**Peer Review and Communication History**

**MS Title**: It’s Easy to Maintain when the Changes are Small: Exploring Environmentally Motivated Dietary Changes from a Self-control Perspective

**Author Names**: Lara H. Wehbe, Kasia Banas, Esther K. Papies

**Submitted:** Dec 1, 2021

**Editor First Decision**: Revise & Resubmit

May 8, 2022

Dear Lara H. Wehbe,

I now have received two reviews of your manuscript, “It’s easy to maintain when the changes are small: Exploring sustainability motivated dietary changes from a self-control perspective,” from qualified researchers who, cumulatively, are experts in research on self-control generally and in qualitative methods including thematic analysis in particular. I also independently read the manuscript before consulting these reviews. I agree that your manuscript has important strengths and also that there are some issues that need to be addressed. I therefore encourage you to submit a revised version for further consideration at Collabra: Psychology.

The reviewers have provided highly informative comments that are essential for you to addresss as part of the revision process.

In addition, I ask that you please define the term “self-control,” as you intend it to be interpreted in this paper, given that the term sometimes has been used in different ways in different contexts, and given that the concept of self-control is featured prominently in the paper.

It also appears important for the manuscript to acknowledge that some of its questions to participants directly pertained to topics that relate to addressing the coactivation of incompatible responses. Accordingly, participants can be expected to write about these themes because they were asked to do so, rather than because these are themes that may emerge for them generally when thinking about reducing dairy intake.

In your resubmission, please include a document with a point-by-point response to both of the points I listed above and to each point raised by each reviewer, outlining each change made in your manuscript or providing a suitable rebuttal.

In summary, I think this is a promising manuscript, and I hope you will revise it for further consideration at Collabra: Psychology. I look forward to receiving your revision.

Please ensure that your revised files adhere to our author guidelines, and that the files are fully copyedited/proofed prior to upload. Please also ensure that all copyright permissions have been obtained. This is the last opportunity for major editing, therefore please fully check your file prior to re-submission.

If you have any questions or difficulties during this process, please contact the editorial office at editorialoffice@collabra.org.

We hope you can submit your revision within the next six weeks. If you cannot make this deadline, please let us know as early as possible.

Sincerely,

Antonio Freitas

# Reviewer 1

##### Rating scale questions

|  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| The study/studies in this manuscript have strong construct validity (good measures and/or manipulations of the constructs the authors wish to study). (Choose “Neutral” if this is not an empirical manuscript) |  |  |  | ✔ |  |
| The study/studies in this manuscript have strong statistical validity (appropriate statistical tests, assumptions are clear and reasonable, no statistical errors, appropriate statistical inferences, etc.). (Choose “Neutral” if this is not an empirical manuscript) |  | ✔ |  |  |  |
| The study/studies in this manuscript have strong internal validity (any causal claims or implications are well-justified, alternative explanations are thoroughly considered, etc.). (Choose “Neutral” if this is not an empirical manuscript, or no causal claims are made or even vaguely implied.) |  | ✔ |  |  |  |
| The study/studies in this manuscript have strong external validity (authors appropriately constrain their conclusions based on the limits of the generalizability of their findings to other contexts (including from lab to real world), other populations, other stimuli or measures, etc.) |  | ✔ |  |  |  |

##### Open response questions

### Please write your review here. The author(s) will see this review. Your identity will not be revealed to the authors unless you also include your name (i.e., sign your review) in this box. It is up to you whether to reveal your identity or not, either is fine.

In general, an interesting and useful piece of research that I enjoyed reading and found quite compelling. Most comments are about very small grammatical errors (this would certainly benefit from another read-through to ensure it reads clearly) but there are a few larger edits that the piece would benefit from. Firstly, the article is too long and provides far too much detail in many parts. It seems that most of the article is dedicated to listing (in text and tables) a huge number of themes, many of which may have come from just one participant. I think the article would benefit from shortening these sections and trying to focus on the most prevalent / interesting themes, instead. The discussion section also seemed too long and disjointed. Many of the points made really didn’t connect appropriately with the findings or with the literature presented in the introduction. For instance, there is a section specifically dedicated to the TTM, but this isn’t introduced as a model worth exploring and it is not explained why this is highlighted in this way. The applied implications relied on significant inferences, many of which didn’t stem from the findings. For instance, stating that it ‘shows the need to repeatedly expose the public’… (53) is simply not accurate. I think it should not take too much time or effort to greatly improve the piece by both shortening it and ensuring there are some common threads pulled through more clearly (e.g. the statements made very clearly in the conclusion).

