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| **Abstract** |  |  |
| **#1** Abstract: Abstract is clear but need to add core argument or research gap being addressed | The abstract has been adjusted accordingly to highlight both the core argument and research gap under study. |  |
| **Introduction – literature review** |  |  |
| **#2** The literature review requires substantial revision. From my perspective, the authors start by introducing the topic in too broad of a context. Given that this is a single case study, I suggest framing the topic around more proximate variables—rather than distal health status. Singapore as a case study can be brought forward as a critical context in which to study the phenomenon.  **#14** My main query is about the underlying gap in knowledge. It is not clear what contribution to knowledge this paper is making.  **#64** The reader could benefit if the authors provided some additional context related to the concept of place. In this vein, it is argued by environmental psychologists that connections with place is based on emotions, beliefs, understandings, and values for a locality. In this sense, what I get from the authors is a somewhat narrow focus, whereas sense of place ought to be broader. This does not affect the study in any way, but I think it is important that the authors set the context for place in this way. For instance, it may be worthwhile to provide a definition of place from Tuan or Relph… "What begins as undifferentiated space becomes a place as we get to know it better and endow it with value" (Tuan, 1977). **It would also be interesting to theorize about what it exactly is about urban environments vs. natural environments that lead to differences in wellbeing.**  **#72** I believe the door is open to explore nature placemaking in greater detail, particularly from a deeper human perception perspective. This particular study is narrow in that regard as it tackles the participants' subjective sense of wellbeing based on limited theoretical framework. Again, that is fine, but that should be further explained. | **#2, 14, 15, 64, 72**  We would like to express our gratitude to the reviewers for their insightful suggestions on how to better frame the literature review and conceptual framework of this study.  We have taken in consideration all the points highlighted by first focusing on the city of Singapore as the main context. Additionally, we have provided further context on the definition of placemaking and how it relates to the notion of nature-placemaking. By doing this we have also exposed the importance of making place in tandem with meanings, values, and beliefs created individually and collectively as part of a cyclical process also impacted by the makers of place or/and facilitators of place.  In the restructured literature review, we have clarified both the research gap(s) in paragraphs **#1,** **2, 11,** in which we argue that although Singapore has increased the access to urban green infrastructure, there is a need to move beyond a superficial contact with nature. We also discuss that to bring the benefits of being exposed to nature, a closer identification and interconnectedness with the natural environment is necessary (Lumber et al., 2017). Subsequently, we propose nature-placemaking as an alternative to enhance the human-nature connection in cities, hence, more exploration on the methods applied, frequency and time of engagement is needed. Additionally, we have included further information related to the facilitators of nature-placemaking and their role assisting people to create new values and meanings with the natural environment. In this point we have also identified that given the newness of nature-placemaking in cities, how facilitators influence the process and the perceived sense of psychological wellbeing of people has not been yet discussed – see paragraph **#11**.  Lumber, R., Richardson, M., & Sheffield, D. (2017). Beyond knowing nature: Contact, emotion, compassion, meaning, and beauty are pathways to nature connection. PLOS ONE, 12(5), e0177186. https://doi.org/10.1371/journal.pone.0177186. |  |
| **#3** Authors should clarify if the study is about the act of participation or the UGS itself (the former seems to be the aim). Why is Singapore relevant and useful to the discourse in general? What is novel or innovative about this study? | **#3, 15**  Nature-placemaking is in fact part of a participatory process - this is already implicit in the main conceptual framework explained (see paragraphs **# 4, 5, 6)**. However, in tandem with its participative character it is important to notice that in the case study analysed (bottom-up nature-placemaking activities facilitated by an NGO), both participation and the natural green spaces in which nature-placemaking is conducted are interrelated. We consider this topic to be extremely relevant for the context of Singapore since it offers a unique case of nature-placemaking against the prevailing tabula rasa redevelopment and artificial reconstruction of the city’s landscape – see paragraph **#2**. Furthermore, more emphasis should be placed in the process of facilitation and the facilitators of nature-placemaking to avoid overpowering, imposition, and superficial beautification of green spaces in which citizens have minimal engagement in the long term (Hes et al., 2020) – as it has been the case for the programmes conducted by the Singapore government (see paragraph **#9)**. Hence, this study aims to highlight the role of the facilitators of nature-placemaking in assisting in the process of promoting a meaningful connection to the natural environment through social-ecological values (identified in this study as the 5Gs: Gracious, Green, Giving, Grounded and Grateful). The facilitator’s methods and influence in the perception of psychological sense of wellbeing in those taking part in the activities were also determinants for participants to enact feelings of social cohesion, sense of community, self-esteem, and self-efficacy.  Hes D., Hernandez-Santin C., Beer T., Huang S., 2020. Place Evaluation: Measuring What Matters by Prioritising Relationships. In Placemaking Fundamentals for the Built Environment. Palgrave Macmillan, Singapore. | Since the literature review has been restructure, we suggest a full read of the section. Direct response to the comments is found in paragraphs **# 2, 4, 5, 6, 9.** |
| **#60** Pg. 23. Line 14 - can you say more about what other organisations do and their methods of facilitating nature placemaking - that might be helpful early on in the paper to clarify the novelty of this paper and its contribution to knowledge.  **#6** Clear conceptual framework of mechanisms is needed. | **#6, 60**  This information could be included in the introduction/literature review. | See Introduction section ‘Nature-Placemaking and Wellbeing Singapore Context’ |
| **#24** Facilitators of place - what exactly does a facilitator do that is distinct from a volunteer? And why is it NGO-led facilitating that is of interest to you (pg. 3, lines 12-13)? Is this part of the gap in knowledge? Or is the gap related to a lack of sources written about Singapore? Does that mean we know lots about facilitating by other sectors? You need to make this all clearer for the reader. | To better clarify the role of facilitators of place we have included a subsection in the literature review under the heading: **Nature-placemaking led by NGOs and its facilitators -** see paragraphs **#10 and 11.** Additionally, kindly refer to our response to comment **#3** which clarifies the gap in knowledge related to nature-placemaking facilitators. | See paragraphs **#10 and 11.** |
| **#15** Don't we already know about these relationships between facilitating nature connectedness and wellbeing - why exactly is it useful to read about this case in Singapore? This novelty needs to be made much clearer. At the moment, I am not sure what research question is being asked and why. | **#15**  We thank the reviewer for highlighting the lack of clarity in our introduction and framing of the research problem. We have adjusted the literature review and conceptual framework to better clarify the study novelty, research questions and gaps. Kindly see our response to comments **#2** and **3**, and please see paragraphs **#1,** **2, 11.** | See paragraphs **# 1, 2** and **11.** |
