significantly different in post hoc tests ($p < .05$).

497

498 Relationships between place and activity (RQ 5)

499 A Chi-Square test was conducted to test the relationship between places and activities (Table
500 7), using the two segmentation variables. As expected, activities mentioned differed with
501 places visited ($\chi^2 = 469.36(18), p < .001$). Table 7 shows for each activity type the percentage
502 of participants undertaking that activity, in each of the four places (> 20% shown in bold).
503 Some activities were less place dependent than others. For instance, those who engaged with
504 cognitive activities (e.g., arts and crafts) did so in different places, except indoor places away
505 from home. In contrast, socialising was more common outdoors. Similarly, nature
506 engagement was most likely undertaken outdoors (at home or away), as were relaxing walks
507 and exercise. Other forms of relaxing were reported at home, indoors as well as outdoors.

508 Finally, indoor activities (working and technology use) were almost exclusively undertaken
 509 indoors at home.

510

511 **Table 7**

512 *Activities in different places.*

Place	Activity type							Total
	Cognitive	Walks	Nature	Social	Indoor	Relaxing	Exercise	
Home outdoor	51	1	58	39	11	24	9	193
	28%	1%	47%	35%	11%	27%	10%	100.0%
Away indoor	16	17	4	10	16	8	11	82
	9%	11%	6%	9%	15%	9%	13%	100.0%
Home indoor	54	0	0	14	73	42	1	184
	30%	0%	0%	13%	70%	48%	.01%	100.0%
Away outdoor	58	139	60	49	4	15	66	391
	32%	89%	49%	43%	.04%	17%	76%	100.0%
Total	179	157	123	112	104	88	87	850
	21%	19%	15%	13%	12%	10%	10%	100.0%

513

514 **Place choices, activities, and wellbeing in place (RQ 6)**

515 Finally, the research examines whether recalled hedonic and eudaimonic wellbeing during
 516 place visits varied depending on the type of place visited, and type of activity in those places.

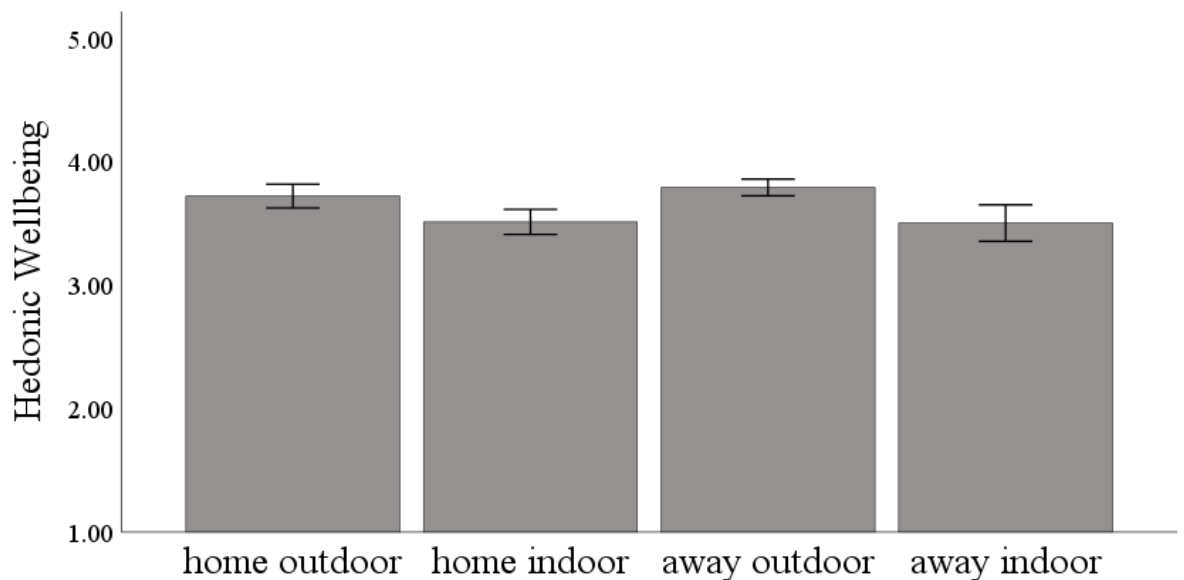
517 Overall, wellbeing in the place visited was positive ($M_{hedonic} = 3.90, SD = .67; M_{eudaimonic} =$
 518 $3.37, SD = .86$; both on scales from 1 (*almost never*) to 5 (*almost always*)). Hedonic and
 519 eudaimonic wellbeing were significantly correlated ($r = .45, p < .001, N = 850$).

520 First, it was examined whether recalled hedonic and eudaimonic wellbeing differed between

521 types of places (see Figures 1 and 2). A multiple analysis of covariance (MANCOVA),

522 controlling for demographic variables, found that wellbeing outcomes did differ depending
523 on type of place ($V = .054$; $F(6,1590) = 7.39$, $p < .001$, $\eta_p^2 = .027$; significant covariates were
524 age, $p < .001$, and income, $p = .001$). Post hoc tests revealed visiting outdoor places away
525 from home was associated with significantly more recalled positive hedonic and eudaimonic
526 wellbeing than visiting places indoors at home ($p < .001$) or indoors away from home ($p_{hedonic}$
527 $= .003$, $p_{eudaimonic} < .001$). Places at home outdoors were also linked to more positive hedonic
528 wellbeing than places at home indoors ($p = .022$) and to more positive eudaimonic wellbeing
529 than places indoors either at home ($p = .007$) or away from home ($p = .001$). There was no
530 significant difference in recalled hedonic or eudaimonic wellbeing between place visits
531 outdoors at home or away from home ($p = 1.00$).

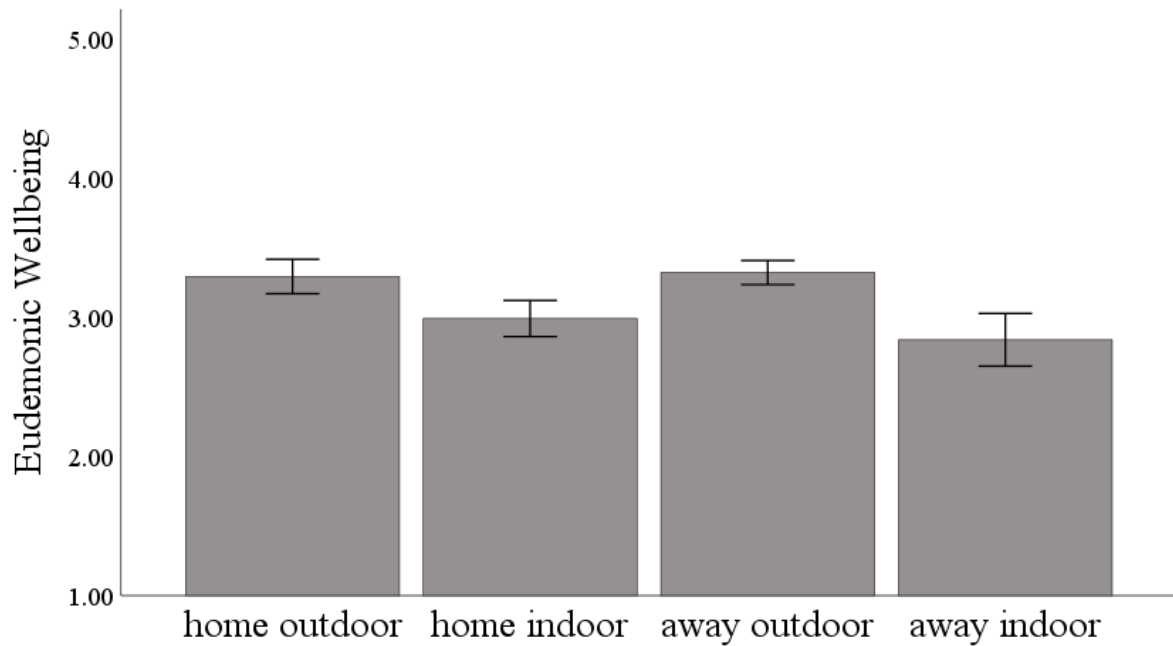
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533