* From the abstract: ‘What are sustainably motivated individuals’ experiences in their transition to a more plant-based diet, and can dietary changes be facilitated’. This wording is very confusing
* P3 to 4: definition refers to those who ‘strive to reduce…’, this seems an odd definition as the term ‘reducer’ implies the act of reducing so it seems the definition should in some way account for actually reducing and clarify on how ‘reduction’ is defined.
* P 4: In discussing motives, some of the most common motives are not included, including animal welfare / rights / protection and health
* In general, it is inconsistent to refer to ‘meat reducers’ but then refer to those who reduce meat and dairy. It is also not clear if this would refer to those who only reduce meat and/or those who only reduce dairy. And, with several mentions of ‘animal products’, not clear why eggs are not included in this.
* P 4: discuss filling gap in lit re ‘self-control’ but this is not mentioned as the research’s focus in the abstract
* Bottom of 4 discusses some motives but then the topic is reintroduced bottom of 5, should be combined for clarity
* Bottom of 4 – top of 5: Should not cite a qualitative study as evidence of the prevalence in a trend, i.e., proportion of meat reducers who are motivated by the environment.
* Bottom of 6: Extra space before Atkins
* The focus on those motivated on the environment does not seem justified in the text
* 10: There are some real issues with the wording in the survey questions. In the first survey question, you suggest that participants must be increasing their consumption of plant-based foods if they are reducing their meat and/or dairy consumption. However, this doesn’t follow as they could be eating more eggs or reducing meat and substituting with, for instance, cheese (as acknowledged, bottom 33). In addition, some questions say ‘meat/dairy’, while others say ‘meat and dairy’ and some just ‘meat’. There is also a typo in 11, ‘impacts other[s]’. These issues need to be acknowledged in the text and accounted for in the analysis.
* Question wording about how often people eat / plan to eat meat / dairy should be included.
* 14: ‘organized’
* 14: ‘reflexive thematic [analysis] using NVivo’
* 16: ‘a final refinement [of] the themes’
* Inconsistent use of Oxford comma throughout
* 19: ‘and action[s]’
* 19: ‘most participants’ who did not’ should not have an apostrophe
* 19: ‘as a central to’ should not have ‘a’
* 20: ‘concerned’ should not have a ‘d’ at the end, if you are editing grammatical errors for legibility, as suggested
* 24: ‘questioning [their] own beliefs’
* 24: ‘qualities, [or] taste’
* 25: Final quote in table is confusing with the reference to allergies; I wonder if there is another quote that could be used in its place?
* When discussing ‘good value’ re animal-derived meat, it would be worth mentioning perceived value, i.e. that these foods are culturally constructed as more valuable
* 29: ‘Conflict due over’ -> ‘Conflict due to’
* Note after tables about [] and … are not necessary
* 30: ‘avoided the confrontation’ ◊ ‘wanted to avoid the confrontation’
* 31: ‘Other people[‘s]’
* 31: Toxic masculinity in table but not referred to in text; I wonder if this is one point worth elaborating on more? (not essential just a suggestion)
* 32: Perceived inconvenience quote missing fullstop
* 33: Note after table not needed
* 33: ‘other[s] with similar dietary goals’
* 34-35: There is research that demonstrates repeated exposure increases the sense of enjoyment for different foods
* With the themes identified, it is not clear if these are a list of every single theme, even where it was only said once, and there was a lack of consistency in specificity. For instance, bottom of 39: ‘Support from vegans’; did others get support from vegetarians / flexeterians / etc? A bit of clarification on how something met the threshold for a theme (i.e. was just being mentioned once sufficient) and ensuring consistency in specificity would help. It is odd that in 3.3.1 (starting on p 40) you include n values but not before this and for consistency would make sense to do .
* 40: The layout of the ‘n=4’ makes it not clear what this refers to
* 40: ‘[and] accessibility and availability of ethical meat’
* 41: ‘most emphasises’ -> ‘most emphasised’
* 41: ‘non-push’, should this be ‘non-pushy’?
* 43-44: This section seems to not flow with the rest and I wonder if there is a way to (a) move the methods part into the methods section and (b) move the information about identity into another results section?
* 43-44: Can the table instead show comparisons between pre- and post-identity? The current information in the table seems less useful. The note under the table is also not necessary as this information is in the text.
* 44: ‘predominant environmental motives’ is awkward
* 44: ‘share in-depth’ ◊ Seems to be a word missing here. I also would not describe this as ‘in-depth’ due to the methodology
* The terminology from COM-B is used throughout so a bit more of an in-depth explanation of this in the beginning and the reasoning for choosing it as the primary framework would be useful
* 47: It seems that two of the reasons people’s self-identification might change is that they (a) don’t identify as strongly with the label as might vegetarians / vegans and (b) perhaps may have put this in the pre-screening in the hopes it would help them be included?
* 48: ‘a rewarding’ -> remove ‘a’
* 49: ‘identifies as [a] person’
* 50: first sentence missing fullstop
* 52: While it is true that some / many were reducing meat and dairy at the same time, it is not clear if one preceded the other or if they decided to reduce both at the same time, so the statements made here are not accurate without this information.
* 55: The statement about using a ‘wide-angle lens’ doesn’t align with earlier statements suggesting that this research provides in-depth information (the former rings more true)
* 55: Statements of the large sample size, for a survey, seem to oversell the actual sample size

# Reviewer 2

##### Rating scale questions

|  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| The study/studies in this manuscript have strong construct validity (good measures and/or manipulations of the constructs the authors wish to study). (Choose “Neutral” if this is not an empirical manuscript) |  |  |  | ✔ |  |
| The study/studies in this manuscript have strong statistical validity (appropriate statistical tests, assumptions are clear and reasonable, no statistical errors, appropriate statistical inferences, etc.). (Choose “Neutral” if this is not an empirical manuscript) |  |  | ✔ |  |  |
| The study/studies in this manuscript have strong internal validity (any causal claims or implications are well-justified, alternative explanations are thoroughly considered, etc.). (Choose “Neutral” if this is not an empirical manuscript, or no causal claims are made or even vaguely implied.) |  |  |  | ✔ |  |
| The study/studies in this manuscript have strong external validity (authors appropriately constrain their conclusions based on the limits of the generalizability of their findings to other contexts (including from lab to real world), other populations, other stimuli or measures, etc.) | ✔ |  |  |  |  |

##### Open response questions

### Please write your review here. The author(s) will see this review. Your identity will not be revealed to the authors unless you also include your name (i.e., sign your review) in this box. It is up to you whether to reveal your identity or not, either is fine.

Collabra Review

This is a well-written and comprehensively researched article. The authors conducted an online qualitative study of 80 people motivated by environmental concerns attempting to reduce their dairy and meat intake. The authors’ employ a reflexive thematic approach to explore the role of self-control, habits, identity, and social norms in participants’ attempts to reduce their intake of animal products.

In all, I am impressed by the authors’ analysis, including their use of open science practices for qualitative research. For example, it was useful to see where the authors had removed information from participants’ quotes. Moreover, I think it is important that the authors included a reflexive diary to emphasize their position with regard to the research question.

I have some minor comments that I believe, if addressed, will strengthen the manuscript. One theme that cuts across my comments is that there are several normative statements/generalizations that I think are not merited based on the findings from the study. I would encourage the authors to either include empirical support for these claims from other work or to simply remove these statements.

P1. Abstract:
Worth mentioning it is an online study.

Introduction:
p. 3- “Individual efforts in reducing meat and dairy foods could significantly help environmental and animal agriculture sustainability.”