| **#7** It is also unclear how environmental awareness relates and should be included in the conceptual framework. | We thank the reviewer for highlighting this point. While environmental awareness has been found to be associated with a sense of connectedness to nature and ecological behaviour (see Mayer & Frantz, 2004), we have strengthened our argument in the literature review to make this connection clearer for our conceptual framework. Specifically, a key point of this study was to explore if participation in nature-placemaking could enact environmental awareness and/or pro-environmental attitudes. This was explored in the first phase of the study through the qualitative analysis. Participants of the FG manifested to have awaken a greater sense of environmental awareness and care for the natural environment. Subsequently, to triangulate these results and to apply objective measurements, the connectedness to nature scale (CNS) by Mayer and Frantz (2004) was included in the survey to measure the degree of nature connection among the GUI members.  Mayer S. Frantz Mc C. (2004). The Connectedness to Nature Scale: A measure of Individuals’ Feeling in Community with Nature. Journal of Environmental Psychology, 24(4) 503-525. |  |
| **#19** Introduction - you start with a discussion about stress - why? Is this a measure you use later? | Since we are not directly measuring stress, we have adjusted our literature review and emphasise the components that are analysed in the study as part of the contribution of nature-placemaking in the subjective sense of wellbeing e.g., autonomy, competence, relatedness, self-esteem, self-efficacy, connection to nature, and feelings of social cohesion, sense of community. | See introduction/literature review section. |
| **#20** Definition of nature placemaking really needs defining more clearly. Does this mean that all previous place-making has not involved nature? Why is there a need for this distinction? Is this the only concept - is this about place-making or is it about place-keeping, stewardship, engagement with nature, connectedness to nature? I'm not sure why the concept you use is best described as 'nature placemaking'. | We would like to thank the reviewer for raising our awareness on the lack of clarity on the concept of place-making in the paper. To better provide a succinct yet comprehensive understanding on the concept - that can be found from paragraph **#9 -** we have included the subsection in the literature review: **Nature-Placemaking and Wellbeing**. In this subsection we explain the distinction between placemaking and nature-placemaking, which primarily stands for the introduction of a meaningful and transcendental experience with the natural environment through which an opportunity to reconnect with the natural environment is enabled as well as the introduction of environmental awareness, pro-environmental attitudes etc. (Davis et al., 2011; Lumber et al., 2017). A corollary of the nature-placemaking process is an enhanced subjective sense of health and wellbeing. Some of the activities include nature programmes such as farming and gardening designed to enable self-reflection, gratitude, and compassion towards the natural environment (Bush et al., 2020). As such, nature-placemaking goes beyond a superficial interaction with the natural environment and considers the intangible experience and meanings and feelings of interconnectedness with the surrounding natural environment.  Davis JL, Le B, Coy AE. Building a model of commitment to the natural environment to predict ecological behavior and willingness to sacrifice. Journal of Environmental Psychology. 2011; 31: 257-265.  Lumber, R., Richardson, M., & Sheffield, D. (2017). Beyond knowing nature: Contact, emotion, compassion, meaning, and beauty are pathways to nature connection. PLOS ONE, 12(5), e0177186. https://doi.org/10.1371/journal.pone.0177186.  Bush J., Hernandez-Santin C., Hes D. 2020. Nature in Place: Placemaking in the Biosphere. In Hes, D., Hernandez-Santin, C., Beer, T., & Huang, S. W. (2020). Place evaluation: measuring what matters by prioritising relationships. In Placemaking Fundamentals for the Built Environment (pp. 275-303). Palgrave Macmillan, Singapore. | See paragraphs **# 9,** and **10.** |
| **#21** You talk about how the benefits of 'programmes' 'can be traced back to the participative character of placemaking, which have been found to enhance sense of belonging and sense of community' (pg. 2, lines 37-39). Are you there claiming that NATURE placemaking (or whatever you call it) brings even more enhanced sense of belonging and sense of community because it is in nature? If so, you need to explain this more and make it more explicit. | Although this interpretation is correct it is important to clarify that according to this study results, the nature-placemaking activities conducted at GUI brought and enhanced sense of belonging and community. These feelings are supported by the activities with the natural environment that enable both social connections and a meaningful contact with the natural environment. See literature review section paragraph #7 and discussion section. | Literature review section paragraph #7 and discussion section. |
| **#22** Jennings and Bamkole (2019) paper and do not agree that they concluded that that 'a reflexive process of social learning and co-creation…could facilitate urban environmental planning' (pg. 2, lines 53-56). Take care not to lose the meanings when summarising findings from other work. | We would like to thank the reviewer for this observation. We have adjusted in paragraph 8 the interpretation of Jennings and Bamkole (2019) study. | Paragraph **#8** |
| **#23** How does listening to the voices of the often-silenced (pg. 2, line 58) stimulate environmental awareness and enhance sense of place - I don't understand a. how this fits with your work, or b. where this conclusion is coming from. | In the corrected version of the literature review we have adjusted the conceptual framework and clarified how environmental awareness could be enhanced through nature-placemaking. | See paragraphs 4 to 9. |
| **#25** Pg. 3, line 40 - what is a 'nature self-motivating environment'? This does not make sense to me. | For the sake of clarity, we have amended the full sentence: *“The result of being part of a self-motivating environment is that individuals can sustain citizen engagement and thus build a sense of ownership towards the natural environment over time and construction of alternative values towards nature”* (see paragraph **#10**). | Paragraph **#10** |
| **#13** The discussion needs to more clearly link back to the literature and surface key findings. I am still confused at this point because the study is not about nature—it is **about** participation. Furthermore, the authors acknowledge they did not measure the environment. This paper is less about health/wellbeing and nature and really about social benefits of participation. | The paper highlights the importance of interacting directly with nature in a meaningful way through nature-placemaking programmes to enact the health/wellbeing benefits those activities in the natural environment can bring. Included in the benefits that might impact the sense of psychological wellbeing are the positive relations with other people, social connections and relationship with non-human entities which are also beneficial to the wellbeing.  Please kindly refer to our response to comment **#3.** |  |
| **#65** I think this is acceptable to maintain a narrow focus in this regard, however, the authors need to articulate the restricted definition of their study and the existing research specific to their application. In doing so, they should highlight the broader body of knowledge. | We appreciate the reviewer’s recommendation and we have articulated the study focus by also including the existing research conducted in the topics of nature-placemaking and its facilitators. Kindly see our response to comments **#2, 14, 15, 64, 72.** |  |