534 **Figure 1.** Means (and 95% confidence intervals) for hedonic wellbeing in places to get away.

535



536

537 **Figure 2.** Means (and 95% confidence intervals) for eudaimonic wellbeing in places to get
 538 away.

539

540 Recalled wellbeing was also significantly associated with activity choices ($V = .063$;
 541 $F(12,1584) = 4.28, p < .001, \eta_p^2 = .031$; significant covariates were income, $p = .003$, age, $p <$
 542 $.001$, gender $p < .001$). Figures 3 and 4 suggest exercise and nature engagement were linked
 543 to the most positive wellbeing, while relaxing activities (linked to technology use) and indoor
 544 activities were linked to lower wellbeing. Post hoc tests revealed exercise elicited greater
 545 hedonic wellbeing than cognitive activities ($p = .004$), socialising ($p = .001$), relaxing walks
 546 ($p = .023$), and indoor activities and other relaxing activities (all $p < .001$). Nature
 547 engagement elicited significantly more hedonic wellbeing than socialising ($p = .013$), or
 548 indoor activities, or other relaxing activities (linked to technology use) (all $p < .001$).
 549 Relaxing appeared less beneficial for hedonic wellbeing than cognitive activities, exercise,
 550 nature engagement, walking (all $p < .001$), or socialising ($p = .009$). Indoor activities
 551 (working and technology use) were also significantly less beneficial than walking ($p = .015$).
 552 Results were similar, but less pronounced, for eudaimonic wellbeing. Nature engagement was
 553 most beneficial and significantly more so than cognitive activities ($p = .044$) or indoor
 554 activities ($p = .006$). Exercise was more beneficial than cognitive activities ($p = .019$), indoor

555 activities ($p = .002$), and relaxing ($p = .035$). Indoor activities were also significantly less
556 beneficial than walking ($p = .008$).

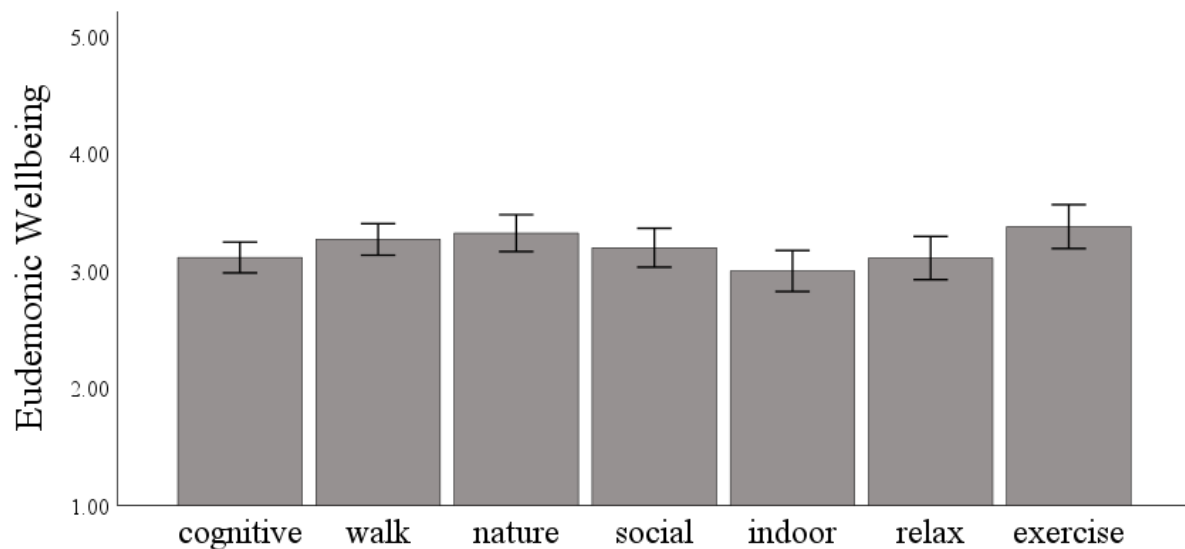
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560
561 **Figure 3.** Means (and 95% confidence intervals) for hedonic wellbeing while engaging in
562 seven activities in places to get away.



563

564 **Figure 4.** Means (and 95% confidence intervals) for eudaimonic wellbeing while engaging in
 565 *seven activities in places to get away.*

566

567 Overall, it appears spending time outdoors on activities involving nature engagement and
 568 exercise were associated with the most positive wellbeing. Spending time indoors on
 569 activities that involve technology use (work, study, gaming, watching TV) appear to be least
 570 beneficial for wellbeing.

571

572

Discussion

573 Gaining a sense of being away from everyday stressors and demands is important for
 574 wellbeing (Korpela et al., 2001; von Lindern, 2017). During the 2020 Covid-19 lockdowns,
 575 people's ability to visit places outside their home was severely restricted, providing a unique
 576 opportunity to examine the types of nearby places people visited to get away during the
 577 pandemic, what they did there, and how they experienced those visits. Using an online survey
 578 with 850 UK participants this paper sought to address six research questions. What types of
 579 places (RQ1) did people visit during the pandemic to get away and what did they do there
 580 (RQ3)? Did place (RQ2) and activity choices (RQ4) differ between demographic groups
 581 (e.g., age, gender, ethnicity, urban living)? To what extent were place and activity choices

582 related (RQ 5)? And does recalled hedonic and eudaimonic wellbeing during those place
583 visits depend on place type and activity choices (RQ6)?

