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1 **“Something inside me has been set in motion”: Exploring the psychological wellbeing of**
2 **people engaged in sustainability initiatives**

3 Mirijam Mock^{1*}, Ines Omann², Christine Polzin³, Wouter Spekkink⁴, Julia Schuler⁵, Vlad Pandur⁶,
4 Ambra Brizi⁷, Angelo Panno⁸

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6

7 ¹Vienna University of Economics and Business, Department socioeconomics, Austria

8 ²Vienna University of Economics and Business, Department socioeconomics, Austria

9 ³Helmholtz Centre for Environmental Research GmbH – UFZ, Department of Environmental Politics,
10 Germany

11 ⁴Delft University of Technology, Faculty of Technology, Policy and Management, the Netherlands.
12 Present address: Sustainable Consumption Institute, University of Manchester, UK

13 ⁵University of Leipzig, Department of Medical Psychology and Medical Sociology, Germany

14

15 ⁶West University of Timisoara – UVT, Department of Psychology, Romania

16 ⁷Roma Tre University, Department of Education, Italy

17 ⁸Roma Tre University, Department of Education, Italy

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20

21

22 *Corresponding author:

23 Email: mirijam.mock@wu.ac.at

24 Postal address:

25 Institute for Social Change and Sustainability,

26 Department socioeconomics

27 Vienna University of Economics and Business

28 Welthandelsplatz 2

29 1020 Vienna

30 Austria

Abstract

The role of sustainability initiatives and niche groups in transitions towards sustainability has received a good deal of attention. However, little is known about the people who make up these groups. This paper discusses their psychological wellbeing – a concept that comprises six elements: self-acceptance, personal growth and development, purpose in life, environmental mastery, autonomy, and positive relations with others. In the study we performed 46 semi-structured interviews with people from 11 sustainability initiatives in five countries across Europe. We find that the groups offer a platform to build and maintain social relations with other, often like-minded, people. While these relations often serve an important motivational function to stay engaged, they are not free of challenges. The interviews show that sustainability initiatives can also provide fertile ground for personal growth and other dimensions of psychological wellbeing. Environmental mastery – and specifically the capacity to cope with global environmental problems beyond individual control – is a major challenge for people engaged in sustainability initiatives. Overall, the data suggests strong links between social engagement and psychological wellbeing. From a theoretical perspective, this paper enriches the transition literature by exploring the role of psychological wellbeing among people engaged in niches.

Keywords: psychological wellbeing; niches; sustainability transitions; transition management; sustainability initiatives; sustainability actors

1. Introduction

A large number of people around the world are active in local groups that aim to contribute to a transition towards sustainability. Such groups may include initiatives such as repair cafés, food-coops, transition towns, ecovillages and the like. These groups can be understood to form niches where innovative ideas and practices are developed that may challenge and help to reshape incumbent sociotechnical regimes as, for example, the market or culture (Rip and Kemp 1998; Geels 2002; 2011; Geels and Schot 2007; Seyfang and Smith 2007).

While the literature on sustainability transition and transformation has paid much attention to the ways in which niches can develop successfully (e.g., Kemp et al. 1998; Raven et al. 2010; Raven 2012) and how niche innovations may diffuse (Schot and Geels 2008; Smith 2007; Smith and Seyfang 2013; Seyfang and Longhurst 2016), far less work has been done on the agency, perspectives and experiences of individuals who operate in niches (Rauschmayer et al. 2015; O'Brien 2011; Genus and Coles 2008; Smith et al. 2005). This paper helps to unpack the role of individuals in sustainability initiatives, which has been identified as an area of research in both the field of transition and transformation (Hölscher et al. 2018). As it is people who make change happen, there is good reason to inquire into their wellbeing and resilience, that is, their ability to sustain themselves in order to contribute to sustaining change over the long-term.

70 This paper contributes to closing this research gap by probing into the wellbeing of niche actors. The
71 literature suggests that wellbeing is one of the principal benefits that people get from engaging in
72 sustainability niches and that it mainly stems from working with like-minded people, from expressing
73 values that are difficult to practice in mainstream society, and from being actively involved in
74 creating practical alternatives to the market logic (Seyfang and Smith 2007, Seyfang 2009).

75
76 Gaining empirically founded insights into the wellbeing of sustainability niche members may support
77 the understanding why individuals engage and remain involved in initiatives that sustain niche
78 development. The results of our study may thus open up new avenues for research on the role of
79 individuals in niche development. Our investigation is based on 46 interviews with members of 11
80 sustainability initiatives in five European countries, conducted as part of the EU FP7 project
81 GLAMURS¹. Following a data-driven and theory-guided interview process, the research team jointly
82 looked for a common theoretical framework to help analyse the data on wellbeing.
83 We found the concept of psychological wellbeing (Ryff 1989) to be particularly useful in shedding
84 light on what people experience as members of sustainability initiatives as it offers a useful
85 conceptualization of recurring aspects of wellbeing that came up in the interviews.

86 In the next section, we lay out our theoretical argument, embedding our subjects in the multi-level
87 perspective on sustainability transitions. We then look at the level of sustainability initiatives that
88 make up niches and the individuals who engage in these initiatives, focussing particularly on their
89 psychological wellbeing, an aspect that has not yet received much attention in the literature. Section
90 3 describes the case studies and method of our investigation. We then report our findings (section 4)
91 and discuss them (5). The last section concludes and suggests future avenues for research (6).

92 2. Theoretical Background

93 2.1 Sustainability initiatives from the multi-level-perspective

94 Studies of sustainability transitions often employ a multi-level perspective, which differentiates three
95 levels to analyse innovations: the niche level, the sociotechnical regime, and the sociotechnical
96 landscape (Geels 2002; 2011; also see Rip and Kemp 1998). *Sociotechnical regimes* channel societal
97 developments along certain trajectories. Despite their stabilizing dynamics, sociotechnical regimes
98 may undergo radical change, which often originates in *niches* that emerge at the margins of existing
99 regimes (Seyfang and Smith 2007). These niches constitute protected spaces where people can
100 experiment with non-mainstream practices or technologies, express alternative values, and engage
101 in different types of learning (Smith 2007; Smith and Seyfang 2007), with a particular orientation
102 towards sustainability problems in incumbent regimes.

103 The *socio-technical landscape* is an exogenous environment that is beyond the direct control of niche
104 and regime actors, including, for example, macro-economic or macro-political trends and deep
105 cultural patterns (Geels and Schot 2007). The landscape is usually understood to apply pressure to

1 The project Green Lifestyles Alternative Models and Up-scaling Regional Sustainability (GLAMURS, 2012-2016), analysed drivers and barriers for sustainable lifestyles and how they can be up-scaled. For more information, please see www.glamurs.eu.

106 incumbent regimes, which creates opportunities for niche innovations to offer solutions, diffuse
107 widely and potentially displace an extant regime on the long term (Seyfang and Longhurst 2016).

108 Niches can be of different sorts (Smith and Raven 2012; Seyfang and Smith 2007). While the niche-
109 oriented literature originally focused on market-based niches, the niches we consider here are more
110 similar to what Seyfang and Smith (2007: 585) refer to as grassroots innovations:

111 “[N]etworks of activists and organisations generating novel bottom–up solutions for
112 sustainable development; solutions that respond to the local situation and the interests and
113 values of the communities involved. In contrast to mainstream business greening, grassroots
114 initiatives operate in civil society arenas and involve committed activists experimenting with
115 social innovations as well as using greener technologies.”