| **#73** Much of placemaking, however, ignores an ecological approach and thus, there is a lack of literature related to nature placemaking. Hes et al. (2020) posited that people's connection with the natural environment enhances wellbeing; however, the conventional conceptualization of placemaking overlooks the biophilic element. In that sense, the process of nature placemaking and the role of the facilitator is essential. This study highlights that important connection that people have with nature. The study effectively produces important and relevant findings, particularly that individuals manifest a strong connection and further exploration to the natural environment upon their first experience with GUI. The importance of nature placemaking has relevance  for nature-based solutions for tackling environmental challenges and building capacity and support for sustainable human development. | We would like to express our gratitude to the reviewer for appreciating the importance and relevance of this study and the contribution of nature-placemaking in relationship with NBS, especially in current times where a more meaningful connection to the natural environment is required to support sustainable human and environmental development. |  |
| **Methods** |  |  |
| **#4** Please define that many terms or remove jargon for a broad academic audience.  One case study is not adequate for a research paper. | While we understand the reviewer concerns regarding publishing a paper with a single case study, we would like to emphasise that indeed conducting only one case study is appropriate for publication. This approach is known as *intrinsic* case study typically undertaken to learn about a specific phenomenon. The researcher(s) define the uniqueness of the phenomenon making the case study distinguishable from others (Crowe *et al.* 2011). Please notice that in the methods section, we provided information regarding the uniqueness of the case study selected in this case GUI (see paragraph **#12,** and **Method: GUI Case Study** section). Furthermore, several papers have published single case studies that analyse unique phenomena in everyday contexts in which they occur. This could include minority groups overcoming a disaster event, as found in the longitudinal study conducted by Moreno and Shaw (2018) with a small coastal community in Chile, or marginalised communities - see Fahlberg, 2019’s study conducted in the City of God favela, or single case studies conducted to explore behavioural relationship across specific populations - see Hellström *et al.* 2005’s single case study of an elderly married couple living with dementia. Also see Hobson’s (2006) single case study conducted on one Singaporean environmental organisation.  Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. BMC medical research methodology, 11, 100. https://doi.org/10.1186/1471-2288-11-100.  Moreno, J., Shaw, D. Women’s empowerment following disaster: a longitudinal study of social change. Nat Hazards 92, 205–224 (2018). https://doi.org/10.1007/s11069-018-3204-4.  Fahlberg A., N. (2018). Rethinking Favela Governance: Nonviolent Politics in Rio de Janeiro’s Gang Territories. Politics & Society, vol. 46, 4, pp. 485–512.  Hellström I, Nolan M, Lundh U. 'We do things together': A case study of 'couplehood' in dementia. Dementia. 2005; 4:7–22. doi: 10.1177/1471301205049188.  Hobson K. 2006. Enacting environmental justice in Singapore: Performative justice and the Green Volunteer Network. Geoforum, Volume 37, Issue 5. doi.org/10.1016/j.geoforum.2005.08.004. | See methods section. |
| **#8** Grounded theory analysis does not apply to this research design—the authors' used existing measures. I don't understand how Grounded theory applies especially since the authors were not focused  on theory building. | In the last two decades there has been a growing number of studies combining mix-methods approach with grounded theory. There are examples that use convergent designs in which grounded theory is implemented to analyse qualitative data and to examine the results of quantitative data (Babchuk, 2015; Birks & Mills, 2015; Charmaz, 2014; Johnson et al., 2010; Walsh, 2015). In some of those studies there was no intention of developing a theory or model (Howell Smith *et al,* 2019). Similarly, in our study, we have used an exploratory mix-methods approach in which grounded theory was implemented for the analysis of the qualitative data. Using this approach, the research team was able to examine the statements of the GUI core members and volunteers to finally produce a theoretical explanation of the phenomenon grounded on the data. This initial theoretical model was implemented for the design of the survey instrument. Finally, in the conceptualization of the results, we integrated results from the qualitative phase and explore the convergence between those obtained from the qualitative and quantitative explorations (Creswell & Plano Clark, 2018). This is considered a sound methodology (Glaser and Strauss,1967) widely implemented in mix-methods studies (Guetterman *et al.,* 2019). It is important to emphasise that the results of our study enabled the development of a theoretical explanation of how the process of Nature-Placemaking at GUI unfolds and some of the components that could potentially enhance the sense of health and wellbeing of volunteers. We consider these findings to be important in the context of Singapore that offers limited opportunities of bottom-up place-making with the natural environment.  Howell Smith MC, Babchuk WA, Stevens J, Garrett AL, Wang SC, Guetterman TC. Modeling the Use of Mixed Methods–Grounded Theory: Developing Scales for a New Measurement Model. Journal of Mixed Methods Research. 2020;14(2):184-206. doi:10.1177/1558689819872599.  Babchuk, W.A. (2015). Pragmatist grounded theory: Advancing mixed methods for educational inquiry. In Chang, B. (Ed.), Proceedings of the 34th Annual Research-to-Practice in Adult and Higher Education (pp. 10-16). Oklahoma, Oklahoma City, OK: University of Central.  Birks, M., Mills, J. (2015). Grounded theory: A practical guide (5th ed.). Thousand Oaks, CA: Sage.  Charmaz, K. (2014). Constructing grounded theory: A practical guide through qualitative analysis (2nd ed.). Thousand Oaks, CA: Sage.  Johnson, R., McGowan, M., Turner, L. (2010). Grounded theory in practice: Is it inherently a mixed method? Research in the Schools, 17, 65-78.  Walsh, I. (2015). Using quantitative data in mixed-design grounded theory studies: An enhanced path to formal grounded theory in information systems. European Journal of Information Systems, 24, 531-557. doi:10.1057/ejis.2014.23.  Creswell, J. W., Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.). Thousand Oaks, CA: Sage.  Glaser, B. G., Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago, IL: Aldine  Guetterman, T. C., Babchuk, W. A., Howell Smith, M. C., Stevens, J. (2019). Contemporary approaches to mixed methods-grounded theory research (MM-GT): A field-based analysis. Journal of Mixed Methods Research, 13, 179-195. doi:10.1177/1558689817710877. |  |
| **#16** Even though the title tells us this is about the facilitators in this case in Singapore, I think this is what we learn least about in the paper. It's not until we see the numbers in Table 5 and Figure 6 and a statement on pg. 21, lines 43-45 that 'ultimately, the volunteers of this group [2] become the facilitators and guides for those in Group 1'. This is really important, but you describe them all as participants and so makes it difficult for the reader to decipher the findings and their implications. | We have enhanced our explanation and included further information about the facilitators and the NPM process at GUI. | See pages 10 and 1, method section |
| **#17** It also might help explain your tiny sample numbers in this group (although not justify completely, as the same explanation isn't made for the even smaller numbers in Groups 3 and 4). | This has been explained in the text, see section Data Analysis and response to comment # 48. |  |