584

585 Participants identified a wide range of places to get away (RQ1). These places were grouped
586 into four types: outdoor places at home, such as the garden or balcony, indoor places at home,
587 such as the bedroom or bathtub, outdoor places away from home, such as parks, the
588 countryside, or beaches, and indoor places away from home, such as shops or workplaces.
589 Participants were more likely to mention outdoor than indoor places. Most of those included
590 references to natural aspects. This is in line with existing research pointing to the importance
591 of outdoor places to get away (Hammitt, 2000) and of visiting nearby nature during Covid-19
592 (Bijker & Sijtsma, 2017; Dzhambov et al., 2021; Hubbard et al., 2021; Poortinga et al., 2021;
593 Tomasso et al., 2021).

594 Participants also mentioned a wide range of activities they undertook in the places they
595 visited (RQ3). Some were physically active (walking, exercise), others more cognitively
596 stimulating (reading, listening to music or podcasts, arts activities), and others were less
597 specific (relaxing). Walking outdoors was mentioned most often, in line with other studies
598 that found an increase in walks in nearby natural spaces for wellbeing during the pandemic
599 (Poortinga et al., 2021). The findings point to a rich variety of different activities that
600 participants engaged with. However, the sample could be clustered into seven segments with
601 distinct activity patterns. The largest segment mentioned engagement in a range of
602 cognitively stimulating *cognitive activities*, such as listening to music or engaging in arts and
603 crafts, often in combination with walking, relaxing, or nature engagement. The second largest
604 group mentioned *relaxing outdoor walks*. A similar number mentioned *nature engagement*
605 (bird watching, gardening). Fewer participants mentioned *social activities, indoor activities*
606 (often involving technology use), *relaxing* or *exercising*.

607 Overall, it appears that the sample can be segmented along activity. However, some activities
608 were associated with a range of other activities. For instance, it appears that for some people,
609 relaxing is linked to walking, while for others it is linked to cognitively stimulating activities
610 or linked to technology use. Similarly, for some people, walking is linked to exercise whereas
611 for others it is linked to relaxing or socialising.

612 Places choices and activity choices were related, although some activities were less place
613 dependent than others (RQ5). For instance, participants engaged with cognitively stimulating

614 activities in different places. However, relaxing walks were only undertaken outdoors away
615 from home. Moreover, in line with pandemic restrictions, socialising was more common
616 outdoors (at home or away from home). Nature engagement was most common outdoors (at
617 home and away from home) and technology use was most common indoors at home.

618 All place visits were associated with positive wellbeing (RQ6). However, not everyone
619 engaged in what appeared to be the most beneficial experiences. For instance, just under a
620 quarter of the participants chose an indoor place and an activity involving technology use
621 such as watching television. Such activities were less beneficial for both hedonic and
622 eudaimonic wellbeing. Moreover, physical exercise was linked to greater positive wellbeing,
623 but only very few participants mentioned exercise. Literature has highlighted a reduction in
624 exercise and physical activity during the pandemic (Stockwell et al., 2021). Perhaps this is
625 partly related to a reduced access to places, infrastructure, and people that support it.

626 Recalled hedonic and eudaimonic wellbeing were most positive in outdoor (often natural)
627 places (at home and away from home), in line with other research that has demonstrated the
628 importance of nature engagement for wellbeing during the pandemic (Astell-Burt & Feng,
629 2021; Poortinga et al., 2021). Significant differences in recalled wellbeing, depending on
630 activities, were also found. A large proportion of the participants referred to activities that
631 involved some sort of active nature engagement (gardening, listening to the birds). Several
632 authors have referred to the importance of more immersive engagement with nature to
633 maximise the wellbeing benefits from being in nature (Macaulay et al., 2022; PANS, 2021;
634 Pretty, 2004; Wyles et al., 2017). Macaulay et al. (2022) suggested wellbeing benefits of
635 mindful engagement with nature may be particularly relevant when there are constraints on
636 restorative experiences. Their study participants intentionally attended to the external
637 environments to gain distance from work or stressful thoughts to gain more psychological
638 distance. It seems many of the participants in the present study did the same. They found
639 nearby places to get away and immersive engagement with nature (animals, plants, weather)
640 in those places supported positive wellbeing experiences.

641 Places and activities may have contributed to wellbeing by satisfying a range of different
642 hedonic and eudaimonic needs. Visiting outdoor natural spaces may have supported hedonic
643 wellbeing through restoration of negative affect and mental fatigue (Kaplan & Kaplan, 1989;
644 Ulrich et al., 1991) as well as through satisfaction of aesthetic needs (e.g., beautiful natural
645 scenery). Previous research has found a strong link between restorative qualities and

646 perceived beauty of natural environments (van den Berg et al., 2003). Visits to these places
647 also appear to have supported the satisfaction of social needs. Social activities, in our sample,
648 were primarily undertaken outdoors. During the pandemic lockdowns, places designed for
649 social interaction (cafés, restaurants) were closed. Participants found other ways to satisfy
650 these needs. The changed meaning and use of natural spaces was also highlighted by King
651 and Dickinson (King & Dickinson, 2023), who demonstrated that visits to urban green spaces
652 during the pandemic provided people with a sense of purpose and supported social needs.

653 The largest activity cluster in our sample contained cognitively stimulating activities
654 (reading, listening to music, arts and crafts). Such activities can help satisfy aesthetic needs as
655 well as growth needs, through engagement with challenging activities (Sirgy et al., 2017).
656 Arts and craft activities may have supported the experience of flow when an optimum
657 balance between skills and challenges was found (Csikszentmihalyi, 2014; Csikszentmihalyi
658 & LeFevre, 1989b). Moreover, reading and listening to music or podcasts may have provided
659 participants with an opportunity to escape into fictional worlds. We did not study these
660 different needs in detail, and further research may want to test these hypotheses.

661 The findings suggest that both place and activity choices may have contributed to need
662 satisfaction and wellbeing, and the two can be strongly interlinked. Theories and research that
663 examine how place characteristics impact wellbeing during place visits, such as the Attention
664 Restoration Theory (Kaplan & Kaplan, 1989), tend to focus more on hedonic wellbeing
665 (affective restoration) and attention restoration. These theories may not help explain
666 eudaimonic wellbeing benefits (Capaldi et al., 2015). Moreover, participants in our research
667 reported needing recovery from stress and mental fatigue, as well as boredom. Leisure
668 theories (Sirgy et al., 2017) explore hedonic as well as eudaimonic wellbeing. However, they
669 focus primarily on leisure activities rather than place characteristics (Sirgy et al., 2017).
670 Combining different perspectives and examining how place characteristics *and* activities
671 impact wellbeing is important. A combination of different perspectives can provide greater
672 insight into how place visits benefit hedonic and eudaimonic wellbeing.