116 Grassroots innovations may include initiatives such as food networks, community energy projects,
117 ecovillages, and Transition Towns (Seyfang and Smith 2007). In line with Seyfang and Smith’s (2007)
118 notion of grassroots innovations, we understand a sustainability initiative as a movement, an
119 informal group, a formal association or an organisation that aims to contribute to a transition
120 towards sustainability in its respective region through its activities and members’ engagement.
121 Grassroots innovations tend to focus on social and institutional innovations rather than technological
122 innovations and are often sustained by some form of ideological commitment to alternative ways of
123 doing things. They are typically driven by social needs, such as providing goods and services that are
124 of value to other people (see also OECD 2015), and that are hardly or not at all provided by
125 traditional markets). The protected space that sustains sustainability initiatives consists primarily of
126 alternative values and culture, rather than market regulation and (government) subsidies (Seyfang
127 and Haxeltine 2012). Following these criteria, the sustainability initiatives analysed here are part of
128 grassroots innovations².

129 **2.2 Niche actors from the multi-level perspective**

130 Prevailing concepts and models of understanding and managing sustainability transitions mainly
131 focus on the substantial changes, dynamics and governance challenges that such transitions involve.
132 However, transition research still lacks a good understanding of the actors who are involved in the
133 sustainability initiatives (often as volunteers) that make up the niche.

134 Different typologies have been developed that group actors involved at the different levels of the
135 multi-level-perspective (niches, regimes, landscapes) (Fischer and Newig 2016; Avelino and
136 Wittmayer 2015; Farla et al. 2012). These typologies classify the actors from a broad perspective and
137 involve mostly collective actors from a variety of backgrounds, such as policymakers, public
138 authorities, firms, social movements, civil society, third sector, etc. One particular stream of research
139 also deals with multi-actor decision making by analysing governance mechanisms, power relations,
140 questions of legitimacy, etc. (Avelino 2009; Grin et al. 2010; Kern and Smith 2008; Smith et al. 2005).

2 A minor exception is the energy cooperative studied in the Austrian case study as it was founded in response to government initiatives. However it depends on the active participation of civil society partners as well as continual government cooperation.

141 An explicit focus on niche actors conceptualised as individuals and not collective actors is still
142 missing. Individual actors only appear when they have particularly influential roles to play, notably as
143 frontrunners (Rotmans and Loorbach 2010), change agents (Nevens et al. 2013), champions or policy
144 entrepreneurs (Brown et al. 2013; Farla et al. 2012). There is still a gap in the literature in terms of
145 empirically based descriptions of these and other niche actors, for example, regarding their
146 backgrounds, roles, motivations, behaviours, resources, or wellbeing.

147 The individual perspective is important in studying societal change because it allows us to
148 understand dynamics at the micro level, including perceptions and feelings connected with change
149 such as fear, anger, joy, or anticipation, which may act as motivation or barriers for individuals to
150 engage with change initiatives. The next section introduces the concept of psychological wellbeing,
151 which will guide us through our analysis of the empirical data.

152 **2.3 Psychological wellbeing of people engaged in sustainability initiatives**

153 While not much is known about the sources, types and dynamics of wellbeing of people in
154 sustainability initiatives or niches within the context of sustainability transitions, individuals have
155 been studied in the broader context of volunteering. Volunteering in social and environmental
156 contexts, such as social provision, health care, education, environmental preservation, or
157 development cooperation, is widely regarded as beneficial for both society and the individual
158 volunteer (Klar and Kasser 2009, OECD 2015, Meier and Stutzer 2008, Binder and Freytag 2013,
159 Binder 2015 Wilson and Musick 1999), at least when volunteering takes place on a regular basis
160 (Binder and Blankenberg 2016: 5).

161
162 While engagement in sustainability initiatives (whether paid or unpaid) may have similar benefits as
163 other types of volunteering in the social field, it also poses a number of challenges. People who
164 regularly contribute to sustainability initiatives may be confronted with a range of challenging
165 emotions and experiences, such as feelings of guilt about one's own contribution to climate change,
166 fear and anxiety due to an increased awareness about climate change impacts (Büchs et al. 2014),
167 restricted political and economic influence, as well as limited resources (Middlemiss and Parrish
168 2010, Wilson and Musick 1999). Engaging for sustainability thus entails similar challenges to those
169 that have been widely studied in the literature on pro-environmental behaviour (Venhoeven et al.
170 2013), notably the temporal and spatial discord and difficulties to realise goal attainment. A
171 commonly reported feeling is that of frustration about the seeming futility of small steps in the face
172 of much more powerful counter-dynamics at the macro level (Randall and Brown 2015). This may
173 result from the distance in time between action and results when engaging for intergenerational
174 goals, such as preserving nature for future generations, as well as in space, when engaging for
175 intragenerational goals, such as not harming people living in other parts of the world (Büchs et al.
176 2014; Middlemiss and Parish 2010; Neumayer 2004; Anand and Sen 2000).

177
178 Given the challenges outlined above, how do people who engage in sustainability initiatives feel
179 about and experience civic engagement, i.e. what can we learn about their wellbeing? As the term
180 wellbeing has a plethora of definitions (Dodds 1997), we will briefly discuss how the concept is being
181 used in two research areas related to ours: i) studies of pro-environmental behaviour (for an
182 overview, see Venhoeven et al. 2013) and ii) volunteering (Klar and Kasser 2009, OECD 2015). A
183 common distinction in these studies is between eudaimonic and hedonic wellbeing. Within the

184 hedonic tradition, the goal of life is considered to be the experience of a maximum amount of
185 pleasure while minimising the amount of pain. This notion of wellbeing is closely associated with life
186 satisfaction and happiness, which is described as the totality of one's hedonic moments (Henderson
187 and Knight 2012; Ng and Diener, 2014; Ryan and Deci 2001). Some authors argue that the hedonic
188 conception of wellbeing is strongly related to material affluence (e.g. financial satisfaction, income),
189 and that such affluence has a short-lived effect on people's wellbeing as individuals soon become
190 accustomed to a given level of material welfare (e.g., Binswanger, 2006; Seligman, 2002) . Seligman
191 (2002) labelled such a phenomenon as the hedonic treadmill effect.

192
193 The eudaimonic concept of wellbeing does not equate wellbeing to happiness and life satisfaction
194 (Ryff, 1989). Central to its conceptualisation is the expression of virtue, which Aristotle defined as
195 'behaving in a way that is noble and is worthwhile for its own sake' (Henderson and Knight 2012:
196 197) alongside with the realisation of one's inherent potentials, living in accordance with "one's true
197 self" (Ryan and Deci 2001), i.e., in a way that is most congruent or meshing with one's deeply held
198 values (Waterman 1993; Ryan and Deci 2001). Eudaimonia occurs through the pursuit of personal
199 meaningful goals, which are congruent with deeply held values, and are tackled holistically and fully
200 engaged. It embraces the idea of striving toward excellence based on one's unique potential (Ryff
201 and Keyes 1995; Ryan and Deci 2001). The two pillars of eudaimonia are personal growth and
202 purpose in life.