| **#18** queries about the research design - you make so much of the role of facilitators - but you don't compare it to programmes without facilitators or any kind of comparative analysis which makes it difficult for the reader. Did you consider a control (i.e. self-moderated nature placemaking without  any facilitators) to compare? Is it possible to use GUI sites without any facilitation? This constraint should be outlined in the methods section as it is only broadly touched in in the Limitations section. | Yes, we considered having control group. However, interactions with the GUI facilitators are inevitable in the GUI campus. All existing programs have extensive involvement of facilitators. Even by just visiting the campus, visitors will have some interactions with facilitators. Hence, it was not feasible to have control groups within the GUI campus. This could be addressed in the limitation section. |  |
| **#26** You do not explain why an in-depth case study method is your chosen approach - explain/ justify this for the reader. | We have enhanced our explanation for our chosen methodology approach. | See page 7, Method section |
| **#28** Make a decision about the terms you use - is it volunteers/ participants/ facilitators? When does a volunteer become a facilitator? Shouldn't you be treating them differently in your analysis - hencethe underlying focus of the paper…yes? | In the qualitative stage of our study, it was found that GUI does not have a structured NPM facilitation style, instead it was unveiled that long term volunteers at GUI could become a facilitator. A Volunteer could be asked by the GUI core team to help as facilitator, or the volunteer(s) could request to participate as facilitator in certain activities. Hence the difficulty on making a distinction between volunteers and facilitators. Nevertheless, for the sake of clarity we have specified in the manuscript that short-term GUI volunteers are only participants to the programmes and some long-term volunteers have participated as facilitators. This information has been included in the paper, see method section ‘Facilitation Process’. | See page 11, Method section |
| **#29** Does the nature placemaking happen at the GUI headquarters? Where are they? How close is the site for people to reach? Do you need a car to get there? Is it easy to get to? How large is the site? Can you provide a plan? | This information has been included in the case study section. | See case study section. |
| **#59 (#29)** Pg. 22. Line 43 - I think you need to provide some information about the physical setting as it seems that it is integral to the study and understanding the findings. See my earlier comments on this (in Methods). It would be logical to expect that because you are examining connection to nature that conducting this research in a natural environment would glean a positive association. This is not a new finding. | We appreciate your feedback. Information about the physical setting has been included in the methods section.  We agree that it is logical to expect that spending time in a natural environment is positively related to the sense of connection with nature. However, recent studies have found that the mere presence of nature does not contribute to nature connectedness (Lumber et al., 2017; Bell-Williams et al., 2021). Rather, extended interactions with nature such as engagement through contact, and sensory and emotional activities are required to enhance such connections (Lumber et al., 2017). This study aims to contribute to these recent efforts in examining the components of enhancing nature connection with a focus on the roles of facilitators in the process of nature-placemaking.  Lumber, R., Richardson, M., & Sheffield, D. (2017). Beyond knowing nature: Contact, emotion, compassion, meaning, and beauty are pathways to nature connection. PLOS ONE, 12(5), e0177186. <https://doi.org/10.1371/journal.pone.0177186>.  Bell-Williams, R., Irvine, K. N., Reeves, A., & Warber, S. 2021. Digging deeper: Gardening as a way to develop non-human relationships through connection with Nature. European Journal of Ecopsychology 7: 1-18. |  |
| **#30** A river (or stream?) not only supports environmental awareness and nature connection in NPM, but it is also a habitat (pg. 4, lines 35-7)…you are taking a specifically anthropocentric view of nature throughout your paper which seems to be at odds with your claims of this connection to nature. | We appreciate the reviewer’s comment as it gives us the possibility to expand on this topic.  Indeed, the water stream creates wildlife habitat hence the importance of its presence for the NPM at GUI since it provides the opportunity for volunteers to appreciate wildlife habitats. We agree that this paper mostly holds an anthropocentric view as it is trying to unveil if NPM might enhance the connection to the natural environment. Nevertheless, holding this view should not be seen at odds in nature connection studies. In fact, plenty are the studies conducted in anthropology fields that have substantially contributed to the understanding of how humans have connected to the natural environment across different cultures. See the studies conducted by the ethnologist and anthropologist Claude Lévi-Strauss, and others (Apffel-Marglin and Varese, 2020).  Apffel-Marglin F., Stefano Varese S. 2020. Contemporary Voices from Anima Mundi A Reappraisal. Peter Lang Publishing, Inc., New York |  |
| **FG** |  |  |
| **#31** Why were FGs conducted with core staff members from business development, finance and marketing? What was the rationale behind this? And it is not possible when reading your quotes to work out who the specific quote comes from and which area of GUI they work in - I think that would be useful. | We have clarified in our manuscript that all the GUI core members - including: the executive lead, kampung architect, craft lead, HR representative, sales, marketing, volunteer manager, farmer, earth over lead, and kitchen lead - were invited to the FGDs to help the research team explore how NPM at GUI unfolds and how each member plays a role throughout the process.  Since our ethics protocol restricts us from revealing the identity FGDs participants, we cannot include the specific role of the core member in the qualitative excerpts as the person’s identity could be easily revealed. |  |
| **#32** It isn't clear about the volunteers in the FGDs - are these people who actively help or facilitate or are they part of the 130000 people who have benefited from GUI activities? | To invite participants to the FGDs an online invitation was sent through GUI social media and email. Anyone who in the past participated as a volunteer in GUI NPM programmes could sign for the FGDs. It is important to clarify that at the stage of participants recruitment, the research team had not yet reached the conclusion that GUI long-term volunteers might also become NPM facilitators. This finding was unveiled after the data analysis. Our initial assumption was that GUI core team were the facilitators of the NPM programmes. |  |
| **#34** If you did your FGDs on GUI premises, are there any problems with this - might this have influenced the data collection? There is no critique at all about GUI in any of the commentary, and I'm wondering if doing the data collection on site was problematic/ inhibit responses in any way? | While we understand the reviewer’s concern that conducting the FGDs at GUI office premises could have influenced participants responses, we would like to emphasise that at any point this was not observed as problematic or inhibiting the participants responses. We aimed at finding a familiar and comfortable place for the FGDs. Additionally, GUI was strategically selected as the premises could also enact memories and sentiments regarding their involvement in the NPM programmes, which could also inspire their responses.  To ensure privacy and protect participants responses, the offices premises were only accessible to the research team and participants while the FGDs were conducted. |  |