* This is a normative statement and I would be curious if the authors have empirical data to support the claim that individual efforts can make a significant difference in agricultural sustainability, particularly as most people are not likely to voluntarily reduce their intake. This seems like a huge task on the production side that is not totally driven by (though certainly responsive to) consumption.
p. 7 - “little is known about the psychological experiences of meat and dairy reducers, and about the social and environmental factors influencing them (e.g., social norms, identity, availability).
* I wonder if you can set up some of the social and environmental factors as they make up 2 out of the 3 themes from the qual results. There is growing research on environmental factors related to dietary changes that it would be relevant to cite.
o Here are some intervention studies from the choice architecture/behavioral economics literature that I think reveal the importance of environmental alterations and changes in options:
♣ <https://www.cambridge.org/core/journals/british-journal-of-nutrition/article/nudging-consumers-towards-healthier-choices-a-systematic-review-of-positional-influences-on-food-choice/3D7DE450C7FEB6844E79D773C92A8B14>
♣ <https://academic.oup.com/eurpub/article/27/5/912/3888821?login=true>
♣ <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-3272-x>
p. 8 - “Here, we explored the experiences of individuals in this transition, to identify ways to better support them and enable a wider societal shift toward more sustainable diets.”
* It seems outside of the scope of the study to “enable a societal shift” given that you’re examining individual behaviors of 80 self-selected participants. ϑ
p. 9 - “We held question creation meetings using the research aims, questions, and relevant theories on behavioural change (Greaves et al., 2017; Kwasnicka et al., 2016) and the integrative model of self-control (Kotabe & Hofmann, 2015). We ensured an open-ended format (Korstjens & Moser, 2018), and piloted the survey for comprehension (n = 5).”
* Very cool methods! Like the open science format
* Can you talk about why you chose an online design? It seems like such a design would hinder elaboration compared to interviews (as you mention in the limitations).

Table 4 is excellent — very helpful.

Credibility strategies—useful and important to include.

In the Findings section, can you discuss somewhere how long the average response was (i.e., measured by word length/characters). That’s going to be very different from qual interviews. I’m honestly surprised you got any good quality data from these open-ended responses (based on my experience). And were there patterns of missingness? I’m not asking to quantify, per se, but this seems interesting. Or patterns in response more broadly?

Is there a reason you include the participant’s gender following each quote/description? This seems like it is unnecessarily calling attention to their gender and I don’t think I saw a rationale—forgive me if I missed something. My suggestion would be to drop this as it doesn’t seem relevant and draws attention to a social category without a rationale.

p. 18. “For instance, they continuously and increasingly sought knowledge from the media, the news or from their readings (e.g., P20, F).

* This is a notable finding. It seems like this is also part of the “habit maintenance behaviors” (i.e., the need to continue to maintain intrinsic motivation).

Table 8, p 25: “conflict from too much choice” and “decision conflict”

* It really seems like the behavioral economics literature would be relevant to cite. See above for some of the articles that summarize this work.
* You mention dual process theories later, and it could be relevant to mention earlier.

p. 27 – The finding that diet group identify changed from pre-screening to the study was interesting. Any sense from participants why that might be? Good to mention either way.

P. 35 – Based on reading the major themes, “wishes”/interventions, and descriptions of policy interventions (e.g., tax policy), was interesting and not discussed later.

p. 38 On the topic of changing motives, is there research showing that people use choice-supportive psychological mechanisms to maintain habits/increase intrinsic motivation. It seems like the number of motives increased overall. This is an interesting finding on its own.

p. 41 – “Our research shows the need to repeatedly expose the public to reliable information about the environment, to increase their knowledge of the role of food in climate change.”
“and that increasing the public’s awareness may progressively increase their willingness to reduce or engage in further reduction.”

* Your research did not show this given your self-selected sample and the limitations of qualitative methods. Your research examined the lived experiences of those who are actively trying to reduce their meat/dairy consumption for environmental reasons.

Strengths and Limitations.
-p 42, I would spend more time discussing the relative strengths/weaknesses of an online qual survey. And I would spend some time talking about whether this group is representative and not. (To be clear, as a qual researcher myself, I don’t think your study has to be representative. You are interested in understanding the experiences of those who select to reduce their animal product consumption and so the sample is explicitly not representative). But, it is worth speculating how you might predict the response from the general public might be different based on your findings.

Considering the number of minor comments I included, I will defer to the editor as to which comments seem the most relevant to address.

Thank you for sharing your work with me! This is an impressive manuscript! I wish you the best in your research!

**Author Response**
Sep 8, 2022

Xth August 2022

Dear Professor **Freitas**

Thank you very much for your editorial letter with the invitation to submit a major revision of our manuscript “It’s easy to maintain when the changes are small: Exploring sustainability motivated dietary changes from a self-control perspective”. We would also like to thank the reviewers for their very insightful comments and helpful suggestions. We have revised the manuscript in accordance with these suggestions, and detailed our revisions point by point below. We feel like these revisions have greatly improved the quality of our manuscript and hope you approve of them.

We look forward to hearing from you.

Sincerely,

Authors

**Editor’s comments**

We would like to thank you for your comments and have addressed each of them below.

**1.** *I ask that you please define the term “self-control,” as you intend it to be interpreted in this paper, given that the term sometimes has been used in different ways in different contexts, and given that the concept of self-control is featured prominently in the paper.*

We have now added:

“Self-control has been defined as “the ability to restrain impulses in the service of greater goals and priorities” (Milyavskaya & Inzlicht, 2017, p. 1). While this has often been understood as requiring effort, it has also been suggested that self-control can be effortless, for example when adaptive habits are developed and automatically inhibit desires (Adriaanse et al., 2014)” (Section 1.2, p.5)

**2.** *It also appears important for the manuscript to acknowledge that some of its questions to participants directly pertained to topics that relate to addressing the coactivation of incompatible responses. Accordingly, participants can be expected to write about these themes because they were asked to do so, rather than because these are themes that may emerge for them generally when thinking about reducing dairy intake.*

“Secondly, and as self-control theories guided our question generation, we acknowledge that our findings are limited in that participants were guided by the concepts introduced in the survey questions. In other words, it is possible that participants’ responses referenced constructs such as habits and social norms because we asked about them, and that other aspects of the reduction process were less likely to be shared as a result. Future research may address this issue with either more open questions, or quantitative measures.” (Section 4.4, p.53)