203 The eudaimonic aspect of wellbeing provides the foundation for the concept of psychological
204 wellbeing, as posited by Carol Ryff (1989). She integrates several theoretical approaches to define
205 and operationalise six dimensions that are considered to promote emotional and physical wellbeing:
206 i) *self-acceptance*, which is expressed by holding positive attitudes towards oneself and one's past
207 life; ii) *personal growth* in the sense of continued self-realisation and personal development; iii)
208 *purpose in life* as the belief that one's life is meaningful and purposeful; iv) *environmental mastery*
209 defined as the ability to manage effectively one's life and surrounding world; v) a sense of *autonomy*
210 *and self-determination*, which represents the individual's skill to resist social pressures and evaluate
211 oneself by personal standards rather than socially desirable standards; and vi) *positive relations with*
212 *others*, referring to the capacity to show empathy and maintain satisfying and trusting relationships
213 with others (Ryff 1989; Ryff and Keyes 1995).

214 **3. Methods, sample, and limitations**

215

216 The data for this study was collected as part of the European Commission's FP7-funded research
217 project GLAMURS, in which case studies were conducted in seven European countries. For the
218 present paper, interview data from five of these case study countries – Austria, the Netherlands,
219 Germany, Italy and Romania—were chosen to be analysed in detail. This selection was based on the
220 relevance and quantity of available data in the seven case study countries.³ Within each of these

3 The data we got from the interviews in the UK have not been analysed because the majority of the interviews were done with staff of two Local Authorities, some of whom had professional roles as sustainability officers. While these interviews informed many other aspects of the GLAMURS project, they could not inform this part of the research which focussed on grassroots innovations and niche members. The data from Spain

221 countries, one or more sustainability initiative within the same region was analysed, leading to a
 222 total sample of 11 initiatives. In-depth, semi-structured interviews with initiative members were
 223 carried out in order to explore their wellbeing and other aspects.

224 3.1 Initiatives, Participants and Sampling

225 We conducted the interviews in the first half of the year 2015. In each case study, we interviewed
 226 between seven and 12 members of the sustainability initiative(s), leading to a total of 46 interviews
 227 and 80 hours of interview material (for an overview of the interview sample see Table 1). Some of
 228 the interviewees were chosen through a snowball sampling technique (i.e., they knew each other,
 229 although they did not necessarily engage in the same initiative or focus on the same issue), while
 230 others included a small number of gatekeepers who had been identified prior to the interviews as
 231 part of an actor-network analysis (see Hauck et al. submitted). Criteria for the sampling included a
 232 balance between members of the core group of the initiative (e.g. founders) and more loosely
 233 connected members, as well as gender and age balance. Initiatives differed considerably in their
 234 objectives, activities, methods and degree of formality. While some had a clear focus on single
 235 activities (e.g. energy cooperatives building and operating photovoltaic plants), others engaged in a
 236 broad range of activities and touched on the whole lifestyle of members (e.g. ecovillages). An
 237 overview of the initiatives and their diversity is presented in Table 2 (see appendix).

Case Study	Initiative(s)	Total of Interviewees	Age range	Gender (f/m)
Austria	Network for organic consumption and production; Energy cooperative	10	47-57	4/6
Netherlands	Energy cooperative; 3 repair cafés	12	40-70	2/10
Germany	Transition Town Movement	10	31-61	4/6
Italy	Agricultural cooperative	7	29-72	3/4
Romania	3 ecovillages	7	30-40	3/4
Total		46	21-72	23/33

Table 1: Overview of the interview sample

238 3.2 Procedure, material and methodological limitations

239 The questionnaire that guided the interview was jointly developed by the project team and
 240 combined eleven broad questions with a range of optional prompts and probing questions that were
 241 pre-tested by all team members. The questions addressed the members' wellbeing, conflicts related
 242 to sustainable behaviour, governance representations (see Fischer et al. 2018) and sustainable
 243 lifestyles more generally. The question most directly related to wellbeing was "You have participated

could not be analysed because the question on wellbeing was reframed in such a way that the answers we received were more about the general wellbeing of the group than about the experiences and feelings of the individual members being interviewed.

244 in [name of the initiative] for [add time]. What has this changed for you – if anything?”, optionally
245 followed by the prompt: “What do these changes mean to you? Would you say that they’ve had
246 rather positive or negative impacts on your life?” The interviewers would typically further explore
247 these topics by asking follow-up questions. Local researchers conducted the interviews in the
248 respective national language according to shared agreements on sampling and interview procedure.

249 The researchers conducted the majority of the interviews in an everyday surrounding and met the
250 participants at their home, workplace, the initiative’s office, a public park or restaurant⁴. We audio-
251 recorded all interviews and transcribed them verbatim.

252 Using a step-wise procedure, we generated a rough coding framework for responses related to
253 personal wellbeing. Each local research team coded their transcripts (using NVivo and Atlas.ti) and
254 wrote detailed analytical summaries in English that served as a basis for the further refinement of the
255 codes and for reflections on how to theorise the data. After intense discussion, a training and
256 exchange session on the coding system and a process of interrater-comparisons, we agreed that
257 Ryff’s framework of psychological wellbeing (Ryff 1989) applied well to the data without having to
258 artificially squeeze it into a theoretical frame. We then refined the coding framework along Ryff’s
259 categories before applying it in the analysis of our interview data.⁵

260

261 **3.3 Methodological limitations**

262 Although our interview guideline included general questions about wellbeing, Ryff’s six dimensions of
263 psychological wellbeing did not appear explicitly in the guideline. We did not have the possibility for
264 follow-up interviews, which means that further exploring initial findings on the six dimensions of
265 psychological wellbeing was not possible in the context of our study. It is possible that inclusion of
266 questions tailored to the six dimensions of psychological wellbeing would have yielded more specific
267 insights on each of these dimensions, and would have led to a more balanced representation of
268 information on these categories in our interview data. For example, it is likely that interviewees were
269 more at ease talking about social relations than about other dimensions of psychological wellbeing
270 that are less frequently talked about unless prompted, such as “meaning of life” or “self-acceptance”.
271 However, the fact that we did not ask explicitly about the six dimensions also means that where they
272 did come up, they came up naturally. Finally, it was not our aim to ‘test’ Ryff’s framework of
273 psychological wellbeing, but upon initial inspections of the interview data, the framework proved to
274 be highly useful in understanding the wellbeing-related experiences of actors engaged in
275 sustainability initiatives.

276 As our data encompasses self-reports of wellbeing only, people may have provided socially desirable
277 responses rather than reveal their actual wellbeing.

4 In the Romanian case study we interviewed most of the participants via online calls.

5 More details on data collection and analysis is provided in the project report on the empirical work in the cases studies: http://glamurs.eu/wp-content/uploads/2016/01/WP5_Deliverable_D5.1.pdf

278 A selection bias is likely to have occurred due to the snowball sampling technique we used in order to
279 find interview partners. This technique restricted our control over the diversity or representativeness
280 of the sample.

281 Our study was qualitative and explorative by nature and did not allow us to examine causality. Thus,
282 we mainly looked at the association between engagement and psychological wellbeing. We could not
283 infer whether or not psychological wellbeing was the direct effect of engagement.