| **#35** Can you explain the rationale behind the question: 'How do you think GUI has contributed to your personal life development?' and the answers - did everyone really say that it did? | This question was posed at the beginning of the FGDs to help participants elicit their own personal views and sentiments towards GUI.  The openness of this question helped to understand the impact that NPM programmes might have had at the personal level. Additionally, we could explore if the ‘5Gs’ were mentioned. Some of the answers compared their daily life interactions and behaviour before and after GUI. As expected from FGDs, answers by some participants inspired and helped others put together their own reflexions. One answer style was the narration of personal life experiences before volunteering at GUI followed by a comparison of how they used to see those same experiences in the past and now after being immerse in GUI programmes.  Other answers were related towards the appreciation of the natural environment which before GUI was knowledge only acquired through textbooks. Similarly, several participants mentioned how their social behaviour started changing after engaging in NPM programmes. Examples for this was feeling more compassionate towards others, being able to talk to their neighbours, and helping in their local communities. |  |
| **#36** Pg. 7, line 27 - you state that 'these findings informed the design of the online survey…' - in what way did they inform it? | After we analysed the FGDs data, it was possible to see patterns in the responses suggesting that participation in NPM at GUI provided a sense of psychological wellbeing. This finding seemed to be related to the social experience, community bonding, interaction with nature, and the sense of safe place they felt at GUI. With these initial observations, it was decided to explore further how all these factors correlate with each other from an objective point of view. |  |
| **#37** Table 2 - are you claiming that the psychometric scales are measures of enhanced wellbeing? Where is 'wellbeing'? How did you decide on these scales and why? For example, the social cohesion work by Forrest and Kearns was not designed as a psychometric scale. | We would like to clarify that we are not claiming that psychometric scales are measures of enhanced wellbeing.  The preliminary results obtained from the qualitative exploration (see response for comment #36) informed the selection of psychometric scales so that we can triangulate the preliminary results. Additionally, earlier studies that examined wellbeing have concluded that social cohesion, sense of community, connectedness to nature, intrinsic motivation, and self-esteem are components that contribute to enhance the perceived health and wellbeing (Hes et al., 2020; Stewart & Townley, 2020; Talò et al., 2014). The results of these studies also helped to finalize the selection of scales.  For social cohesion, we used the scale from Sampson et al (1997). The work of Forrest and Kearns was cited in table 3 since their five domains of social cohesion are relevant to the context of this study.  Talò, C., Mannarini, T. & Rochira, A. Sense of Community and Community Participation: A Meta-Analytic Review. Soc Indic Res 117, 1–28 (2014). https://doi.org/10.1007/s11205-013-0347-2.  Stewart K., Townley G. 2020. How Far Have we Come? An Integrative Review of the Current Literature on Sense of Community and Well-being. Journal of Community Psychology, (0), 1–24. <https://doi.org/10.1002/ajcp.12456>. |  |
| **#38** How and why did you decide that you wanted individuals who had been engaged in programmes for a minimum of 3 months? Did you ask them about their perceived wellbeing before they started the GUI? It's hard to understand the rationale behind the questions you asked and unpicking the way in which the input from the facilitators had an effect on people's wellbeing. | For the FGDs, the aim was to invite participants that have had a prolonged experienced at GUI. We were informed by GUI core members that in occasions, university students required to conduct social service will select GUI to volunteer for one or two days. Some students would decide to return to GUI others would not return hence, a minimum of three months engagement was set to conduct an in-depth exploration with members that have had prolonged participation in NPM activities.  The questions were carefully designed to elicit opinions regarding NPM programmes at GUI and how participating in the activities might increase their connection to the natural environment thus enhancing their sense of health and wellbeing. At this point the study remained open and exploratory. It was through the participants responses that it was unveiled the importance of facilitators and how they share the 5Gs in the process. The analysis of the responses led the research team to understand that NPM at GUI entailed a process of familiarisation with the physical and social settings, and the facilitators (which initially was hypothesised were only the core members) influence their sense of enhanced health and wellbeing, as they directly interact with volunteers enabling feelings of social cohesion, sense of community, and motivation to emerge during the nature-placemaking process. |  |
| **#39** Why is your final sample size for the survey so small? I was expecting a larger number that 104 given your statement of the 130000 people who have benefited from GUI activities. Why did you stop at 104? | We would like to clarify that the number of people benefited by the GUI activities (130000) is the cumulative number over the decade, that includes many short time visitors (mostly one-time participants). As mentioned earlier, our focus was on the participants who are “at least 18-years old and who have been engaged in any GUI programmes for a minimum of three months within the last two years”. The number of people who met these criteria was approximately 150.  The survey was left open for two months and it was decided to suspend reception of responses in January 2020 when news of Covid cases were reported in Singapore. This decision was a preventive measure as the pandemic situation could have influence the survey responses. |  |
| **Results** |  |  |
| **#40** Some of your quotes do not demonstrate the point you are making in the text -e.g. you state that 'these 5 values have been integrated in the mindset of many of the participants' - a. how can you claim this is the case? And b. I don't think the quotes on pg. 10 demonstrate this, particularly not the quote by Sophie FGD3. | For the sake of brevity, we excluded some quotes from the text and tried to include quotes that would reflect how FG participants expressed to have integrated the 5Gs taught at GUI in their daily activities. The 5Gs, as mentioned in the paper are not a replacement of personal values, instead, they allude to the appreciation of the natural environment and sustainable living. Listed below are additional quotes abstracted from the FGD. Please not that we have included some of these in the manuscript:   1. *“GUI has changed me personally in the sense that I’ve become more confident and I’m a lot more mindful right now. My interactions with people, my family”* 2. *“For me, it changed my diet. I had gone from a meat-based diet to now mostly plant-based diet. And my lifestyle practices, so over here, they are very mindful about the things we use, how things are, and Sustainability”* 3. *“I feel grateful. There are times when I feel inspired, but most of the time I feel grateful. I think being part of GUI has also made me a better person, like to be friendly to people, to be warm. Because you see these positive energies here at GUI then It’s more important to learn about the groundedness, be grateful, your worth in the world is all these things. Like, why we recycle? When we are green It’s also because we are grateful for the things that we receive from Earth, and from our environment. So, it’s not like a replacement kind of mindset but more of to come here and recharge and experience new things that maybe you didn’t know that you’d imagine you’d like to. By just coming here, you just get exposure. every time we come here, something unexpected will happen. I think only with an open mind and open heart to experience new things then can you appreciate your trip here. my fallback plan is always the 5Gs. being open minded and have place to explore.