673 Overall, this research suggests being somewhere different, as well as doing something
674 different, may be beneficial for wellbeing (Hammit, 2000; Staats et al., 2010). The findings
675 highlight the need for further theory development that examines place-activity interactions
676 and how they impact hedonic and eudaimonic wellbeing during visits to places to get away.
677 This requires combining insights from theories that focus on place characteristics, such as

678 Attention Restoration Theory (Kaplan & Kaplan, 1989), and theories that focus on leisure
679 activities (Sirgy et al., 2017). Three types of place-activity relationships may be relevant:
680 activities and places that are (almost) entirely interdependent (playing football on a football
681 pitch), activities and places that are (almost) entirely independent (listening to music), and
682 activities and places that interact, where one may enhance wellbeing resulting from the other
683 (mindful engagement with nature). The role of place features and accessible place types will
684 vary between those, as will associated wellbeing benefits of place visits.

685 Demographic analyses (RQ2 and 4) suggested that older people, those who identified as
686 white, those who worked, had a degree, and lived in rural areas were more likely to visit
687 places associated with the most beneficial outcomes (outdoor places away from home). It
688 appears that participants with less access to nearby natural spaces visited those spaces less, in
689 line with existing literature (Colley et al., 2022; Lenaerts et al., 2021b). Previous literature
690 has also found gender differences in positive effects of nature visits (Bhatti, 2006; Parry et
691 al., 2005; Saleem & Kamboh, 2013). No significant gender differences were found in this
692 research. It is not clear why this is the case. It may be because there was less variety between
693 men and women in the types of natural places that were visited, due to reduced access and
694 good weather. Further research will need to examine this.

695 Activities least likely to be associated with positive wellbeing (indoor at home, involving use
696 of technology) were more common among men, those with no degree or employment, and
697 younger participants, which complements previous work (Michaelson et al., 2020;
698 Richardson et al., 2018). Engaging with social activities was more common among older
699 participants and those living in households with fewer people (living alone). These findings
700 suggest that place and activity choices are linked to accessibility to different spaces such as
701 nearby natural spaces. However, they also point to the influence of motivational factors, as
702 some of these differences (e.g., gender) cannot be explained by differences in accessibility
703 alone.

704 **Limitations and further research**

705 The results presented here form part of a longer survey. Being mindful of survey length
706 resulted in constraints to the number of questions that could be included to measure key
707 constructs. For instance, the novel measure of eudaimonic wellbeing in place was useful,
708 short, and found to be statistically reliable in our analysis, but further research needs to
709 validate its psychometric properties. Moreover, the scale was developed based on a survey

710 measuring recalled wellbeing during activities (Waterman, 2005). Further research may want
711 to include the two versions of the scale, for activities and places, to help further understand
712 how each contributes to psychological wellbeing.

713 All place visits were associated with positive wellbeing. However, participants recalled
714 slightly more positive hedonic than eudaimonic wellbeing, when reflecting on their place
715 visits. It is possible that participants found it easier to relate to the hedonic wellbeing
716 questions than to the eudaimonic wellbeing questions. Future research will need to examine
717 this.

718 Due to the timing of the research (Autumn 2020), people were asked to reflect on their
719 experiences during the height of the first Covid-19 lockdown in Spring 2020, meaning
720 participants were not in strict lockdown at the time of the survey. Therefore, our findings are
721 likely affected by a range of factors that influence memory and recalled experiences,
722 including changes in the weather, ongoing restrictions, personal circumstances, and
723 individual differences. Further research may want to examine in-the-moment wellbeing,
724 during place visits and in other circumstances, for instance, through field research or
725 experience sampling.

726 The majority of participants referred to an outdoor place to get away, in line with other
727 research (Poortinga et al., 2021). It should be noted the weather was pleasant in the UK
728 during the first lockdown that this study focused on (dry and relatively warm), which would
729 have made it much more attractive for people to spend time outdoors. In addition, due to
730 travel restrictions, there was significantly less traffic on roads making it potentially easier and
731 more pleasant for people to find and visit nearby outdoor spaces. The Covid-19 pandemic
732 created a unique situation where people's motivations, abilities, and opportunities to visit
733 different spaces and engage in different activities changed significantly. Further research will
734 need to examine whether the findings hold under other circumstances (e.g., comparing
735 different lockdowns). Although the principle of place-activity interdependencies may hold,
736 the conditions will also have altered some of these. For instance, social activities were not
737 possible during the pandemic in places where they would normally be allowed. Participants
738 used other places (outdoor natural spaces), to satisfy social needs. Once bars, pubs, and
739 restaurants opened again, outdoor natural spaces may have fulfilled different functions.

740 Our data was collected in the UK. Similar lockdowns were introduced in other countries
741 across the world. The findings of this research may be similar for other countries, but this

742 needs further investigation. Many countries across the world found increased benefits from
743 nature engagement during the pandemic (Lu et al., 2021; Poortinga et al., 2021; Soga et al.,
744 2021) suggesting similar experiences. However, place and activity choices may also be
745 related in different ways across countries and cultures, due to suitability and accessibility of
746 different places for engagement in different activities.

747 **Implications for policy and practice**

748 Despite the unique situation that was being investigated, the findings may provide some
749 valuable practical insights for policy and practice. The findings show that nearby places to
750 get away can support satisfaction of important hedonic and eudaimonic needs. Investment in
751 local places that enable everyone to find such places is important. Such investment could
752 support wellbeing for all, including those less able or willing to travel distances. It would also
753 help support wellbeing in the event of any future pandemic lockdown restrictions. Providing
754 people with easy access to outdoor spaces at home (gardens, balconies) and away from (but
755 near) the home (local parks, street trees) could be particularly beneficial.

756 The findings highlight that supporting the wellbeing of everyone requires understanding why
757 people visit certain places and what might be preventing people from visiting the places that
758 may be most beneficial for their wellbeing. Although most participants visited the most
759 beneficial places, this was not the case for everyone. Alongside investing in local spaces it is
760 essential to take account of what is preventing people from visiting places of most benefit and
761 whether anything can be done to encourage them to visit those places.

762 The findings also suggest that providing access to such places is not necessarily enough
763 without consideration of what people do when they get there. Providing a range of places to
764 support different activities is key, but encouraging specific activities in those places may also
765 be important. For instance, more active, immersive engagement with natural spaces, and
766 physical activity in such spaces, will enhance the beneficial effects of exposure to natural
767 environments. Providing suitable place-based interventions to promote wellbeing may require
768 several steps: 1) examining existing place-activity interactions, 2) examining what hedonic
769 and eudaimonic needs can be supported by those place-activity interactions, 3) assessing
770 hedonic and eudaimonic needs of the target population, and 4) providing access to, and
771 encouraging engagement with, different place-activity packages that address those needs.

772 This study has demonstrated people can find nearby places to get away that support their
773 wellbeing. During the height of the pandemic most people could not travel (far). They had to

774 find nearby spaces to get away and were successful in doing so. This is a particularly
775 important insight for supporting the wellbeing of those who cannot easily travel far. It is also
776 important in the context of environmental impact, as a potential reduction in leisure travel can
777 benefit environmental quality. Architecture, planning, and land management should aim to
778 design, build, and manage local environments for people that enable easy access to a wide
779 range of different spaces where people can get away and engage in the activities that benefit
780 their wellbeing. Easy access to such spaces can help create vibrant local communities that are
781 visited and used by a wide range of residents.