**Reviewer 1**

*In general, an interesting and useful piece of research that I enjoyed reading and found quite compelling. Most comments are about very small grammatical errors (this would certainly benefit from another read-through to ensure it reads clearly) but there are a few larger edits that the piece would benefit from. Firstly, the article is too long and provides far too much detail in many parts. It seems that most of the article is dedicated to listing (in text and tables) a huge number of themes, many of which may have come from just one participant. I think the article would benefit from shortening these sections and trying to focus on the most prevalent / interesting themes, instead. The discussion section also seemed too long and disjointed. Many of the points made really didn’t connect appropriately with the findings or with the literature presented in the introduction. For instance, there is a section specifically dedicated to the TTM, but this isn’t introduced as a model worth exploring and it is not explained why this is highlighted in this way. The applied implications relied on significant inferences, many of which didn’t stem from the findings. For instance, stating that it ‘shows the need to repeatedly expose the public’… (53) is simply not accurate. I think it should not take too much time or effort to greatly improve the piece by both shortening it and ensuring there are some common threads pulled through more clearly (e.g. the statements made very clearly in the conclusion).*

We would like to thank Reviewer 1 for their detailed assessment and taking the time to make very useful suggestion to improve our manuscript. We have addressed each of them below.

**1. Abstract**

* 1. *From the abstract: ‘What are sustainably motivated individuals’ experiences in their transition to a more plant-based diet, and can dietary changes be facilitated’.* *This wording is very confusing.*
	2. *P 4:* *discuss filling gap in lit re ‘self-control’ but this is not mentioned as the research’s focus in the abstract.*

To address both comments, we have now adjusted the abstract as follows:

“Here, we examine the experiences of environmentally motivated meat and dairy reducers. Specifically, we examine whether shifting towards and maintaining sustainable eating behaviours requires self-control.” (p.1)

We have now changed the wording to “environmentally motivated” throughout the manuscript, including in the title.

**2. Introduction**

* 1. *P3 to 4: definition refers to those who ‘strive to reduce…’, this seems an odd definition as the term ‘reducer’ implies the act of reducing so it seems* *the definition should in some way account for actually reducing and* *clarify on how ‘reduction’ is defined.*

We realise that “trying to reduce” may not always be the same as “reducing”, but we are interested in successful and less successful reduction attempts. For ease of writing, we have decided to keep the term “reducers”, but have now clarified our definition as follows:

“Wedefine meat and dairy reducers as individuals who are actively trying to reduce their meat and dairy intake, even though we acknowledge that they may not always be successful.” (section 1.1, p.2)

* 1.
1. *P4:* *In discussing motives, some of the most common motives are not included, including animal welfare / rights / protection and health.*
2. *Bottom of 4 discusses some motives but then the topic is reintroduced bottom of 5,*

 *should be combined for clarity.*

We agree that both paragraphs discussed common themes (e.g., motives), and were not clearly separated. To address this, we have now restructured both paragraphs as follows:

* The second paragraph on page 4 now focuses solely on motives, including our rationale for selecting environmentally motivated individuals for the current study.
* The paragraph on page 5 now focuses solely on the theme of the barriers and enablers for reducing meat and dairy from the literature.
	1. *The focus on those motivated on the environment does not seem justified in the text.*

We have rewritten our argument more explicitly the following justification:

“Given the climate emergency, we predict that in the future, the group of consumers trying to reduce their meat and dairy consumption for environmental reasons will increase (Bastian & Loughnan, 2017; Mathur et al., 2020). Therefore, the current article focuses on exploring the experiences of environmentally motivated meat and/or dairy reducers.” (Section 1.1, p.3/4)

* 1. *In general, it is* *inconsistent to refer to ‘meat reducers’ but then refer to those who reduce meat and dairy.*

We have now replaced: ‘People who reduce their meat and dairy intake’ with ‘meat and dairy reducers’ or meat and/or dairy reducers’ where relevant.

* 1. *Bottom of 4 – top of 5: Should not cite a qualitative study as evidence of the prevalence in a trend, i.e., proportion of meat reducers who are motivated by the environment.*

To address this comment, we now deleted this sentence.

* 1. *The terminology from COM-B is used throughout so a bit more of an in-depth explanation of this in the beginning and the reasoning for choosing it as the primary framework would be useful.*

We would like to highlight that the COM-B model was not a primary framework for this research – apologies if our write-up caused any confusion. To clarify, we used a multitude of theories to support our research approach:

* The COM-B model was used to detect the gap in the literature relating to the barriers and enablers of the reduction process (Graça et al., 2019).
* Self-control theories and behaviour maintenance models guided our process to generate the survey questions and to link our findings with those models.

We have now rewritten Section 1.2 to reflect this more clearly and make self-control the primary focus of the study.

**3. Methods**

* 1. *10: There are some real issues with the wording in the survey questions. In the first survey question, you suggest that participants must be increasing their consumption of plant-based foods if they are reducing their meat and/or dairy consumption. However, this doesn’t follow as they could be eating more eggs or reducing meat and substituting with, for instance, cheese (as acknowledged, bottom 33). In addition, some questions say ‘meat/dairy’, while others say ‘meat and dairy’ and some just ‘meat’. There is also a typo in 11, ‘impacts other[s]’. These issues need to be acknowledged in the text and accounted for in the analysis.*

We want to thank Reviewer 1 for bringing this to our attention. We apologise that we have uploaded an older version of the survey that does not match the survey that was actually shown to participants on Qualtrics during the study. We have now added the correct most up-to-date version of the survey to the OSF repository (<https://osf.io/bhvyw/?view_only=002d533a053448c1b739da13400447ce>)

* 1. *Question wording about how often people eat / plan to eat meat / dairy should be included.*

We have now added the exact wording of the questions in text.

**4. Findings**

* 1. *p25: Final quote in table is confusing with the reference to allergies; I wonder if there is another quote that could be used in its place?*

We now replaced this with the following quote:

“With milk, do you choose almond or oat etc? Then there's the fact that I'm told a lot of the dairy alternatives are just as bad, if not worse for the environment than what meat is (P32, F)” (p. 25)

* 1. *When discussing ‘good value’ re animal-derived meat, it would be worth mentioning perceived value, i.e. that these foods are culturally constructed as more valuable.*

To address this, we now have deleted this discussion.