* 4. *Grounded. We have to be very grounded. But to me the idealism is the important thing because I’m an idealistic person, I’m just like, a coward and scared. So, every time that I come here, I see GUI, and I’m like, it happened! It happened! And it come from a thought, a good idea. You might be scared, or you think your idea is hopeless because nobody’s gonna care about it, but just stay idealistic, man. It’s gonna happen”.* 5. *“I realised that it’s important to connect with other people. I started to interact with more people, to hear and learn from their experiences. I think I lived a sheltered life but hearing their experiences give me a window to look into society, make me grow as a person. Learning from them makes me a more sympathetic person and opened up my ears to want to listen more and learn and grow from their experiences”* 6. *“I understand how many things here at GUI are deliberately and consciously designed. The facilitator explained to me how a lot of things here are repurposed, like the furniture. Or how the kitchen is designed to make people be more aware of their water usage. It makes me feel like everything has a purpose and helps me see the little things in life. It also made me realise the importance of connecting with other people and nature. After coming here, I realise I’m more open to things”.* 7. *“I adopted the mindset of doing whatever you want and that everything will work out my way. I feel a lot happier these days. It’s the feeling of being free. I realise that the society’s model mindset can be quite toxic”* 8. *“Seeing a place like GUI in real life, and people who actually convert these sustainable ideas to action is mind opening”* | Results section |
| **#41** pg. 10 line 56 - you say that the principles are 'inculcated' - is that in the people who work for GUI? You need to explain more about the sample in this way. | The 5Gs are inculcated or encouraged in the people who participate in nature-placemaking programmes. This has been clarified in the text. | See results section: Intangible values: The 5G mentality. |
| **#42** Pg. 11, line 1 - what do you mean by 'as part of a free will process'? | During the FGD, participants asserted that joining nature-placemaking activities at GUI gave them the opportunity to explore different thoughts as they found a place to reflect about themselves:  “*I learn to always be free with the way I think. It’s important these days as i will be upset if I get stuck in a fixed way of thinking”.* (FGD 3)  *I guess, in a place like this, it makes me realize there’s more to it, a connection to myself, being closer to who I am rather than what the system wants me to be.* (FGD 6)  This was an important finding as they also expressed that participating in GUI programmes entailed a different style of learning that cannot be comparable to a formal public-school setting defined by mandatory schemes that exclude direct interaction with the natural environment. |  |
| **#43** Figure 5 - where is the statistical significance shown - is that what green means? This is not clear. You say that 'this suggests that individuals that report having a sense of community doe to their engagement in GUI NPM developed feelings of interest….' - I am nervous about the use of the term 'due to'. You are suggesting causality when you are only analysing the correlations, so you should change your text to reflect this. Does it rather show (or indicate) that the values people hold around sense of community are closely related to those around social cohesion etc. That has been borne out in other studies. | We agree with the reviewer that correlation does not explain causation, hence we have reviewed the text and modify accordingly the results. See answer to comment #10. |  |
| **#10** "A two-tailed test of significance indicated that there was a significant positive relationship between the frequency of engagement and commitment and the number of programmes attended" - These variables should be treated as having collinearity—rather than correlated to each other. | We agree that these variables share some degree of collinearity. As shown in the results reported in the correlation matrix (Figure 6), it is not possible to remove this colinear relationship or infer any direct effect of causation (i.e., whether frequency increased commitment, or vice-versa). We have amended the text found in results to reflect your comment and in the discussion section we have acknowledged the implications collinearity has on some of the inferences we can draw from the analysis of our data. |  |
| **#11** Authors cannot claim impact, only correlation. This was not a longitudinal study. It is just as likely that those with greater sense of community would be more likely to engage more frequently. This is also true of social cohesion. While the authors used appropriate statistical tests, interpretations are incorrect. | We concord with the reviewer comment and in our study, we are not claiming impact. This has been amended in the manuscript and included in the limitations section. | Limitation section |
| **#12** Level of significance of tests is not reported so it is unclear which correlations are even significant. | Results of the significance test have been reported in Figure 6. | Results section: Table 6 |
| **#44** Is IMI overcoming obstacles and getting things done efficiently? This strikes me as different to the statement sample included in Table 2. | The items included in Table 2 (after corrections labelled as Table 3) show only a statement sample of the items included in each scale (see table three heading column 3) as each scale is composed of several items. The IMI is a multidimensional measure of subject’s experience of experimental tasks (Ryan, 1982, Ryan & Deci, 2000) and it consist of items abstracted from the subscales measuring: interest/enjoyment, perceived choice, perceived competence, effort, and relatedness. We have adjusted the test accordingly.  Ryan, R. M. 1982. Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. Journal of Personality and Social Psychology, 43: 450–461.  Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55(1), 68. | See section online surveys Table 3, and section: ‘Exploration of the factors that enhance psychological wellbeing in NPM’. |
| **#45** Pg. 18, line 30 - you state that 'GUI tends to attract new members who have a high sense of nature connection'. This might not be the correct assumption to make - research from the IWUN project www.iwun.uk found that increases in nature connectedness was most marked in people who had not been connected beforehand. Might this be a reason for the strong scores? | Our reasoning for this argument is that, firstly, the FGDs and survey results show that the main reason to visit GUI was to interact with nature at GUI campus. This suggests that those who come to GUI have already high interests in and, perhaps connection with nature. Based on this result and the result of no significant differences in the degree of nature connection across the GUI members, we concluded that those who come to GUI are interested with nature interactions and have already high sense of connectedness with nature.  Since we cannot examine if the newer member's nature connection has increased in the beginning of their engagement at GUI because we do not have longitudinal data. Therefore, this could be examined in the future study with longitudinal research design. |  |
| **#46** Pg. 18, lines 44-45 - you state that '…suggesting that the long-term engagement with GUI could enhance sense of community' - but looking at the stats in Table 6, it doesn't look like Groups 1 and 4 are so very different when you consider that they would all be rounded up/ down to a 5, so how can you make that statement? (Can you explain the numbers in brackets/ parentheses)? I think you need to qualify this. | An initial scan over the descriptive statistics (means and standard deviations) would indeed suggest that there might not be differences between the groups. However, we could not make assumptions with descriptive statistics alone. Hence, to confirm if there were statistical differences, we conducted a Kruskal-Wallis, a non-parametric method used for testing statistical differences across groups. Non-significant differences were reported except from the comparison in sense of community between Group 1 and 4. This was triangulated with the responses in the FGD that indicated that the longer the engagement in GUI NPM the stronger the sense of community as discussed by FGD participants. Please see response to comment# 11.  The values contained in the brackets correspond to the standard deviation. This has been qualified in the manuscript. | Table 6 after corrections Table 7. Data analysis section. |