284

285 **4. Results: Psychological wellbeing in the context of sustainability** 286 **engagement**

287

288 The data from all countries and case studies provided a comprehensive basis for the analysis of
289 wellbeing among the members of sustainability initiatives and – in most cases – an alignment with
290 Ryff’s categories of psychological wellbeing. Two of the six categories of psychological wellbeing
291 clearly stand out in the analysis because of the frequency with which interviewees addressed them:
292 positive relations and personal growth. Self-acceptance, autonomy and self-determination came up
293 least often in the interviews. While this may say something about the relative ease with which
294 interviewees talked about certain dimensions of wellbeing, it may not necessarily reveal something
295 about the relative importance or salience of these responses, as this may have been influenced by a
296 variety of factors. A minority of quotes referred to negative states of wellbeing, while most referred
297 to positive ones. This rough overview of the results may help to put the following results into
298 perspective (we provide exemplary quotes for each dimension of psychological wellbeing, in the
299 order of their frequency of appearance in the dataset).

300

301 **4.1 Positive relations: “Meeting like-minded people, having fun and making** 302 **others smile”**

303

304 The experience of building and maintaining social relations with other, often like-minded, people
305 within sustainability initiatives was most widely shared among the interviewees. Having the
306 opportunity to form and maintain positive relations with a group of similar people sharing common
307 goals is an important contributor to subjective wellbeing.

308

309 Gernot⁶, a member of the German Transition Town group reflects on the effects of spending time
310 with like-minded people:

311 *“And that’s what keeps me running, this one-to-one human recognition. That’s why I go to anti-fascist*
312 *demonstrations [...] being around with people who are very similar to me.” (Gernot, Transition Town,*
313 *Germany)*

314

315 In a world full of structures and institutions that foster unsustainable behaviours, swimming against
316 the stream by following a sustainability-oriented lifestyle can sometimes foster feelings of loneliness
317 or isolation from the rest of society (Weintrobe 2012). In such an environment, positive relations to
318 like-minded people may be all the more important as a counterbalance and important contributor

6

All names of interviewees used in this paper are pseudonyms.

319 towards psychological wellbeing. In some cases, being part of a sustainability initiative can also
320 create a feeling of collective efficacy, as evidenced by Evi from the energy cooperative in Austria:

321
322 *“Yes, the internship at the Climate and Energy Model Region has indeed changed something because*
323 *I’ve gotten in touch with people who do pioneering work in this field or who are simply involved with*
324 *all their heart, who really serve as an engine and who say: ‘If we stand together, if we do something*
325 *together, we are simply more powerful and we can really get something going.’ It helps to know that*
326 *I’m not all alone and I see those pioneers who have already been involved for a long time. If they can*
327 *do it, I can sustain it as well. And I can withstand the storm and remain strong and say ‘And it’s still*
328 *the way it is, and it’s worth fighting for.” (Evi, energy cooperative, Austria)*

329
330 This theme of collective efficacy recurred throughout our data. The work in the Italian agricultural
331 cooperative, for example, was said to be easier and more pleasant when done together. In the Dutch
332 repair cafés doing things together and asking for help and advice was described as enjoyable.
333 Similarly, one member from the Austrian energy cooperative suggested that the harmony that
334 emerged from working together in the group contributed to the members’ wellbeing. A member of
335 the German Transition Town describes his initiative as consisting of like-minded people who benefit
336 from their different interests by complementing each other. Relationships within ecovillages were
337 most exceptional in our sample. Generally, and in contrast to the other initiatives we looked at,
338 ecovillagers know each other very well. They described and valued their community as a group of
339 diverse people and not as being composed of like-minded people as the other initiatives did, as
340 illustrated by the following quote:

341
342 *“If we were all alike it wouldn’t be so much fun anymore.”(Tamara, ecovillage, Romania)*

343
344 Overall, meeting people, getting inspired by them, discussing and exchanging ideas and having good
345 times while working together were frequently mentioned as positive aspects of engagement and as
346 important motivational factors of niche actors. In some groups (notably the repair cafés), the
347 opportunity to help others and contribute to their wellbeing (*“Making other people happy”*) was also
348 mentioned as a motivation.

349
350 *„I enjoy being committed and doing something for others. One always receives something in return*
351 *[...] – that’s where I get my strength and energy from and what I enjoy” (Maria, transition Town,*
352 *Germany)*

353
354 Ruben, a member of a repair café, states that these social aspects are even more important to him
355 than the original motivation to reduce waste:

356
357 *“You can make people happy with it, and that you reduce waste, that is very nice, but... Yes, for me it*
358 *is more about the people and the joy of doing something.” (Ruben, repair café, The Netherlands)*

359
360 Another member of the repair café stresses that the word “café” in the initiative’s title reflects the
361 importance of this positive social atmosphere.

362
363 While most of the interviewees’ statements allude to positive and supporting effects of the social
364 relations within the group, a few interviewees also mention problems and conflicts arising from
365 group dynamics.

366

367 *“It disturbs me that people interrupt each other ... I got really annoyed. ... Officially, I’m still part of*
368 *the editorial board [of a local magazine on sustainability issues], but I can’t stand these meetings*
369 *anymore. I get so annoyed when one of these trolls starts talking again. It’s impossible. I get too*
370 *agitated.” (Maria, Transition Town, Germany)*

371

372

373 **4.2 Personal growth “Eventually personal development felt good”**

374

375 Our interviewees reported about processes of personal growth, varied phases and ambivalent
376 feelings regarding their engagement in sustainability initiatives. In other words, being engaged in
377 such groups can go along with varying phases of positive and negative wellbeing. Three interviewees
378 shared similar experiences of going through hard phases, but could learn through experiencing them
379 and finally enjoying their development. Tamara from the ecovillage in Stanciova (Romania) compares
380 this process with running:

381

382 *“It began with a lot of frustration, but now I realize I’ve reached that point – not the end of the line,*
383 *but... I’m past the point where... It’s like when running, you feel a lot of effort at the start, you feel the*
384 *fatigue, then after... Whoop! You’re past the point of fatigue, your endorphins start rushing in and...*
385 *it’s just this great joy. My staying in Stanciova has passed this point.” (Tamara, ecovillage, Romania)*

386

387 They agreed that it needs effort and energy, sometimes a sacrifice but in the end it was deemed
388 worth it, because one can enjoy what one was reaching for, after going through a challenging
389 process.

390

391 Personal growth, i.e., ‘a sense of continued growth and development as a person’ (Ryff and Keyes
392 1995: 720), was frequently brought up in the interviews.