782 **Conclusion**

783 Supporting people to manage their wellbeing is a significant challenge, especially during
784 times of significant strain such as the Covid-19 pandemic. Environmental psychology
785 literature has pointed to the importance of people's use of different places to support their
786 wellbeing (Korpela & Hartig, 1996) and leisure research has focused on the benefits of
787 engaging with leisure activities (Sirgy et al., 2017). This research supports previous insights
788 that highlight the ways in which people supported their wellbeing by visiting natural spaces
789 to get away during Covid-19. However, it also highlights the rich variety of other places
790 visited and the importance of activities undertaken in the places they visited. By combining
791 theoretical perspectives of environmental psychology literature and leisure literature, a better
792 perspective can be gained on when and how visits to places to get away may benefit
793 wellbeing by supporting hedonic and eudaimonic need satisfaction.

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- 796 Arden, J. B. (2010). *Rewire your brain: Think your way to a better life*. Dordrecht,
797 Netherlands. John Wiley & Sons.
- 798 Astell-Burt, T., & Feng, X. (2021). Time for 'Green' during COVID-19? Inequities in Green
799 and Blue Space Access, Visitation and Felt Benefits. *International Journal of*
800 *Environmental Research and Public Health*, 18(5), 2757.
801 <https://www.mdpi.com/1660-4601/18/5/2757>
- 802 Barr, M., & Copeland-Stewart, A. (2021). Playing video games during the COVID-19
803 pandemic and effects on players' well-being. *Games and Culture*, 17(1), 122-139.
804 <https://doi.org/10.1177/15554120211017036>
- 805 Bhatti, M. (2006). 'When I'm in the garden I can create my own paradise': Homes and
806 gardens in later life. *The Sociological Review*, 54(2), 318-341.
807 <https://doi.org/10.1111/j.1467-954X.2006.00616.x>
- 808 Bijker, R. A., & Sijtsma, F. J. (2017). A portfolio of natural places: Using a participatory GIS
809 tool to compare the appreciation and use of green spaces inside and outside urban
810 areas by urban residents. *Landscape and urban planning*, 158, 155-165.
811 <https://doi.org/https://doi.org/10.1016/j.landurbplan.2016.10.004>
- 812 Bowler, D. E., Buyung-Ali, L. M., Knight, T. M., & Pullin, A. S. (2010). A systematic
813 review of evidence for the added benefits to health of exposure to natural
814 environments. *BMC public health*, 10(1), 456. [https://doi.org/10.1186/1471-2458-10-](https://doi.org/10.1186/1471-2458-10-456)
815 [456](https://doi.org/10.1186/1471-2458-10-456)
- 816 Bratman, G. N., Anderson, C. B., Berman, M. G., Cochran, B., de Vries, S., Flanders, J.,
817 Folke, C., Frumkin, H., Gross, J. J., Hartig, T., Kahn, P. H., Kuo, M., Lawler, J. J.,
818 Levin, P. S., Lindahl, T., Meyer-Lindenberg, A., Mitchell, R., Ouyang, Z., Roe, J., . . .
819 Daily, G. C. (2019). Nature and mental health: An ecosystem service perspective.
820 *Science advances*, 5(7), eaax0903. <https://doi.org/doi:10.1126/sciadv.aax0903>
- 821 Brodeur, A., Clark, A. E., Fleche, S., & Powdthavee, N. (2020). Assessing the impact of the
822 coronavirus lockdown on unhappiness, loneliness, and boredom using Google Trends.
823 *arXiv preprint arXiv:2004.12129*.
824 <https://arxiv.org/ftp/arxiv/papers/2004/2004.12129.pdf>
- 825 Capaldi, C. A., Passmore, H.-A., Nisbet, E. K., Zelenski, J. M., & Dopko, R. L. (2015).
826 Flourishing in nature: A review of the benefits of connecting with nature and its
827 application as a wellbeing intervention. *International Journal of Wellbeing*, 5(4).
828 <https://doi.org/https://doi.org/10.5502/ijw.v5i4.449>
- 829 Carpiano, R. M. (2009). Come take a walk with me: The "Go-Along" interview as a novel
830 method for studying the implications of place for health and well-being. *Health &*
831 *place*, 15(1), 263-272.
832 <https://doi.org/https://doi.org/10.1016/j.healthplace.2008.05.003>
- 833 Chao, M., Chen, X., Liu, T., Yang, H., & Hall, B. J. (2020). Psychological distress and state
834 boredom during the COVID-19 outbreak in China: the role of meaning in life and
835 media use. *European journal of psychotraumatology*, 11(1),
836 <https://doi.org/10.1080/20008198.2020.1769379>
- 837 Chen, I.-S. (2020). Turning home boredom during the outbreak of COVID-19 into thriving at
838 home and career self-management: the role of online leisure crafting. *International*
839 *Journal of Contemporary Hospitality Management*, 32(11), 3645-3663.
840 [doi/10.1108/IJCHM-06-2020-0580](https://doi.org/10.1108/IJCHM-06-2020-0580)
- 841 Coghlan, A., & Filo, K. (2016). Bringing personal character strengths into the production of
842 the leisure experience. *Leisure Sciences*, 38(2), 100-117.
843 <https://doi.org/10.1080/01490400.2015.1087355>