* 1. *31: Toxic masculinity in table but not referred to in text; I wonder if this is one point worth elaborating on more? (not essential just a suggestion).*

We now have added the following sentence in text:

“For others, however, this was more challenging: for example, a male participant reported facing stereotypes around men for trying to reduce the consumption of foods commonly associated with masculinity (e.g., P40, M).” (Section 3.2.2, p. 34)

We have also now added a sentence in the discussion to highlight the need for further research looking into gender differences:

“Additionally, the process of reducing meat intake may differ by gender; for example, social expectations around masculinity may deter men in their behaviour change process. Indeed, recent research has suggested that gender conformity is linked to meat consumption frequencies (Rosenfeld & Tomiyama, 2021). Understanding gender differences in how social influences impact people’s meat and dairy consumptions can help strengthen efforts to improve the sustainability of eating patterns.” (Section 4.4.2, p. 59)

* 1. *With the themes identified, it is not clear if these are a list of every single theme,*

*even where it was only said once, and there was a lack of consistency in specificity. For instance, bottom of 39: ‘Support from vegans’; did others get support from vegetarians / flexeterians / etc?*

To address this comment, we changed this to:

“Those surrounded by others with previous experience of reducing their meat and dairy intake, for instance, vegans and vegetarians, found their support helpful.” (Section 3.3.2, p. 38)

We also added the following:

“In each subtheme, tables include extracts from participants’ experiences alongside a higher-order descriptive pattern that, together, provide a comprehensive overview of the theme at hand.” (Section 3, p. 17)

* 1. *A bit of clarification on how something met the threshold for a theme (i.e. was just being mentioned once sufficient) and ensuring consistency in specificity would help. It seems that most of the article is dedicated to listing (in text and tables) a huge number of themes, many of which may have come from just one participant.*

We used reflexive thematic analysis in this study, which involves detecting patterns within the data – rather than listing everything that is mentioned as a separate theme. In addition, this analysis method highlights deviant cases to include different perspectives. This approach allows for an unbiased immersion in participants’ experiences in the analysis process.

To make this more explicit for readers with a quantitative background, we have added the following in the Method section:

“While there are**no set rules** as to how many quotes should be used and from how many participants, the focus is on detecting themes that are reflected across the data (Eldh et al., 2020; Sandelowski, 1994).” (Section 2.4.1, p. 16)

* 1. *I think the article would benefit from shortening these sections and trying to focus on the most prevalent / interesting themes, instead.*

We have identified a few sections where shortening was possible, including section 3.1.1 as the theme of flexibility is repeated in section 3.3.1

In subtheme 3.1.1: we took out ‘Sometimes, identifying with flexitarians allowed for flexibility in their dietary choices and goals (e.g., P76, F).’ and the related quote on the positive aspect of flexitarian identification.

We also understand Reviewer 1’s concerns about the length of the manuscript. However, given that this study is qualitative in nature and given the diverse experiences reported, taking out any additional information could compromise the quality of our work and bias our findings. Nonetheless, we have taken Reviewer 1’s comment seriously by restructuring and shortening some parts of the discussion that we will list in later parts of this letter (point **5.1** and **5.2**).

* 1. *40: It is odd that in 3.3.1 (starting on p 40) you include n values but not before this and for consistency would make sense to do. The layout of the ‘n=4’ makes it not clear what this refers to.*

It is common practice in qualitative research to add counts of the themes participants’ mention as a useful tool for thematic analysis to generate patterns within the data (Sandelowski, 2001). Not only does providing counts play a role in the analysis and the process of generating patterns, but also, it is useful for the reader, for example, to have a sense of the most common desired strategies and the ones infrequently mentioned.

The information justifying our use of thematic count was written as a note in Table 5. We now restructure this section as follows:

* We now added “Question 13 asks for participants’ suggestions about what they, or others, could do to make their dietary transition easier and more enjoyable. The responses to this question were gathered into one subtheme (3.3.3) where we included counts of participants mentioning each contextual strategy. Although generating meaning from the data partly depends on more comprehensive patterns (Sandelowski, 2001), we believe that displaying the counts for this subtheme will provide a comprehensive overview for the reader of what lay people think could help them in their reduction process.” (Section 2.1, p. 8)
* We now added a note under Table 13 “*Note.* Some of the suggestions mentioned by participants were somewhat similar to the strategies listed in subthemes 3.3.1 and 3.3.2. To avoid repetition, we only evidenced participants’ extracts in this table if they were not previously mentioned.” (Section 3.3.3, p. 42)
	1. *43-44: This section seems to not flow with the rest and I wonder if there is a way to (a) move the methods part into the methods section and (b) move the information about identity into another results section?*

This is a great suggestion. We now have moved “We conducted an additional exploratory analysis...” to the end of the data analysis section in the methods (Section 2.4, p. 16).

* 1. *The note under the table is also not necessary as this information is in the text.*

We have now deleted the repetitive information below the table.

1. *43-44: Can the table instead show comparisons between pre- and post-identity? The current information in the table seems less useful.*
2. *47: It seems that two of the reasons people’s self-identification might change is that*

*they (a) don’t identify as strongly with the label as might vegetarians / vegans and (b) perhaps may have put this in the pre-screening in the hopes it would help them be included?*

We would like to thank Reviewer 1 for their comments. We have addressed both these comments:

* In relation to the first comment: we believe that the post-hoc analysis that is of great value to the literature on meat and dairy reducers. As research in this field is on the rise, one difficulty researchers face is the ability to quantify the number of reducers within the wider population. It might be due to the novelty of this topic. We had suggested that there might be discrepancies between how researchers and lay people use dietary labels and that this is a potential area for future research, to explore people’s understanding and use of the various dietary labels. We believe our table does evidence the drop in numbers of participants between the pre-screening and the main study (pre- and post- identity), as suggested by Reviewer 1.
* To address the third comment, we now have added in text moved the table to a supplementary material, rewritten the paragraph with better clarity into the main text:
* “For instance, 17 participants who self-identified as omnivores or flexitarian in the pre-screening study later chose not to identify with any dietary group. Similarly, 43 participants who identified as omnivore or flexitarian in the main study reported that they would not choose these labels to identify themselves in social settings, despite choosing an appropriate label (e.g., “*To be honest, I'd never heard of Flexitarian until now. But I guess I am flexitarian then.”* P68).” (Section 3.4, p. 43)

“All participants mentioned the importance of being flexible with their diets. When given the opportunity to express their dietary identity openly through open-ended questions, some of the self-reported omnivores and flexitarians deviated from their previous dietary identification responses. They reported instead that they preferred not using any label, possibly because this better depicts how they present themselves in their daily lives (e.g., “*I just see myself as a person who eats meat. I am unsure what a flexitarian is*.”) or because the pre-screening question on diets was multiple choice, whereas the question in the main study allowed for open responses.” (Section 3.4, p. 43)

* “These findings could be important to consider in future studies. As lay people’s representations of how they identify themselves may differ from that of researchers, researchers interested in the behaviour of reducing meat and dairy intake should consider not recruiting participants using labels such as “flexitarian”, but rather by focusing on the behaviour of reducing. For further details on this exploratory analysis, see OSF.” (Section 3.4, p. 43).