393 Sustainability initiatives can provide fertile ground for self-reflection and self-knowledge, a basis for
394 personal growth, as documented by interviewees from the Transition Town, the agricultural
395 cooperative and the network for organic production and consumption. The following quote
396 exemplifies this finding:

397

398 *“And I realise that something inside me has been set in motion, and I understood that one is different*
399 *in a different world. That had a pretty big impact on my perception of the ego. There is no fixed ego.*
400 *Instead, depending on the context one is always a social ego. In a social context I always have to*
401 *integrate myself differently. So a lot has changed about my self-perception and that was pretty*
402 *good.” (Claudia, Transition Town, Germany)*

403

404 The initiatives may sometimes also provide an intellectual stimulus for people to ponder about
405 deeper questions of meaning in life, as experienced by Josef:

406

407 *“If you measure it in monetary terms, engaging in this initiative is not profitable for me. But it is*
408 *valuable for myself, internally. I can develop my own philosophy of producing, of integrating myself.*
409 *‘What are my values, what is valuable to me? Where do I have problems translating my values into*
410 *actions?’ Such a group is incredibly valuable in finding answers to those questions. [...] Our meetings*
411 *stimulate me to reflect. ... That gives me something, I feel better afterwards.” (Josef, network for*
412 *organic production and consumption, Austria)*

413

414 This kind of personal growth processes can be regarded as “second-order learning”, a frequently
415 used concept in the niche literature to explain sustainability transitions - as values and assumptions
416 underlying established ways of doing things are questioned and changed (e.g., Smith 2007; Geels
417 2010; van de Kerkhof and Wieczorek 2005). This goes in line with some authors suggesting that
418 socio-ecological transformations require a form of value change from extrinsic to intrinsic values
419 (Crompton 2010, Maiteny, 2000).

420
421 Personal growth can be experienced particularly strongly when engagement encompasses a radical
422 lifestyle change. Moving to an ecovillage or so-called intentional community is a good example. In
423 this process of radical transformation, it is common to undergo processes of community building that
424 entail effective approaches to coping with fear and uncertainty, as described by one interviewee of
425 the Romanian case study:

426
427 *[...] “but the fears are always here and many people say ‘how are you so brave, so courageous, you
428 don’t have fear, you are fearless’. You know, I have so many fears (giggles), but the difference is that I
429 can cope with them. I can look at them, face them and walk with it, walk in with the fear. It’s, it’s
430 amazing.” (Costanza, ecovillage, Romania)*

431
432 Similarly, Vlad (Costanza’s husband) from Romania describes the following experience of personal
433 growth:

434
435 *“You realize you can actually do things that before used to seem so far away [...] And what I’ve
436 realized is that I am aware of a very powerful zone of inner resilience and self-confidence. In the sense
437 that... These darker zones, where you don’t know what lies beyond, they don’t cause as much fear in a
438 given context, and even if it is there, you are a lot more capable of noticing it.” (Vlad, ecovillage,
439 Romania)*

440

441 **4.3 Purpose in life: “Doing something meaningful”**

442

443 The belief that one’s life is meaningful and purposeful (Ryff and Keyes 1995: 720) can arise, among
444 other things, from engaging in activities that are perceived as meaningful. Classical examples include
445 voluntary work, caring for others or practising hobbies or professional activities, as long as the
446 personal goals one pursues through these activities are congruent with one’s deeply held values (Ryff
447 and Keyes 1995; Ryan and Deci 2001). For people who are voluntarily engaged it is important that this
448 engagement makes sense to them, that they can do something useful. This may contribute to their
449 wellbeing, as stated by Jasper and Ruben from the Dutch repair café. Among members of repair
450 cafés, experiencing a sense of meaning was often linked to the gratitude they receive.

451 *“Yes, in any case being useful. I don’t like to sit still. I really need something to do. And the best is if I
452 do something useful, of which I say: Well, that was fun.” (Jasper, repair café, Netherlands)*

453 *“Well, and then someone leaves completely happy. And that is such a grateful thing.” (Ruben, repair
454 café, Netherlands)*

455 Meaningful engagement can lead to inner satisfaction and gratitude, as the following quote shows.

456

457 *“I believe the engagement in the groups simply reflects the meaning of life to me. If I know I can take*
458 *part in creating something or I can change something in my environment in some respects, then I*
459 *think that’s an important mission for me. So I say: hey, I’m committed to that, I can do something*
460 *there, and often there is an inner satisfaction and gratitude.” (Ernst, network for organic*
461 *consumption and production, Austria)*

462
463 For a small number of our respondents, engagement in the initiative is paid work, which allows them
464 to receive an income from a job that provides meaning, as Alessandro, an Italian food-coop member
465 explains:

466 *“It gave shape to the dreams. My dream was to do a job that would bring me in contact with the*
467 *essence, working with my hands as well as with my head, and agriculture, (...) gave me the*
468 *opportunity to work outside. I wanted to have an essential life where it was possible to produce and*
469 *sell my own products and services to other people using a multifunctional agriculture. [...] Even if the*
470 *engagement in the cooperative meant a reduction of my leisure, when I look back, I do not regret my*
471 *choice because I improved my way of using time.” (Alessandro, agricultural initiative, Italy)*

472 A sense of purpose and meaning can also derive from the idea of contributing to something that will
473 last and influence younger generations, as for example in the case of Heinz, who describes this
474 feeling as follows:

475 *“It really has to make a deep sense and I see, if the youth, if the younger ones get a meaning, a*
476 *motivation, to see that it makes sense what we are doing, that there is an unbelievable motivation in*
477 *it. [...] What makes me burn for it, is simply to witness that independent of me also others are burning*
478 *for it. That is beautiful, that is beautiful, because I will pass away at some point. And if something*
479 *goes on burning...” (Heinz, network for organic consumption and production, Austria)*

480

481 **4.4 Environmental mastery: “Learning to set boundaries”**

482

483 Ryff and Keyes define environmental mastery as “the capacity to manage a complex environment,
484 and to choose or manage and mould environments to suit needs” (Ryff and Keyes 1995: 720). When
485 our interviewees spoke about their engagement, they revealed strongly diverging degrees of this
486 capacity. A major share of the negative feelings reported by our interviewees touches perceptions of
487 environmental mastery. Valentin, a member of the Austrian climate and energy model region
488 describes how and why his engagement for the initiative leads to stress and psychological problems.

489

490 *“Yes, of course it affects you, because obviously it takes a lot of time to engage in these initiatives,*
491 *and you have less time for the private sphere. I’d say you’re more under stress. It would be better for*
492 *me, personally, and for my health, to use the time I’ve invested there for myself, because I feel*
493 *drained, I honestly have to say that. I’m affected psychologically, on the brink perhaps to burnout. I’ve*
494 *already received treatment for a number of years, again and again.” (Valentin, energy cooperative,*
495 *Austria)*

496 Later in the interview, Valentin describes how some of his psychological problems are linked to global
497 environmental challenges that are beyond individual control. His feelings of helplessness with regard
498 to environmental problems derive from the realisation that environmental mastery is necessarily
499 limited, when many of the most serious challenges are impossible to tackle individually. The
500 following quote demonstrate how he experiences fear and anxiety about climate change impacts and

501 the seeming futility of small steps in the face of much more powerful counter-dynamics at the macro
502 level.

503 *“These days I hardly ever listen to the news, because I think they are detrimental for my health, so*
504 *many negative things, which one hears, those conflicts everywhere, these environmental issues,[...]*
505 *because somehow this is hopeless, at least for me, that is how I see it.”(Valentin, energy cooperative,*
506 *Austria)*

507
508 For him, relations to the other group members and harmonious collaboration are especially
509 important as they help him to cope with the problems reported above. Others complain about
510 having got sick because of overload related to the initiative’s activities.