| **#47** you talk about 'the sense of community in GUI' (pg. 18, line 51) - is this the sense of community that you are measuring? Rather than sense of community more widely, as defined by Forrest and Kearns? If so, then yes - of course this would increase if people are spending time doing GUI activities**.** | We would like to clarify that the Sense of Community (SOC) referred in this paper is based on McMillan and Chavis (1986): it consists of four dimensions including needs fulfilment, group membership, influence, and emotional connection. The SOC is widely used in the community studies to examine the strength of one’s relationships in a geographical community like a neighborhood and a relational community such as workplace and volunteer organization (McMillan & Chavis, 1986; Talò, 2018). Recent review studies identified that SOC is positively associated with various community behaviours, psychological well-being, and life satisfaction (Talò et al., 2014; Stewart & Townley, 2020). In this study, SOC was used as a proxy indicator for psychological well-being, to explore the SOC and well-being of nature-placemaking participants, in relation to their levels of engagement, measured by duration, frequency, and breadth.  McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. Journal of Community Psychology, 14(1), 6–23.  Talò, C., Mannarini, T. & Rochira, A. Sense of Community and Community Participation: A Meta-Analytic Review. Soc Indic Res 117, 1–28 (2014). https://doi.org/10.1007/s11205-013-0347-2.  Talò, C. (2018). Community-based determinants of community engagement: A meta-analysis research. Social Indicators Research, 140(2), 571–596. https://doi.org/10.1007/s11205-017-1778-y.  Stewart K., Townley G. 2020. How Far Have we Come? An Integrative Review of the Current Literature on Sense of Community and Well-being. Journal of Community Psychology, (0), 1–24. https://doi.org/10.1002/ajcp.12456. |  |
| **#48** Figure 6 really does demonstrate the disparities in the numbers across the groups - so I really think  you should explain to the reader why there aren't comparable numbers in the groups, and why you felt it was statistically valid to have one group of only 2 individuals. | Groups were identified using a cluster analysis technique according to the three measures of engagement (i.e., duration of engagement, number of programmes attended, frequency of engagement). The cluster analysis is a quantitative technique that groups similar observations into clusters or categories based on the observed values of numerous variables for each individual (McIntosh et al., 2010). Specifically, this study applied the two-step cluster analysis that determined the number of groups based on the result of Hierarchical Cluster Analysis and the interpretability of each cluster. This approach is widely used and recommended for its rigour (Ibes, 2015; Song & Knaap, 2007). This information was included in the manuscript in section ‘Data Analysis’:  *To further understand how NPM unfolds, a cluster analysis was conducted to divide GUI members into relevant groups according to the frequency of engagement, duration of commitment, and number of programmes attended.*  McIntosh, A. M., Sharpe, M., & Lawrie, S. M. (2010). 9—Research methods, statistics and evidence-based practice. In E. C. Johnstone, D. C. Owens, S. M. Lawrie, A. M. McIntosh, & M. Sharpe (Eds.), Companion to Psychiatric Studies (Eighth Edition) (pp. 157–198). Churchill Livingstone. <https://doi.org/10.1016/B978-0-7020-3137-3.00009-7>.  Ibes, D. C. (2015). A multi-dimensional classification and equity analysis of an urban park system: A novel methodology and case study application. *Landscape and Urban Planning*, *137*, 122-137.  Song, Y., & Knaap, G. J. (2007). Quantitative classification of neighbourhoods: The neighbourhoods of new single-family homes in the Portland Metropolitan Area. *Journal of Urban Design*, *12*(1), 1-24. | Data Analysis section. |
| **#49** Pg. 19, line 54 - you talk about facilitators but don't mention them in any of the tables/ figures. Where are the facilitators in your sample. | GUI facilitators are long-time members of the organisation, that include all the GUI core members, and some of the long-term participants.  Focus group discussions covered both types of facilitators, but the survey only included facilitators who are not GUI core members. However, we cannot differentiate how many of the survey participants are the facilitators since we did not ask in the survey questionnaire to avoid potential confusion among the participants who might not be familiar with the term, facilitators.  In our survey sample, based on their duration of engagement, frequency, and the number of programs attended, some participants from group 2, groups 3, and 4 would probably have played roles in facilitation. For better clarity, we have included the table below.   |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | | **Stakeholders** | **Roles at GUI** | **Focus Group** | **Survey** | | GUI Core members | - Various roles at organization    (admin, finance, program    development etc)  - Facilitators | Yes (n=12) | No | | Long-term GUI participants/ Volunteers | - Participants of the programs offered at GUI  \*Some long-term members act as a facilitator | Yes (n=24) | Yes (n=104) | | Short-term GUI participants/ Volunteers | Participants of the programs offered at GUI | No | | See Results section: Duration of engagement, number of programmes and frequency. |
| **#68** I do think the authors could, given the type of research, provide additional explanation related to how impartiality and detachment from personal bias was ensured. The authors acknowledged the use of independent researchers to compare and validate the results; however, in a more general sense, I think it is important that the authors articulate how the discussions took place to ensure participants were not led to a particular answer. | Thanks to the reviewer for raising our awareness on this important point. We included further information of how the discussion groups took place and the measures set in place to avoid interviewer bias (see Method section ‘Focus Groups’:  *The participants, moderator, and assistant were seated around a rectangular table facing each other to enhance communication and rapport (Krueger and Casey, 2000). The beginning of each session was dedicated to build rapport to create a comfortable environment. Individuals were asked to introduce themselves and share her time of engagement with GUI. The questions were presented in a form of fluid discussion introducing basic information about the topic to help eliciting different answers that were taken in a more in-depth discussion. The moderator retained a relaxed and candid attitude to maintain human connection. In FGD there is always a risk of introducing interviewer bias, to mitigate this the moderator gave enough time to participants to reflect on their answers. The questions and probs were conducted to enact in-depth analysis instead of misleading participants into specific answers.* | Method section: Focus Groups. |
| **#71** The research goals I thought are well defined and researched using a robust and comprehensive method. The use of seven focus groups was thorough; however, there is a disproportionate number of female respondents versus male respondents for the survey. I do not believe that would effect the results, but the authors may want to dedicate a couple of sentences to acknowledge and address it. | There was a significant difference in gender in the sample size that included 75 female and 28 male respondents. We concord with the reviewer that this would not affect the results and it was confirmed by a median test that did not find statistically significant differences between the two groups according to all the variables measured. The only statistically significant difference was found in the variable self-efficacy p=0.041. This has been acknowledged in the manuscript. | See ‘Online surveys’ section. |