**5. Discussion**

* 1. *The discussion section also seemed too long and disjointed. Many of the points made really didn’t connect appropriately with the findings or with the literature presented in the introduction. For instance, there is a section specifically dedicated to the TTM, but this isn’t introduced as a model worth exploring and it is not explained why this is highlighted in this way.*

To avoid misleading readers that TTM and COM-B models are central to our research, we now have addressed this as follows, we have clarified the discussion structure such that now:

* Section 4.1:

We have now deleted the communication strategies implication.

* Section 4.2.4:

To shorten the Discussion, we have now removed the “Changing motives for meat and dairy reduction” section.

* Section 4.3:
* We have simplified our argument in section 4.3.1 by restructuring the content to highlight the complexity of the behaviour addressed.
* We have now deleted section 4.3.2
* Section 4.4: We also carefully revisited the Discussion section to ensure that the structure is clear, and paragraphs follow each other naturally.
	1. *The applied implications relied on significant inferences, many of which didn’t stem from the findings. For instance, stating that it ‘shows the need to repeatedly expose the public’… (53) is simply not accurate.*

We now have moderated these claims and clarified the section (Section 4.4.1, p. 50)

* 1. *34-35: There is research that demonstrates repeated exposure increases the sense of enjoyment for different foods.*

We want to thank Reviewer 1 for their suggestion. Although we see the value of mentioning research on repeated exposure to foods and the causal relationship with increased enjoyment of plant-based foods, this was not consistently observed in our data. We therefore decided against including a reference to this in the paper.

* 1. *44:* *‘predominant environmental motives’ is awkward.*

We have now rephrased the sentence as follows:

“This study was designed to explore the experiences of environmentally motivated meat and dairy reducers from a self-control perspective, ...” (top of p. 48)

* 1.
1. *44: ‘share in-depth’* ◊ *Seems to be a word missing here. I also would not describe this as ‘in-depth’ due to the methodology.*
2. *55: The statement about using a ‘wide-angle lens’ doesn’t align with earlier*

*statements suggesting that this research provides in-depth information (the former rings more true).*

We thank Reviewer 1 for noting the missing word. To address these comments, we have now:

* Deleted ‘that allowed participants to share in-depth’
* Added in the methods section a sentence that justifies our use of online surveys, as an under-utilised and beneficial tool for qualitative research, which can indeed provide a wide-angle lens view of an issue (Braun et al., 2020). (p.11)
	1. *52: While it is true that some / many were reducing meat and dairy at the same time, it is not clear if one preceded the other or if they decided to reduce both at the same time, so the statements made here are not accurate without this information.*

We do not have such information for all participants. Therefore, to address this comment, we have now deleted:

“as most participants reported reducing both meat and dairy intake at the same time, and did not necessarily follow the sequence of a “food hierarchy” proposed by Grassian (2020)”

* 1. *55: Statements of the large sample size, for a survey, seem to oversell the actual sample size.*

We have deleted this sentence.

**6. Typography/Grammatical mistakes**

* 1. *14: ‘organized’*

*14: ‘reflexive thematic [analysis] using NVivo’*

*16: ‘a final refinement [of] the themes’*

*Inconsistent use of Oxford comma throughout*

*19: ‘and action[s]’*

*19: ‘most participants’ who did not’ should not have an apostrophe*

*19: ‘as a central to’ should not have ‘a’*

*20: ‘concerned’ should not have a ‘d’ at the end, if you are editing grammatical errors for legibility, as suggested*

*24: ‘questioning [their] own beliefs’*

*24: ‘qualities, [or] taste’*

*29: ‘Conflict due over’ -> ‘Conflict due to’*

*30: ‘avoided the confrontation’ ◊ ‘wanted to avoid the confrontation’*

*31: ‘Other people[‘s]’*

*32: Perceived inconvenience quote missing fullstop.*

*33: ‘other[s] with similar dietary goals’*

*40: ‘[and] accessibility and availability of ethical meat’*

*41: ‘most emphasises’ -> ‘most emphasised’*

41: ‘non-push’, should this be ‘non-pushy’?

*48: ‘a rewarding’ -> remove ‘a’*

*49: ‘identifies as [a] person’*

*50: first sentence missing fullstop.*

We want to thank Reviewer 1 for their detailed and careful attention to our manuscript and for spotting grammatical and typing mistakes. We have corrected the mistakes listed above and carefully revisited the manuscript again to add further corrections where needed.

* 1. *Note after tables about [] and … are not necessary*

 *33: Note after table not needed*

We deleted the notes below the tables, and now added these annotations once at the start of the findings section.

Again, we thank Reviewer 1 for their constructive insights and very helpful suggestions.

**Reviewer 2**

*This is a well-written and comprehensively researched article. The authors conducted an online qualitative study of 80 people motivated by environmental concerns attempting to reduce their dairy and meat intake. The authors’ employ a reflexive thematic approach to explore the role of self-control, habits, identity, and social norms in participants’ attempts to reduce their intake of animal products.*

*In all, I am impressed by the authors’ analysis, including their use of open science practices for qualitative research. For example, it was useful to see where the authors had removed information from participants’ quotes. Moreover, I think it is important that the authors included a reflexive diary to emphasize their position with regard to the research question.*

*I have some minor comments that I believe, if addressed, will strengthen the manuscript. One theme that cuts across my comments is that there are several normative statements/generalizations that I think are not merited based on the findings from the study. I would encourage the authors to either include empirical support for these claims from other work or to simply remove these statements.*

We would like to thank Reviewer 2 for their positive comments on the usefulness of our research and for taking their time to provide insightful suggestions on how to improve the manuscript.