- 844 Colley, K., Irvine, K. N., & Currie, M. (2022). Who benefits from nature? A quantitative
845 intersectional perspective on inequalities in contact with nature and the gender gap
846 outdoors. *Landscape and urban planning*, 223, 104420.
847 <https://doi.org/https://doi.org/10.1016/j.landurbplan.2022.104420>
- 848 Cooke, P. J., Melchert, T. P., & Connor, K. (2016). Measuring well-being: A review of
849 instruments. *The Counseling Psychologist*, 44(5), 730-757.
850 <https://doi.org/10.1177/0011000016633507>
- 851 Corley, J., Okely, J. A., Taylor, A. M., Page, D., Welstead, M., Skarabela, B., Redmond, P.,
852 Cox, S. R., & Russ, T. C. (2021). Home garden use during COVID-19: Associations
853 with physical and mental wellbeing in older adults. *Journal of Environmental*
854 *Psychology*, 73, 101545. <https://doi.org/https://doi.org/10.1016/j.jenvp.2020.101545>
- 855 Csikszentmihalyi, M. (2014). *The collected works of Mihaly Csikszentmihalyi*. New York.
856 Springer.
- 857 Csikszentmihalyi, M., & LeFevre, J. (1989b). Optimal experience in work and leisure.
858 *Journal of personality and social psychology*, 56(5), 815-822.
859 <https://doi.org/10.1037/0022-3514.56.5.815>
- 860 Drisko, J. W., & Maschi, T. (2016). *Content analysis*. Oxford, UK. Oxford University Press.
- 861 Dzhambov, A. M., Lercher, P., Browning, M. H. E. M., Stoyanov, D., Petrova, N., Novakov,
862 S., & Dimitrova, D. D. (2021). Does greenery experienced indoors and outdoors
863 provide an escape and support mental health during the COVID-19 quarantine?
864 *Environmental Research*, 196, 110420.
865 <https://doi.org/https://doi.org/10.1016/j.envres.2020.110420>
- 866 Fornara, F., Mosca, O., Bosco, A., Caffò, A. O., Lopez, A., Iachini, T., Ruggiero, G.,
867 Ruotolo, F., Sbordone, F. L., Ferrara, A., Cattaneo, Z., Arioli, M., Frassinetti, F.,
868 Candini, M., Miola, L., & Pazzaglia, F. (2022). Space at home and psychological
869 distress during the Covid-19 lockdown in Italy. *Journal of Environmental Psychology*,
870 79, 101747. <https://doi.org/https://doi.org/10.1016/j.jenvp.2021.101747>
- 871 Groarke, J. M., Berry, E., Graham-Wisener, L., McKenna-Plumley, P. E., McGlinchey, E., &
872 Armour, C. (2020). Loneliness in the UK during the COVID-19 pandemic: Cross-
873 sectional results from the COVID-19 Psychological Wellbeing Study. *PloS one*,
874 15(9). <https://doi.org/https://doi.org/10.1371/journal.pone.0239698>
- 875 Hammitt, W. E. (2000). The Relation between Being Away and Privacy in Urban Forest
876 Recreation Environments. *Environment and Behavior*, 32(4), 521-540.
877 <https://doi.org/10.1177/00139160021972649>
- 878 Hartig, T., Mitchell, R., Vries, S. d., & Frumkin, H. (2014). Nature and health. *Annual*
879 *Review of Public Health*, 35(1), 207-228. [https://doi.org/10.1146/annurev-publhealth-](https://doi.org/10.1146/annurev-publhealth-032013-182443)
880 [032013-182443](https://doi.org/10.1146/annurev-publhealth-032013-182443)
- 881 Hubbard, G., Daas, C. d., Johnston, M., Murchie, P., Thompson, C. W., & Dixon, D. (2021).
882 Are rurality, area deprivation, access to outside space, and green space associated
883 with mental health during the COVID-19 pandemic? A cross sectional study
884 (CHARIS-E). *International Journal of Environmental Research and Public Health*,
885 18(8), 3869. <https://www.mdpi.com/1660-4601/18/8/3869>
- 886 Huta, V., & Waterman, A. S. (2014). Eudaimonia and its distinction from hedonia:
887 Developing a classification and terminology for understanding conceptual and
888 operational definitions. *Journal of happiness studies*, 15(6), 1425-1456.
889 <https://doi.org/10.1007/s10902-013-9485-0>
- 890 Kaplan, R., & Kaplan, S. (1989). *The experience of nature: A psychological perspective*. New
891 York. Cambridge University Press.

- 892 Keyes, C. L. M., & Annas, J. (2009). Feeling good and functioning well: distinctive concepts
893 in ancient philosophy and contemporary science. *The Journal of Positive Psychology*,
894 4(3), 197-201. <https://doi.org/10.1080/17439760902844228>
- 895 King, K., & Dickinson, J. (2023). Nearby nature in lockdown: Practices and affordances for
896 leisure in urban green spaces. *Leisure studies*, 42(1), 100-117.
897 <https://doi.org/10.1080/02614367.2022.2092646>
- 898 Korpela, K., & Hartig, T. (1996). Restorative qualities of favorite places. *Journal of*
899 *Environmental Psychology*, 16(3), 221-233.
900 <https://doi.org/https://doi.org/10.1006/jevp.1996.0018>
- 901 Korpela, K. M. (1992). Adolescents' favourite places and environmental self-regulation.
902 *Journal of Environmental Psychology*, 12(3), 249-258.
903 [https://doi.org/https://doi.org/10.1016/S0272-4944\(05\)80139-2](https://doi.org/https://doi.org/10.1016/S0272-4944(05)80139-2)
- 904 Korpela, K. M., Hartig, T., Kaiser, F. G., & Fuhrer, U. (2001). Restorative experience and
905 self-regulation in favorite places. *Environment and Behavior*, 33(4), 572-589.
906 <https://doi.org/10.1177/00139160121973133>
- 907 Korpela, K. M., & Ylén, M. (2007). Perceived health is associated with visiting natural
908 favourite places in the vicinity. *Health & place*, 13(1), 138-151.
909 <https://doi.org/https://doi.org/10.1016/j.healthplace.2005.11.002>
- 910 Korpela, K. M., Ylén, M., Tyrväinen, L., & Silvennoinen, H. (2008). Determinants of
911 restorative experiences in everyday favorite places. *Health & place*, 14(4), 636-652.
912 <https://doi.org/https://doi.org/10.1016/j.healthplace.2007.10.008>
- 913 Korpela, K. M., & Ylén, M. P. (2009). Effectiveness of favorite-place prescriptions: A field
914 experiment. *American Journal of Preventive Medicine*, 36(5), 435-438.
915 <https://doi.org/https://doi.org/10.1016/j.amepre.2009.01.022>
- 916 Kulbin, K., & Kask, K. (2022). Associations between depression symptoms and leisure
917 behavior during the COVID-19 State of Emergency. *Leisure Sciences*, 1-21.
918 <https://doi.org/10.1080/01490400.2022.2036275>
- 919 Landis, J. R., & Koch, G. G. (1977). An application of hierarchical Kappa-type statistics in
920 the assessment of majority agreement among multiple observers. *Biometrics*, 33(2),
921 363-374. <https://doi.org/10.2307/2529786>
- 922 Lee, D.-J., Yu, G. B., & Sirgy, M. J. (2023). Testing the Benefits Theory of Leisure
923 Wellbeing. *Applied Research in Quality of Life*, 18(5), 2705-2748.
924 <https://doi.org/10.1007/s11482-023-10204-w>
- 925 Lee Ludvigsen, J. A., Harrison, K., Millward, P., & Ogden, C. (2023). Lockdown leisure.
926 *Leisure studies*, 42(1), 1-7. <https://doi.org/10.1080/02614367.2022.2162110>
- 927 Lehberger, M., Kleih, A.-K., & Sparke, K. (2021). Self-reported well-being and the
928 importance of green spaces – A comparison of garden owners and non-garden owners
929 in times of COVID-19. *Landscape and urban planning*, 212, 104108.
930 <https://doi.org/https://doi.org/10.1016/j.landurbplan.2021.104108>
- 931 Lenaerts, A., Heyman, S., De Decker, A., Lauwers, L., Sterckx, A., Remmen, R., Bastiaens,
932 H., & Keune, H. (2021a). Vitamin Nature: How coronavirus disease 2019 has
933 highlighted factors contributing to the frequency of nature visits in Flanders, Belgium.
934 *Frontiers in Public Health*, 9. <https://doi.org/10.3389/fpubh.2021.646568>
- 935 Lu, Y., Zhao, J., Wu, X., & Lo, S. M. (2021). Escaping to nature during a pandemic: A
936 natural experiment in Asian cities during the COVID-19 pandemic with big social
937 media data. *Science of The Total Environment*, 777, 146092.
938 <https://doi.org/https://doi.org/10.1016/j.scitotenv.2021.146092>
- 939 Macaulay, R., Johnson, K., Lee, K., & Williams, K. (2022). Comparing the effect of mindful
940 and other engagement interventions in nature on attention restoration, nature