| **5GS** |  |  |
| **#5** It is unclear how the "5Gs" relate to psychological/social wellbeing impacts of nature-placemaking. | While our study is exploring the components that might influence psychological wellbeing in people participating in NPM activities at GUI, we are not conclusively claiming that the 5Gs have a direct impact on the health and wellbeing though this could be explored further. Instead, we are acknowledging that since the 5Gs constitutes a pedagogical framework used to guide the NPM programmes it could potentially have an impact in the way people connect with the natural environment. Possibly these values could also guide individuals in their pursue of creating a sense of community and appreciating the natural environment. |  |
| **#27** You need to explain why the 5Gs are so important and how they are imparted to volunteers/ participants. | The importance of the 5Gs and how they are imparted to volunteers have been explained and included in the methods section. | Methods section. |
| **Discussion** |  |  |
| **#50** I don't understand the statement on lines 58-60: 'people interacting in GUI NPM activities undergo a self-reflective process' - who exactly does this? If they are facilitators, is this part of their training? What training do facilitators have to undergo? | We have included the method section ‘facilitation process’ and we have provided explanation on how the NPM programmes are conducted.  Additionally, we have explained that facilitators do not undergo a specific training, but it is their long-term participation in NPM programmes what helps them to form their own facilitation style, nevertheless, they follow underlying guiding activities which are: 1) introduction; 2) presence with oneself; 3) immersion in the activity; 4) self-reflexion; and 5) community sharing. | Methods section. |
| **#51** Figure 7 is misleading. Why is C where it is on the diagram? Are you suggesting that there are minimum attendance rates? Should there be a D in the diagram because you had 4 groups? | Neither the diagram nor the discussion is suggesting that there should be a minimum of attendance rates. Instead, Figure 7 after corrections Figure 9 is depicting the NPM process at GUI as found in the data analysed.  The diagram is showing how the process of NPM unfolds in GUI in relationship with the role of facilitators. This information was abstracted from the triangulation of both the qualitative and quantitative results. Different steps were identified. For instance, a) Constant guidance and input of facilitators transferring the 5Gs mentality; b) Continuous interaction with facilitators 5G mentality internalised; and c). In each step there was a psychological marker observed (i.e., a) social cohesion; b) intrinsic motivation). It is important to clarify that the diagram is showing the overall process instead of the four groups identified in the quantitative analysis. |  |
| **#52** Pg. 20, lines 48-50: you do not mention in the analysis that new participants 'seek in-depth knowledge about environmental sustainability through direct interaction with nature' - where has this finding come from? | Please refer to case study section where this information has been included. |  |
| **#53** Pg. 21. Lines 1 - you need to provide more explanation of the statement 'volunteers are encouraged to reflect on the GUI principles': this information should be provided in the GUI case study section (alongside how the 5Gs are communicated to volunteers/ part of the facilitator training?). And this links to information you tell us on line 43 that 'ultimately the volunteers of this group become the facilitators and guides for those in Group 1'. This should be made much clearer earlier on in the paper. At the moment, it is not at all clear who is facilitating whom. | See answer to comment 50 and Methods section: Facilitation process. In this section we have provided further information of how the 5Gs are communicated during the NPM programmes. Additionally, we had clarified that long-term volunteers might become NPM facilitators. | Methods section. |
| **#54** Pg. 21. Line 9 - you talk about 'transference of the GUI values' which is making me nervous. Are you really claiming that all volunteers had none of these values before joining GUI? How can you separate their own values from GUI values? To claim transference is a bold statement. | By no means we are claiming that volunteers did not posses these values before GUI. However, since the 5Gs are very specific to the NPM activities performed at GUI the volunteers are exposed to an alternative way of connecting to nature and to a community. We have adjusted our statement to avoid confusion. |  |
| **#55** Pg. 21. Lines 20 and 22 - where do 'sense of restoration' and 'self-awareness' appear in your analysis? | In the qualitative findings we have included information related to sense or restoration and self-awareness (see subheading: Restoration and Self-awareness through nature connection). In our discussion we have elaborated on this finding in the section: Transferring intangible values through hands of experience. |  |
| **#56** Pg. 21. Line 52 - you talk about an 'alternative path' - alternative to what? | By this we are alluding to the alternative path towards environmental education that promotes direct contact and self-discovery with nature, instead of the current educative system that based on utilitarian perspectives of the nonhuman environment (Neo & Schneider-Mayerson, 2021) and offers limited opportunities to students to directly learn by interacting with the natural environment. This has been clarified in the manuscript.  Neo, X., & Schneider-Mayerson, M. (2021). Nature, disappeared: Anti-environmental values in Singapore’s history textbooks, 1984–2015. Environmental Education Research, 0(0), 1–18. https://doi.org/10.1080/13504622.2021.1968350. | Conclusions section first paragraph. |
| **#57** Pg. 22. Line 1 - what do you mean by 'appreciation of the natural environment offers new perspectives already recognised in some of the components envisioned in future knowledge systems'? This does not make sense. | We have removed this sentence from the manuscript and adjusted the section: Nature connection and psychological restoration. | Discussion section |
| **#58** Pg. 22 Line 18 - did you ask people about making decisions and overcoming difficulties in the research to be able to make this statement? | In the FGD participants expressed often to have achieved a high level of confidence helping them to make better decisions and overcome difficulties. These were some of the responses:  *“It kind of trained up my confidence as well to be a leader, in some ways. Pushing me out of my comfort zone to do things that I normally wouldn’t volunteer to do, to be resourceful when facing difficulties”* (FGD 5).  *“I was lost after graduating from poly and was insecure about it. I had confidence issues in the past, but things started to change since I came here. From “I think I can do it” to “I’ll do it”, I try my best to do things*” (FGD 6).  *“So actually, I pick up some skills, and then I'm able to, you know, do a little bit of drilling here and there. So, I think in that way it really helps me a lot also. So, it's sort of like a handyman at home, yeah. And I'm able to also er, help my neighbours. My friends as well, I can give advice. The mindset is to give you confidence. To bring, not skill, mindset back and confident back”* (FGD 1).  *“intrinsic motivation I guess. It’s really something inside that drives you to do whatever that you’re doing and I think the people here, they really demonstrate that as well. And I think that alone gives you a lot of courage and a lot of power to do things”* (FGD 4).  Additionally, the IMI scale was included to measure volunteers perceived improvement in making decisions and overcoming difficult situations. See our response to comment #44. |  |