**1. Abstract:**

* 1. *Worth mentioning it is an online study.*

We have now added the following sentence in the Abstract:

“We conducted a pre-registered qualitative online study surveying 80 participants to explore their experiences of reduction.” (p. 1)

**2. Introduction**

* 1. *p. 3- “Individual efforts in reducing meat and dairy foods could significantly help environmental and animal agriculture sustainability.”*

*This is a normative statement, and I would be curious if the authors have empirical data to support the claim that individual efforts can make a significant difference in agricultural sustainability, particularly as most people are not likely to voluntarily reduce their intake. This seems like a huge task on the production side that is not totally driven by (though certainly responsive to) consumption.*

To address these comments, we have now:

* deleted ‘and animal agriculture’.
* referenced a report from Nature signalling that individual dietary changes can indeed help reduce greenhouse gas emissions.

Schiermeier, Q. (2019). Eat less meat: UN climate-change report calls for change to human diet. *Nature*, *572*(7769), 291–292. https://doi.org/10.1038/d41586-019-02409-7

* 1. *p. 7 - “little is known about the psychological experiences of meat and dairy reducers, and about the social and environmental factors influencing them (e.g., social norms, identity, availability).*

*I wonder if you can set up some of the social and environmental factors as they make up 2 out of the 3 themes from the qual results. There is growing research on environmental factors related to dietary changes that it would be relevant to cite.
o Here are some intervention studies from the choice architecture/behavioral economics literature that I think reveal the importance of environmental alterations and changes in options:
♣*[*https://www.cambridge.org/core/journals/british-journal-of-nutrition/article/nudging-consumers-towards-healthier-choices-a-systematic-review-of-positional-influences-on-food-choice/3D7DE450C7FEB6844E79D773C92A8B14*](https://www.cambridge.org/core/journals/british-journal-of-nutrition/article/nudging-consumers-towards-healthier-choices-a-systematic-review-of-positional-influences-on-food-choice/3D7DE450C7FEB6844E79D773C92A8B14) *♣*[*https://academic.oup.com/eurpub/article/27/5/912/3888821?login=true*](https://academic.oup.com/eurpub/article/27/5/912/3888821?login=true) *♣*[*https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-3272-x*](https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-3272-x)

We have included these useful articles as follows:

“Similarly, environmental factors such as visibility, proximity, and availability of foods, can strongly shape choices. A review of 15 articles on nudging consumers’ food choices shows the promising effect of making changes to the food environment on choice without depriving consumers of choices (Bucher et al., 2016). Other research showed similar effects of nudging on increasing fruit and vegetable intake (Broers et al., 2017) and healthier diets and nutritional choices (Arno & Thomas, 2016).” (Section 1.1, p4/5)

* 1. *p. 8 - “Here, we explored the experiences of individuals in this transition, to identify ways to better support them and enable a wider societal shift toward more sustainable diets.”*

*It seems outside of the scope of the study to “enable a societal shift” given that you’re examining individual behaviors of 80 self-selected participants.*

We have now removed this statement.

* 1. *You mention dual process theories later, and it could be relevant to mention earlier.*

We have now added the following:

“Inhibiting habits and food temptations typically requires self-control (Adriaanse et al., 2014; van’t Riet et al., 2011; Wood & Neal, 2007), as also suggested by dual-process theories (Hofmann et al., 2008).”

**2.5** *Moreover, I think it is important that the authors included a reflexive diary to emphasize their position with regard to the research question.*

All documents of the analysis process, alongside the reflexive diary, are found on the OSF repository (see [OSF](https://osf.io/3huab)) rather than on the pre-registration, which we anonymised for the purpose of the manuscript submission.

**3. Methods**

* 1. *p. 9 - “We held question creation meetings using the research aims, questions, and relevant theories on behavioural change (Greaves et al., 2017; Kwasnicka et al., 2016) and the integrative model of self-control (Kotabe & Hofmann, 2015). We ensured an open-ended format (Korstjens & Moser, 2018), and piloted the survey for comprehension (n = 5).”*
* *Very cool methods! Like the open science format*
* *Can you talk about why you chose an online design? It seems like such a design would hinder elaboration compared to interviews (as you mention in the limitations).*

We want to thank Reviewer 2 for their positive feedback on our use of Open Science. We addressed the comment on highlighting our choice of online designs by now adding the following sentence in section 2.1:

“A key advantage of online survey methods is that it allows for potentially rich data from a broad representation of individuals and experiences (Braun et al., 2020).” (Section 2, p. 8)

* 1. *Table 4 is excellent — very helpful. Credibility strategies—useful and important to include.*

We want to thank Reviewer 2 for their positive appraisal of our methods.

**4. Findings**

* 1. *In the Findings section, can you discuss somewhere how long the average response was (i.e., measured by word length/characters). That’s going to be very different from qual interviews. I’m honestly surprised you got any good quality data from these open-ended responses (based on my experience). And were there patterns of missingness? I’m not asking to quantify, per se, but this seems interesting. Or patterns in response more broadly?*

We have added the following sentence:

“Participants’ responses varied across questions and ranged between 14 to 236 words per response, with an average of 73 words per response and no missing data across responses.” (p.19)

* 1. *8. Is there a reason you include the participant’s gender following each quote/description? This seems like it is unnecessarily calling attention to their gender and I don’t think I saw a rationale—forgive me if I missed something. My suggestion would be to drop this as it doesn’t seem relevant and draws attention to a social category without a rationale.*

After deliberation, we would advocate that this information adds depth to the illustrative purpose of our chosen quotes. For example, some challenges were particular to our female participants (i.e., craving of meat during pregnancy and on their period), while others were particular to our male participants. In other instances, the challenges were paralleled across gender. While we cannot generate patterns nor generalise any of these findings, we do see value in keeping this information in. We have now added the following sentence:

“Following each quote, we provide participants’ self-reported gender to add depth to the illustrative purpose of our chosen quotes.”