- 941 connection, and mood. *Journal of Environmental Psychology*, 81, 101813.
 942 <https://doi.org/https://doi.org/10.1016/j.jenvp.2022.101813>
- 943 Mansfield, L., Daykin, N., & Kay, T. (2020). Leisure and wellbeing. *Leisure studies*, 39(1),
 944 1-10. <https://doi.org/10.1080/02614367.2020.1713195>
- 945 Marston, H. R., Ivan, L., Fernández-Ardèvol, M., Rosales Climent, A., Gómez-León, M.,
 946 Blanche-T, D., Earle, S., Ko, P.-C., Colas, S., Bilir, B., Öztürk Çalikoglu, H., Arslan,
 947 H., Kanozia, R., Kriebeneegg, U., Großschädl, F., Reer, F., Quandt, T., Buttigieg, S.
 948 C., Silva, P. A., . . . Rohner, R. (2020). COVID-19: Technology, social connections,
 949 loneliness, and leisure activities: An international study protocol. *Frontiers in*
 950 *sociology*, 5. <https://doi.org/10.3389/fsoc.2020.574811>
- 951 Martarelli, C. S., & Wolff, W. (2020). Too bored to bother? Boredom as a potential threat to
 952 the efficacy of pandemic containment measures. *Humanities and Social Sciences*
 953 *Communications*, 7(1), 28. <https://doi.org/10.1057/s41599-020-0512-6>
- 954 Mastandrea, S., Fagioli, S., & Biasi, V. (2019). Art and psychological well-being: linking the
 955 brain to the aesthetic emotion. *Frontiers in Psychology*, 10.
 956 <https://doi.org/10.3389/fpsyg.2019.00739>
- 957 Michaelson, V., King, N., Janssen, I., Lawal, S., & Pickett, W. (2020). Electronic screen
 958 technology use and connection to nature in Canadian adolescents: a mixed methods
 959 study. *Canadian Journal of Public Health*, 111(4), 502-514.
 960 <https://doi.org/10.17269/s41997-019-00289-y>
- 961 Newell, P. B. (1997). A cross-cultural examination of favorite places. *Environment and*
 962 *Behavior*, 29(4), 495-514. <https://doi.org/10.1177/001391659702900403>
- 963 Ouellette, P., Kaplan, R., & Kaplan, S. (2005). The monastery as a restorative environment.
 964 *Journal of Environmental Psychology*, 25(2), 175-188.
 965 <https://doi.org/https://doi.org/10.1016/j.jenvp.2005.06.001>
- 966 Panno, A., Theodorou, A., Carrus, G., Imperatori, C., Spano, G., & Sanesi, G. (2020). Nature
 967 reappraisers, benefits for the environment: A model linking cognitive reappraisal, the
 968 “Being Away” dimension of restorativeness and eco-friendly behavior. *Frontiers in*
 969 *Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.01986>
- 970 PANS. (2021). *Natural England and Kantar Public. The People and Nature Survey for*
 971 *England (PANS); Impact of Covid-19 on Green and Natural Spaces* (Natural England
 972 report PANS003, Issue 003.
 973 <https://publications.naturalengland.org.uk/publication/4513040482697216>
- 974 Parry, D. C., Glover, T. D., & Shinew, K. J. (2005). ‘Mary, Mary quite contrary, how does
 975 your garden grow?’: Examining gender roles and relations in community gardens.
 976 *Leisure studies*, 24(2), 177-192. <https://www.jstor.org/stable/4321045>
- 977 Passmore, H.-A., Yang, Y., & Sabine, S. (2022). An extended replication study of the well-
 978 being intervention, the Noticing Nature Intervention (NNI). *Journal of happiness*
 979 *studies*, 23(6), 2663-2683. <https://doi.org/10.1007/s10902-022-00516-3>
- 980 Poortinga, W., Bird, N., Hallingberg, B., Phillips, R., & Williams, D. (2021). The role of
 981 perceived public and private green space in subjective health and wellbeing during
 982 and after the first peak of the COVID-19 outbreak. *Landscape and urban planning*,
 983 211, 104092. <https://doi.org/https://doi.org/10.1016/j.landurbplan.2021.104092>
- 984 Pouso, S., Borja, Á., Fleming, L. E., Gómez-Baggethun, E., White, M. P., & Uyarra, M. C.
 985 (2021). Contact with blue-green spaces during the COVID-19 pandemic lockdown
 986 beneficial for mental health. *Science of The Total Environment*, 756, 143984.
 987 <https://doi.org/10.1016/j.scitotenv.2020.143984>
- 988 Pretty, J. (2004). How nature contributes to mental and physical health. *Spirituality and*
 989 *Health International*, 5(2), 68-78. <https://doi.org/https://doi.org/10.1002/shi.220>