511
512 Being aware of environmental problems seems to translate into thoughts, such as *“more should be*
513 *done” (Gernot, Transition Town, Germany) or “it does not work fast enough” (Heinz, network for*
514 *organic consumption and production, Austria)*. These thoughts illustrate the perception of restricted
515 political and economic influence, and limited resources, which were identified as challenges for
516 sustainability initiatives in section 2.3 (see also Middlemiss and Parrish 2010, Wilson and Musick
517 1999).

518
519 People engaged in ecovillages and repair cafés seem to experience higher degrees of environmental
520 mastery than those in the other initiatives in our sample. In ecovillages, feelings of environmental
521 mastery were often related to personal growth processes or the relaxed atmosphere in the
522 community.

523
524 *“There is a sense of fantastic tranquillity that comes over me and when I get home, I can deal with all*
525 *of my problems. I can just break away because... because that’s what the vibe is like. Because that’s*
526 *what home is like and what friends are like. So it’s this kind of completely unwinding atmosphere.”*
527 *(Adina, ecovillage, Romania)*

528
529 In the repair cafés those feelings were linked to the success of repairing things and the associated
530 gratitude of the owners:

531
532 *“The reactions of people. The unexpected. There are people that go home almost crying of joy,*
533 *because you fixed something that... Of which they thought it was hopeless. Yes, that is funny. Or*
534 *people that can really not afford it and have tried to have something repaired and then heard that it*
535 *will cost... Well, I’m just saying something... 200 euros. And that we do it in an hour for nothing. Yes.”*
536 *(Frank, repair café, Netherlands)*

537
538 Sabine is active in the same initiative as Valentin in Austria and she is politically very active. She also
539 reports about the big amount of time the initiative requires. However, she does not experience this
540 as stressful but instead as fulfilling:

541
542 *“I’m engaged in lots of activities, lots of work and don’t have much time. But that’s not stress or*
543 *pressure because I think I benefit from the things I do or the meetings I have.” (Sabine, energy*
544 *cooperative, Austria)*

545
546 These diverging experiences show that environmental mastery depends on the way in which one is
547 able to deal with time pressure, stress as well as environmental problems. The latter has a second
548 component, the incapability to tackle them as a single person with restricted personal efficacy.
549 Two Romanian ecovillagers told us that strategies to strengthen environmental mastery can be
550 learned in sustainability initiatives:

551

552 *"I suppose I grew up. I think the biggest change is that we are a lot more realistic. And thinking back*
553 *12 years ago, we were more enthusiastic. A lot more enthusiastic, but less realistic. And now we are*
554 *more realistic, but sadly, less enthusiastic, although just as engaged, which is good. Because now we*
555 *are involved while being perfectly aware of the workload a project requires or the workload required*
556 *to organise an event." (Adina, ecovillage, Romania)*

557
558

559 **4.5 Self-acceptance: "How I am and what I do makes sense"**

560

561 Being able to hold a positive attitude towards oneself and towards one's past life as well as being
562 able to concede and to accept varied aspects of self, is what Ryff refers to when speaking about self-
563 acceptance (Ryff and Keyes 1995: 720). Some of our interviewees reported how doing something for
564 the environment or something good for the world is important for them, giving them a good feeling.
565 If they did not do it, something would be missing from their integrity:

566

567 *"I just think I have done something for the environment. And that's important for me. It gives me a*
568 *good feeling. I can say I've done something for future generations, even though we don't have*
569 *children ourselves. I think everyone has a responsibility for the Creation. ... And I want to take this*
570 *responsibility to some extent." (Valentin, Austria KEM)*

571

572 *"... for me, at the emotional level, it has the meaning to have integrity, notwithstanding difficulties. I*
573 *believe we are doing something good for the world." (Martina, agricultural initiative, Italy)*

574

575 Gernot reports having some difficulties with this aspect of psychological wellbeing as he regards
576 himself as "being isolated in being old and living an alternative lifestyle (see below) and as he
577 sometimes feels like a "weirdo". The recognition he gets from the people of the Transition Town is all
578 the more important to him:

579

580 *"In the [name of the sub-initiative] I get a kind of recognition that I do not get in my job or in my*
581 *family, I think, I claim. [...] In those alternative settings, I'm not a weirdo, and at work I am, or at my*
582 *in-laws, exactly. (Gernot, Transition Town, Germany)*

583

584 **4.6 Autonomy and self-determination: "How it feels to take new paths"**

585

586 Regarding this sixth aspect of psychological wellbeing we did not find many results, but the ones we
587 found were of a salient similarity and spread over all the initiatives, except for the repair cafés. When
588 sustainability initiatives are set up as an alternative to mainstream patterns of living and consuming,
589 individual members sometimes feel like outsiders, as Gernot and Sarah from the German Transition
590 Town report:

591

592 *"Sometimes, I'm not satisfied because I let other people tell me that one is supposed to have an*
593 *ordinary job and that one should put some money on the side for retirement or at least for summer*
594 *holidays or other things. And I don't have anything left, yes, I just live from week to week, getting my*
595 *food from the organic store I work at." (Sarah, Transition Town, Germany)*

596

597 A healthy sense of autonomy and self-determination refers to an individual's ability to resist social
598 pressures and to evaluate herself by her own personal standard rather than the standard that is
599 deemed socially desirable (Ryff and Keyes 1995: 727). Still, being a member of a niche sometimes
600 means doing things differently, not following the norm. Taking new paths as a form of resistance
601 requires some degree of autonomy and self-determination, which may foster feelings of happiness

602 and satisfaction and serve as a source of energy, as different interviewees reported in a similar
603 manner:

604
605 *“The cooperative gave me the courage not to give in to conformism. (...) The job in the cooperative is*
606 *becoming the main aim of my daily routine. It is what I wanted from life. Thus, it represents my goal.”*
607 *(Antonio, agricultural cooperative, Italy).*

608 *“Yes, it also involves courage and fun to take a path that not everyone has taken before. That was an*
609 *incredible appeal; it is also an incredible enrichment for oneself, energy-wise. That carries you.”*
610 *(Emma, network for organic production and consumption, Austria)*

611 **5. Discussion**

612 **5.1 Interpreting the results of the six dimensions of psychological** 613 **wellbeing**

614 The perspectives of people engaged in niches, captured through numerous interviews, offer a
615 kaleidoscope of insights and experiences related to psychological wellbeing. The experiences that
616 were both most widely shared and most similar were related to *positive relations* and *personal*
617 *growth*. Experiences related to *environmental mastery*, by contrast, proved to be most challenging.

618 It may not come as a surprise that the emergence of positive relations with others – one of the six
619 components of positive psychological functioning according to Ryff – is the most recurrent theme
620 among people engaged in groups of like-minded peers who share similar goals and values. This might
621 be due to the different ways positive relations relate to the wellbeing of the sustainability initiatives’
622 members: In the interviews, in the most direct way positive social relations are experienced as
623 appreciation, gratitude, social belonging, and collective efficacy. Positive relations may also work as a
624 buffer against negative feelings. Positive social relations may be one of the most crucial aspects in
625 relation to psychological wellbeing in sustainability initiatives. This finding is also reflected in a
626 large-scale German quantitative study by Binder and Blankenberg exploring the relation of
627 environmental concerns and (environmental) volunteering; their findings argue that involvement in
628 other social activities is more predictive for (environmental) volunteering than being concerned
629 about the environment (Binder and Blankenberg, 2016: 9).