* 1. *p. 18. “For instance, they continuously and increasingly sought knowledge from the media, the news or from their readings (e.g., P20, F).*

*This is a notable finding. It seems like this is also part of the “habit maintenance behaviors” (i.e., the need to continue to maintain intrinsic motivation).*

We addressed this comment as follows:

* We now have added ‘Most participants reported continuously seeking out information from the media. This strategy fuelled the maintenance of the reduction behaviour.’ (p. 50)
	1. *Table 8, p 25: “conflict from too much choice” and “decision conflict”*
* *It really seems like the behavioral economics literature would be relevant to cite. See above for some of the articles that summarize this work.*
* *P. 35 – Based on reading the major themes, “wishes”/interventions, and descriptions of policy interventions (e.g., tax policy), was interesting and not discussed later.*

We have added the references that Reviewer 2 have mentioned above (point 3) in the introduction. In the discussion section 4.4.1, we now added:

‘A greater focus of intervention research on the environment and choice architecture (Arno & Thomas, 2016; Broers et al., 2017; Bucher et al., 2016) could help alleviate the decision conflicts observed in our study. Indeed, participants suggested changes in availability and pricing that could help reduce the effort needed for reducing meat and/or dairy intake. Participants also found choosing from many options stressful, task as they held many motives and considerations that needed to be balanced (e.g., healthy, sustainable, and tasty). Again, changes in food policy, for example affecting taxation, subsidies, and food procurement in the public sector, could support environmentally motivated dietary changes by increasing access to tasty, healthy, and sustainable options.’ (Section 4.4.1, p. 51)

* 1. *p. 27 – The finding that diet group identify changed from pre-screening to the study was interesting. Any sense from participants why that might be? Good to mention either way.*

We now included changes within the paragraph as shown on p. 8 of this letter.

* 1. *p. 38 On the topic of changing motives, is there research showing that people use choice-supportive psychological mechanisms to maintain habits/increase intrinsic motivation. It seems like the number of motives increased overall. This is an interesting finding on its own.*

This is an interesting suggestion. However, given our current data, we could only speculate on this, and have decided not to do so because of length considerations.

1. *p. 41 – “Our research shows the need to repeatedly expose the public to reliable information about the environment, to increase their knowledge of the role of food in climate change.”
“and that increasing the public’s awareness may progressively increase their willingness to reduce or engage in further reduction.”*
2. *Your research did not show this given your self-selected sample and the limitations of qualitative methods. Your research examined the lived experiences of those who are actively trying to reduce their meat/dairy consumption for environmental reasons.*

To address this comment, we now changed the sentence to:

“Our research suggests that it may be useful to repeatedly expose the public to reliable information about the role of food in climate change.” (Section 4.4.1, p. 50)

**5. Strengths and Limitations.**

* 1. *p 42, I would spend more time discussing the relative strengths/weaknesses of an online qual survey. And I would spend some time talking about whether this group is representative and not. (To be clear, as a qual researcher myself, I don’t think your study has to be representative. You are interested in understanding the experiences of those who select to reduce their animal product consumption and so the sample is explicitly not representative). But, it is worth speculating how you might predict the response from the general public might be different based on your findings.*

We would like to thank Reviewer 2 for their insights. We have now rewritten the strength and limitation section adding the suggestions above (see section 4.4, p. 52/53)

*Considering the number of minor comments I included, I will defer to the editor as to which comments seem the most relevant to address. Thank you for sharing your work with me! This is an impressive manuscript! I wish you the best in your research!*

We thank Reviewer 2 again for all of their constructive suggestions and improvements to the manuscript.

**Editor Final Decision:** Accept

Sep 23, 2022

Dear Lara H. Wehbe,

I have now had a chance to read over your manuscript “It’s easy to maintain when the changes are small: Exploring environmentally motivated dietary changes from a self-control perspective.”, along with your thorough cover letter describing the changes you made. Thank you for your high degree responsiveness to the concerns that the reviewers and I raised. I am happy to say that your paper is now officially accepted for publication in Collabra: Psychology. Congratulations on this excellent work, I think it will make an important contribution to the literature and I look forward to seeing it published! I hope your experiences with Collabra: Psychology have been positive and that you will continue to consider it as an outlet for your work.

As there are no further reviewer revisions to make, you do not have to complete any tasks at this point.

You will be receiving separate correspondence regarding any production and technical comments, data deposits, as well as publication charges. We work with the Copyright Clearance Center to process any applicable APC charges. Please note that your APC transaction must be completed before your article gets published.

You will have an opportunity to check the page proofs before we publish your article. Thank you again for publishing in Collabra: Psychology.

Sincerely,
Antonio Freitas

# Reviewer 1

##### Rating scale questions

|  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| The study/studies in this manuscript have strong construct validity (good measures and/or manipulations of the constructs the authors wish to study). (Choose “Neutral” if this is not an empirical manuscript) |  |  | ✔ |  |  |
| The study/studies in this manuscript have strong statistical validity (appropriate statistical tests, assumptions are clear and reasonable, no statistical errors, appropriate statistical inferences, etc.). (Choose “Neutral” if this is not an empirical manuscript) |  |  | ✔ |  |  |
| The study/studies in this manuscript have strong internal validity (any causal claims or implications are well-justified, alternative explanations are thoroughly considered, etc.). (Choose “Neutral” if this is not an empirical manuscript, or no causal claims are made or even vaguely implied.) |  |  | ✔ |  |  |
| The study/studies in this manuscript have strong external validity (authors appropriately constrain their conclusions based on the limits of the generalizability of their findings to other contexts (including from lab to real world), other populations, other stimuli or measures, etc.) |  |  | ✔ |  |  |

##### Open response questions

### Please write your review here. The author(s) will see this review. Your identity will not be revealed to the authors unless you also include your name (i.e., sign your review) in this box. It is up to you whether to reveal your identity or not, either is fine.

This is a revision to a manuscript that the authors previously submitted. The authors conducted an online qualitative study of people attempting to reduce their dairy and meat intake. The authors received two reviews as well as comments from the editor and were highly responsive to them. In particular, they were very responsive to the suggestions to bring in social and environmental factors earlier into the manuscript framework and to integrate these factors throughout. They integrated the literature on choice architecture as suggested as well. Overall, the manuscript is much improved and has been strengthened through the review process.