- 990 Puhakka, R. (2021). University students' participation in outdoor recreation and the perceived
 991 well-being effects of nature. *Journal of outdoor recreation and tourism*, 36, 100425.
 992 <https://doi.org/https://doi.org/10.1016/j.jort.2021.100425>
- 993 Ratcliffe, E., & Korpela, K. M. (2016). Memory and place attachment as predictors of
 994 imagined restorative perceptions of favourite places. *Journal of Environmental*
 995 *Psychology*, 48, 120-130. <https://doi.org/https://doi.org/10.1016/j.jenvp.2016.09.005>
- 996 Richardson, M., Hussain, Z., & Griffiths, M. D. (2018). Problematic smartphone use, nature
 997 connectedness, and anxiety. *Journal of Behavioral Addictions*, 7(1), 109-116.
 998 <https://doi.org/10.1556/2006.7.2018.10>
- 999 Russell, J. A. (1980). A circumplex model of affect. *Journal of personality and social*
 1000 *psychology*, 39, 1161-1178. <https://doi.org/10.1037/h0077714>
- 1001 Russell, J. A., & Lanius, U. F. (1984). Adaptation level and the affective appraisal of
 1002 environments. *Journal of Environmental Psychology*, 4(2), 119-135.
 1003 [https://doi.org/https://doi.org/10.1016/S0272-4944\(84\)80029-8](https://doi.org/https://doi.org/10.1016/S0272-4944(84)80029-8)
- 1004 Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A Review of
 1005 research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1),
 1006 141-166. <https://doi.org/10.1146/annurev.psych.52.1.141>
- 1007 Ryan, R. M., Huta, V., & Deci, E. L. (2008). Living well: a self-determination theory
 1008 perspective on eudaimonia. *Journal of happiness studies*, 9(1), 139-170.
 1009 <https://doi.org/10.1007/s10902-006-9023-4>
- 1010 Saleem, A., & Kamboh, K. (2013). Why people visit parks? The role of gender, age and
 1011 education among urban park visitors in Faisalabad. *International Journal of Asian*
 1012 *Social Science*, 3(10), 2196-2203.
 1013 <https://archive.aessweb.com/index.php/5007/article/view/2575>
- 1014 Scopelliti, M., Carrus, G., & Bonaiuto, M. (2019). Is it really nature that restores people? A
 1015 comparison with historical sites with high restorative potential. *Frontiers in*
 1016 *Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.02742>
- 1017 Sirgy, M. J., Uysal, M., & Kruger, S. (2017). Towards a benefits theory of leisure well-being.
 1018 *Applied Research in Quality of Life*, 12(1), 205-228. [https://doi.org/10.1007/s11482-](https://doi.org/10.1007/s11482-016-9482-7)
 1019 [016-9482-7](https://doi.org/10.1007/s11482-016-9482-7)
- 1020 Soga, M., Evans, M. J., Tsuchiya, K., & Fukano, Y. (2021). A room with a green view: the
 1021 importance of nearby nature for mental health during the COVID - 19 pandemic.
 1022 *Ecological Applications*, 31(2), e2248.
 1023 <https://doi.org/https://doi.org/10.1002/eap.2248>
- 1024 Sonnentag, S. (2012). Psychological detachment from work during leisure time: The benefits
 1025 of mentally disengaging from work. *Current Directions in Psychological Science*,
 1026 21(2), 114-118. <https://doi.org/10.1177/0963721411434979>
- 1027 Staats, H., Van Gemerden, E., & Hartig, T. (2010). Preference for Restorative Situations:
 1028 Interactive Effects of Attentional State, Activity-in-Environment, and Social Context.
 1029 *Leisure Sciences*, 32(5), 401-417. <https://doi.org/10.1080/01490400.2010.510990>
- 1030 Stebbins, R. A. (2016). Hedonism, eudaimonia, and the Serious Leisure Perspective. In J.
 1031 Vittersø (Ed.), *Handbook of Eudaimonic Well-Being* (pp. 497-506). Springer
 1032 International Publishing. https://doi.org/10.1007/978-3-319-42445-3_33
- 1033 Stebbins, R. A. (2018). Leisure and the positive psychological states. *The Journal of Positive*
 1034 *Psychology*, 13(1), 8-17. <https://doi.org/10.1080/17439760.2017.1374444>
- 1035 Stockwell, S., Trott, M., Tully, M., Shin, J., Barnett, Y., Butler, L., McDermott, D., Schuch,
 1036 F., & Smith, L. (2021). Changes in physical activity and sedentary behaviours from
 1037 before to during the COVID-19 pandemic lockdown: a systematic review. *BMJ open*
 1038 *sport & exercise medicine*, 7(1), e000960. doi: [10.1136/bmjsem-2020-000960](https://doi.org/10.1136/bmjsem-2020-000960)

- 1039 Subiza-Pérez, M., Pasanen, T., Ratcliffe, E., Lee, K., Bornioli, A., de Bloom, J., & Korpela,
 1040 K. (2021). Exploring psychological restoration in favorite indoor and outdoor urban
 1041 places using a top-down perspective. *Journal of Environmental Psychology*, 78,
 1042 101706. <https://doi.org/https://doi.org/10.1016/j.jenvp.2021.101706>
- 1043 Tkaczynski, A. (2017). Segmentation using two-step Cluster Analysis. In T. Dietrich, S.
 1044 Rundle-Thiele, & K. Kubacki (Eds.), *Segmentation in Social Marketing: Process,
 1045 Methods and Application* (pp. 109-125). Springer Singapore.
 1046 https://doi.org/10.1007/978-981-10-1835-0_8
- 1047 Tomasso, L. P., Yin, J., Cedeño Laurent, J. G., Chen, J. T., Catalano, P. J., & Spengler, J. D.
 1048 (2021). The Relationship between nature deprivation and individual wellbeing across
 1049 urban gradients under COVID-19. *International Journal of Environmental Research
 1050 and Public Health*, 18(4), 1511.
 1051 <https://doi.org/https://doi.org/10.3390/ijerph18041511>
- 1052 Ulrich, R. S., Simons, R. F., Losito, B. D., Fiorito, E., Miles, M. A., & Zelson, M. (1991).
 1053 Stress recovery during exposure to natural and urban environments. *Journal of
 1054 Environmental Psychology*, 11(3), 201-230.
 1055 [https://doi.org/https://doi.org/10.1016/S0272-4944\(05\)80184-7](https://doi.org/https://doi.org/10.1016/S0272-4944(05)80184-7)
- 1056 van den Berg, A. E., Koole, S. L., & van der Wulp, N. Y. (2003). Environmental preference
 1057 and restoration: (How) are they related? *Journal of Environmental Psychology*, 23(2),
 1058 135-146. [https://doi.org/https://doi.org/10.1016/S0272-4944\(02\)00111-1](https://doi.org/https://doi.org/10.1016/S0272-4944(02)00111-1)
- 1059 von Lindern, E. (2017). Perceived interdependencies between settings as constraints for self-
 1060 reported restoration. *Journal of Environmental Psychology*, 49, 8-17.
 1061 <https://doi.org/https://doi.org/10.1016/j.jenvp.2016.11.004>
- 1062 Waterman, A. S. (2005). When effort is enjoyed: Two studies of intrinsic motivation for
 1063 personally salient activities. *Motivation and Emotion*, 29(3), 165-188.
 1064 <https://doi.org/10.1007/s11031-005-9440-4>
- 1065 Waterman, A. S., & Schwartz, S. J. (2024). Identity contributions to a life well-lived: A study
 1066 of the relationship of eudaimonic well-being to intrinsic motivation for identity-
 1067 related activities. *Identity*, 24(1), 1-15.
 1068 <https://doi.org/10.1080/15283488.2023.2233990>
- 1069 Wyles, K. J., White, M. P., Hattam, C., Pahl, S., King, H., & Austen, M. (2017). Are some
 1070 natural environments more psychologically beneficial than others? The Importance of
 1071 type and quality on connectedness to nature and psychological restoration.
 1072 *Environment and Behavior*, 51(2), 111-143.
 1073 <https://doi.org/10.1177/0013916517738312>
- 1074 Xu, S., Murrell, G., Golding, S. E., Brockett, B. F. T., Gatersleben, B., Scarles, C., White, E.
 1075 V., Willis, C., & Wyles, K. J. (2021). #Springwatch #WildMorningswithChris:
 1076 Engaging with nature via social media and wellbeing during the COVID-19
 1077 lockdown. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.701769>

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