630 Our data reveal that experiences of personal growth are common among people engaged in
631 sustainability initiatives and that these experiences are positively associated with their wellbeing.
632 Actors of all the different initiatives we studied reported about personal growth, for example, in the
633 form of going through difficult phases and emerging stronger from the process. Members of three
634 different sustainability initiatives described this in a very similar way. It seems that the more radical
635 the lifestyle changes an initiative demands, the higher the chance for profound personal growth
636 processes for those who are willing and able to commit to such an endeavour. This was most clearly
637 reflected in the accounts of the Romanian ecovillagers, who learned to deal with strong feelings of
638 fear and uncertainty. Members of the Dutch repair cafés were the only ones, who did not talk about
639 profound personal growth processes in the sense of second-order learning (van de Kerkhof and
640 Wiczorek 2005).

641 How this can be explained is not immediately clear. It might be due to the nature of the initiative, but
642 it might just as well be a consequence of cultural differences in how and what people communicate.

643 In relation to environmental mastery, some of our findings reveal that people experience negative
644 feelings when there is a gap between their ambitions and ideals, on the one hand; and the concrete
645 outcomes of their engagement (or the overall initiative), on the other hand. This finding is in line with
646 Binder and Blankenberg's findings that people engaged in environmental initiatives experience the
647 positive benefits of volunteering overall (on life satisfaction) but without a specific effect on
648 environmental satisfaction. They suggest that a "speculative explanation could lie in individuals
649 perceiving their efforts as a 'drop in the ocean' and as ineffective for the environment" (Binder and
650 Blankenberg 2016: 9).

651 Interestingly, members of repair cafés seemed to struggle less with negative feelings about
652 environmental mastery than members of other initiatives in our sample. Although further research is
653 required to confirm this, our hypothesis is that this has to do with the extent to which initiatives have
654 tangible, short-term goals, with immediately observable outcomes. A strong example of such goals in
655 the repair cafés is the successful repair of broken items. Even though repair café volunteers may
656 equally experience frustrations about not always coming closer to their overall, long-term vision of a
657 more sustainable society, the small successes of their engagement possibly contribute to a greater
658 sense of environmental mastery.

659 Talk about *purpose in life* was rare in our interviews. One reason for this silence may be that the
660 engagement is perceived as meaningful and in line with one's values. Purpose in life came up as a
661 topic in interviews with people who got some form of direct return from their engagement, for
662 instance in the form of gratitude by clients of the repair cafés. This purpose is often aligned with
663 doing something good for the world, which increased *self-acceptance* of some of the interviewees.

664 Although *autonomy* is not a direct consequence of being engaged, it could be increased in some
665 cases, where the interviewees perceived themselves to be outsiders. Engaging in a sustainability
666 initiative did not change this perception, but sharing some values or characteristics with other
667 members helped them to feel better and have a stronger sense of agency.

668 **5.2 Success factors for niche development start at the individual level:** 669 **linking individual wellbeing of niche actors in sustainability contexts to** 670 **the multi-level perspective**

671 Our empirical work offers detailed insights into the wellbeing of niche actors in the context of
672 sustainability and takes the understanding of individual actors in the multi-level perspective a step
673 further. Linking these insights back to the transition literature and its conceptualisation of niche
674 actors as collective actors shows that what this literature describes as success factors of niches
675 largely corresponds to wellbeing aspects at the individual level. What contributes to wellbeing in the
676 context of engagement in a sustainability initiative often simultaneously fosters positive niche
677 development. While much of the transition literature focuses on the meso-level when dealing with
678 niche development, we focused on the individual and found that meso-level trends are reflected at
679 the individual level. In the transition literature, at least three key processes are supposed to foster

680 successful niche growth and emergence: managing expectations, building social networks, and
681 learning⁷ (Kemp et al.: 1998; Seyfang and Haxeltine 2012; Seyfang and Longhurst 2016).

682
683 First, our results show that setting tangible goals can play an important role in shaping the
684 expectations of the people involved in niches. Within our sample, initiatives with tangible goals tend
685 to have members who feel optimistic about their ability to make positive changes in the world (i.e.,
686 environmental mastery). Conversely, we found that people who experienced a large gap between
687 their ambitions (or ideals) and the actual outcomes of their engagement, felt more negative about
688 what they could achieve. This link between the goals of particular initiatives and the experience of
689 environmental mastery may be an important micro-foundation for the successful management of
690 expectations at the niche level. Kemp et al. (1998) recommend setting specific, realistic and
691 achievable expectations in transition processes. Our findings suggest that it may be important to do
692 so at the initiative level as well. In a similar vein, Seyfang and Haxeltine (2012: 393) emphasize the
693 importance of ‘developing and promoting short-term steps (both internal and external)’ towards
694 long-term shared visions of system change. Doing so may attract new members and provide ‘a sense
695 of purpose and achievement’ (i.e. a sense of environmental mastery) to existing members.

696
697 Second, the transition literature reveals that networking activities are central for successful niches
698 and ideally embrace many different stakeholders. Correspondingly, our data suggest, that positive
699 social relations go hand in hand with psychological wellbeing. Moreover, it was frequently reported
700 that the diversity of the initiative members was part of the fun of engagement. Positive social
701 relations may lead to a sense of collective efficacy.

702 Third, the transition literature stipulates learning as a key mechanism for niche development (see for
703 example Seyfang and Haxeltine 2012 for the case of transition town groups). Our data show a set of
704 examples of “second-order learning” as well as how fruitful learning processes can be for the
705 wellbeing of people engaged in sustainability initiatives. We already indicated in the results section
706 that the reported learning processes can be understood as second-order learning as members of the
707 initiatives often question core values and assumptions of mainstream society. The engagement in
708 sustainability initiatives helps to align one’s values with actions and helps to overcome initial phases
709 of frustration, fears or uncertainty when changing the personal lifestyle towards a more sustainable
710 direction. Some respondents reported that they did not overcome these challenging feelings but
711 learned how to cope with them. In niches, people can experiment with non-mainstream practices
712 and adapt their value set (Smith 2007; Smith and Seyfang 2007). As many niches aim to replace
713 dominant ways of thinking and doing by alternatives, these processes of learning, adapting and
714 experimenting are crucial for successful niche development. Learning induced by engagement was
715 perceived as positively associated with subjective wellbeing. Thus, learning processes themselves
716 may be crucial for the success of niches, while simultaneously contributing to the wellbeing of their
717 members.

718

719

7 Kemp et al. (1998) talk about “articulation processes” when they refer to learning.

720

721 6. Conclusion

722

723 The two most important pillars of eudaimonia, personal growth and purpose in life, play a key role in
724 engaging for sustainability. Initiatives may offer a wealth of opportunities for personal growth –
725 through social learning, common efforts and energy, rooms for individual and common reflection -
726 but engaging in them also requires time and energy, it involves a number of challenges and requires
727 ways of coping with them. Engaging for a bigger cause gives people a purpose in life. Given the
728 energy and commitment, that all of our interviewees gave to their initiatives one may safely assume
729 that this would hardly be possible, if it were not for some bigger purpose in life.

730 Looking ahead, we would like to make some suggestions for further research, based on our findings
731 and also on the limitations of our study: Even though we shed light on the relevant relationships
732 between psychological wellbeing and engagement in sustainability initiatives, we cannot draw causal
733 inferences. Future studies using quantitative methods (e.g. field experiments, representative
734 surveys) or a living lab (i.e., lab where a participatory interaction design is applied) are needed. For
735 example, it would be interesting to look into the causalities between engagement in sustainability
736 initiatives and psychological wellbeing. In this paper, we pointed out an association between
737 individuals' engagement in sustainable initiatives and psychological wellbeing but future research is
738 needed to causally corroborate this association. One could draw important lessons for the design and
739 management of these groups, if future research would show direct or indirect effects of engagement
740 in sustainability initiatives on psychological wellbeing of individual members. A second follow-up
741 question could be how increased subjective wellbeing contributes to improved outcomes of the
742 sustainability initiative. This kind of evaluation would involve not only the self-reporting of actors
743 (interview data), but also the measuring of outcomes of the actors' sustainability initiatives.
744 Addressing this question would require additional questions in the interviews and surveys that allow
745 for coding along those lines as well as an evaluation of the outcomes of the initiatives. A third
746 suggestion is to conduct a long-term study that not only allows for experiments such as the above-
747 mentioned living lab, but which also allows for a second or third round of interviews might lead to
748 results that are more robust.

749 Given that sustainability research can be expected to link “knowledge to action” (Cash et al. 2003),
750 we would like to make the following suggestions how our results could translate into practical action
751 at the level of niches: People engaged in sustainability initiatives may often face challenges such as
752 mental distress or feelings of helplessness because of the magnitude and urgency of the changes
753 required by sustainability transformations. These challenges are well documented in the literature
754 (e.g. Brundiers and Wiek 2017; Middlemiss and Parrish 2010) as well as emergent from our findings
755 (see for example the topic of environmental mastery). To deal with these challenges and possibly
756 avoid them, Brundiers and Wiek (2017), who work on competencies for sustainability professionals,
757 suggest preventive self-care as a strategy.

758 We suggest that a strategy of preventive self-care could take at least three avenues. A first avenue is
759 to place more emphasis on strengthening those aspects of group membership that are strongly
760 linked to psychological wellbeing. In our study, important aspects worth mentioning in this respect
761 are positive social relations which can act as stimulating and motivating factors as well as the

762 perception of collective efficacy. Less self-evident but equally important are experiences of personal
763 growth and (often second-order) learning. A second avenue that preventive self-care could take is to
764 explicitly address the challenging aspects of public engagement for sustainability. Again, social
765 relations play a key role. In the case of Valentin (a member of the Austrian initiative, see section 4.4
766 in this paper), it was evident that positive relations with other group members were most helpful in
767 coping with the problems of severe mental distress and overload. Finally, setting clear, small and
768 tangible goals – even and especially when the overall aim of the initiative is very far-reaching – may
769 avoid frustration among the initiative members. Setting smaller goals allows a member of an
770 initiative taking responsibility that one can carry instead of feeling responsible for the “pain of the
771 world”. That way one’s engagement can be perceived as successful and self-acceptance, one
772 dimension of psychological wellbeing, might increase. One conclusion to be reached at a more
773 general level is that framing communication about sustainability engagement could benefit from a
774 more explicit focus on aspects of care, creativity, sense of community and personal growth, which
775 seemed to be important cornerstones of the groups we looked at. Doing so may shift the imaginary
776 from one that is often marked by resistance and fight to a more positive, open and inviting one.

777 Our study, which was based on rich qualitative data, may be regarded as complementary to the large
778 quantitative study by Binder and Blankenberg (which was based on SOEP data) on the relation
779 between environmental concerns and (environmental) volunteering. In part, our study has provided
780 some insights into what Binder and Blankenberg called for in their conclusions: ‘a more detailed
781 collection of environmentally relevant information (via questionnaires, interviews, diary studies) [...]’
782 to explain the puzzle that environmental activism seems to increase life satisfaction but not
783 environmental satisfaction’ (Binder and Blankenberg 2016: 13).

784 Finally yet importantly, a relational conceptualization of wellbeing (in our case with engagement)
785 may benefit from a process-oriented perspective. We found that psychological wellbeing is regularly
786 subject to change over the course of one’s engagement, especially when dealing with sustainability
787 issues and within groups. Sometimes negative impacts on wellbeing arise, but some groups also
788 enable learning processes to deal with such impacts and thereby help to put things into perspective,
789 which is perhaps one of the most important abilities in life.

790

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Appendix: Table 2: Overview of the sustainability initiatives analysed in this study

Initiative	Domain	Objectives	Methods/approaches/activities	Structure
Network for organic consumption and production (AT)	food	become the leading region in Europe concerning organic agriculture; increase share of organic agriculture; strengthen regional economy	education, in organic farming; connecting processors and marketers of organic products; strengthening the position of organic products in tourism, gastronomy, handcraft, industry and service,	network of 125 companies (e.g. farmers, restaurants, producers) for organic consumption and production, installed by country government
Energy cooperative (AT)	energy, mobility	regional energy autarky with renewable energy	development and implementation of numerous projects, e.g. decentralised energy production and smart grids, car-sharing, energy cooperatives and use of renewable raw materials for construction and local heating	national programme; manager financed by LEADER; Integration of citizens, administration and companies
3 repair cafés (NL)	consumption	support in repairing goods, reduction of waste, strengthening social relations;	freely accessible meeting places where people gather to fix broken objects, share knowledge and experience on repairing, offering a pleasant environment for people to meet and build up or strengthen social contacts	Started with one repair café in Amsterdam, but currently a global network of 1500 repair cafés; individual repair cafés are mostly independent and locally embedded and an international repair café foundation addresses issues for the movement as a whole.
Energy cooperative (NL)	energy, mobility, housing	make the neighbourhood free of emissions (carbon neutral) by 2040	different projects (insulation of houses, smart energy meters, private photo voltaic plants etc.); providing of information to residents of the district about energy-related improvements; information campaign	a cooperative association with 250 members and led by 8 board members; a separate cooperation exists for the solar roofs project.

Transition Town Movement (DE)	food, consumption	establishment of local environmental resilience and a sustainable lifestyle	deals with subjects such as local food production, food sharing, local currencies, community supported agriculture, non-violent communication workshops and open space art projects	part of the international transition town movement; umbrella group for different initiatives
Agricultural cooperative (IT)	food	Development of an agricultural urban model that is healthy, organic and multi-functional; replace the degraded concrete buildings with a proposed new way of living, based on environmental concerns, on respecting the dignity of labour and on the social value and meaning of agriculture.	production and distribution of food as well as offering services (agricultural training and experimentation, didactics, workshops, urban gardening, food services, restoration, green tourism, and outdoor sports).	farmers, agronomists, chefs, architects, day workers, anthropologists, educators with a passion for sustainable agriculture, healthy food production, environment and landscape preservation.
3 ecovillages (RO)	food, mobility, housing, energy, consumption, work-leisure	Development and living of a holistic, sustainable lifestyle, autarky,	no special method. Members who live in the ecovillages dedicate their life to the issue of sustainability. Workshops and seminars are organised; International networking; awareness raising	self-organised grassroots movement, built on the principles of permaculture, downshifting and a sharing economy