**Peer Review and Communication History**

**MS Title**: The Hazards of Daily Stressors: Comparing the Experiences of Sexual and Gender Minority Young Adults to Cisgender Heterosexual Young Adults during the COVID-19

**Author Names**: Jessica P. Lougheed, Gizem Keskin, Sean Morgan

**Submitted:** Aug 22, 2022

**Editor First Decision**: Revise & Resubmit

Feb 8, 2023

Dear Dr. Lougheed,

I have now received 2 reviews of your manuscript, “The Hazards of Daily Stressors: Comparing the Experiences of Sexual and Gender Minority Young Adults to Cisgender Heterosexual Young Adults during the COVID-19”, from researchers with special expertise in stress and well-being. I also independently read the manuscript before consulting these reviews. The reviewers had mostly positive reactions to your manuscript. 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 did an outstanding job in their reviews. I will highlight issues I think are particularly salient here. In your resubmission, please include a document with a point-by-point response to both the points I list here and the reviewers’ comments, outlining each change made in your manuscript or providing a suitable rebuttal.

1. Reviewer 1 notes the possibility of ceiling effects in your data (i.e., perhaps SGM individuals typically experience more stressors than CH individuals, but both are maxed out during the pandemic). This struck me as something that could be addressed in the manuscript, potentially with exploratory analyses (e.g., considering cohort differences).
2. Reviewer 2 expresses thoughtful and nuanced concerns about the care required in conducting and reporting research on sexual and gender minority populations. As someone who also identifies as an SGM individual, I share the reviewer’s concerns that findings could be misinterpreted, or even used against the SGM community. That being said, I think those concerns need to be weighed against the alternatives, like excluding these topics and identities from the research literature, or selectively publishing results that seem to support a particular narrative or cause. To me, these alternatives seem to pose a greater risk than that posed by publishing high quality research highlighting the experiences of SGM individuals (such as the current paper).

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 see the instructions below for submitting 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 may be 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,

Alexa Tullett

# 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 manuscript describes an interesting study that assessed stress exposure and stress/mood reactivity in a large sample of Canadian undergraduates during several phases of the COVID 19 pandemic. In a set of pre-registered analyses, the authors examined whether sexual/gender minority (SGM) students differed in their experience and/or reaction to stressors compared to cisgender heterosexual (CH) students from early 2021 through early 2022. Results showed no group differences in these analyses. The writing is clear. The analyses were appropriate, specifically controlling for the issue of right censoring, which is common in data of these type. I have only a few comments below.

One potential explanation for the lack of group differences in daily stressors between SGM and CH groups is that the frequency and salience of daily stressors increased for CH participants during the pandemic. SGM participants may have already been exposed to near-ceiling levels of daily stressors pre-pandemic. The CH group may have merely risen to SGM-levels of daily stressors while the SGM group’s stress exposure did not increase as much during the pandemic.

Minor points:

Page 12, 2nd paragraph: change ‘participated’ to ‘participant’

Page 16, 2nd paragraph: change ‘less risk that’ to ‘less risk than’

# 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.

In this paper, the authors compared daily stressors in the lives of people who are cisgendered and heterosexual, and those who are members of a sexual or gender minority. They collected data from multiple undergraduate cohorts, using a 14-day daily diary method, while measuring stressors and negative mood. They found no major differences between the cisgendered heterosexual participants and those who are members of sexual or gender minority.

At the highest level, I thought the topic was interesting and worthwhile. I liked that they used a daily diary study. I appreciated the diversity of gender and sexual identity included in the study.

I did have several concerns with the specific methods used. This paper also forced me to ask myself some questions about the role of replicable science in asking questions about vulnerable populations.

From a personal perspective, it may also be worth mentioning that I am a member of at least one of the marginalized groups studied in this paper. Perhaps that biases me to think the topic is particularly important and worthwhile, while also being cautious with how it is studied.

**Methods Concerns**

1. Broadly speaking, I do not find fault with their methods, but I am also not an expert on the specific techniques they used. I defer to others who are more familiar with them.
a. I looked up information about rightcensoring and how they managed it. On a superficial level, it appears the authors handled it correctly, but I cannot say I am now knowledgeable enough to vouch for it.
b. I looked up their pre-registration, and it appears to me that they reported everything as it was there and noted where they deviated.
2. My biggest methods critique is they did not measure the visibility of the person’s marginalized identity. Being “out” is one part of that, but visibility may extend beyond intentionally having a public identity as a member of one of these groups. If part of the rationale why members of this group experience more conflict is that conflict finds them, then how visible they are to be found is critical. Similarly, some of these identifies may be perceived as less normatively deviant than others, leading to less conflict. A member of a marginalized group who still presents heteronormatively may be treated as anyone else who presents heteronormatively, whereas a highly visible member of that group may have a different experience. On the other hand, if the rationale is their visibility is irrelevant because they somehow seek out or cause more conflict, then I think that is a much bigger and harder to support claim.
3. Gender would have been better measured along two different axes: one first asking about being cis, trans, or genderqueer (and related identities), and the other on a specific gender identity like man vs woman. As it stands, the choices the researchers offer (e.g., “man” vs “trans man”) may be othering for members of the marginalized group. For example, in the case of man vs trans man, the researchers (inadvertently) imply that there are real men (cis) and trans men. Offering the choices of “cis man” and “trans man” may have also worked, although this approach could have alienated the cisgendered participants who don’t perceive their own identity that way. This may seem like hair-splitting, but this kind of language could be alienating to the participants from marginalized groups. Their base rate in the study is so low that any disenchantment or alienation on their part could affect their commitment and potentially outcomes to the study.
4. I am concerned that people who experience significant conflict on a given day would not complete the survey for that day. If I was in the middle of a hard fight with my romantic partner, I’m not sure I’d have the energy or desire to respond to a psych survey that popped up on my phone.
5. Ultimately, I would be open to more exploratory analyses that take these concerns into account, although I don’t expect the results to support the hypotheses, given that the raw percentages are actually lower in the marginalized groups.

**Other concerns**
6. My other big concern is more social and ethical than scientific. I agree that studying marginalized groups is good and necessary – I am also concerned that the world we live in isn’t fully ready for a good-faith study of these groups. Perhaps it’s a symptom of my own media consumption, but I could easily see people who hate these marginalized groups to use the result of this study, that these groups do not experience more conflict than the normative group, and see that as evidence that the marginalized groups are “making it all up,” that it’s “all in their head.”
a. On the other hand, you shouldn’t suppress results just because the results turned out differently than expected – that is just a kind of “ethical file drawer” problem that is still a problem.
b. It is also a question of how the research question is structured. A researcher may take up a project, like this one, wanting to do socially meaningful and positive work by demonstrating the existing of a problem – of greater conflict in these people’s lives. However, that implicitly creates a perceived morally correct answer to the research question.

**Additional thoughts**
I also had a couple side thoughts that I separate from the core review critique. These are the equivalent of “more of a comment than a question,” so the editor and authors can take them for what they are worth. Hopefully they are useful to the authors.

1. As a member of one of these groups, I am tempted to theorize why they got the results they did. I would not be surprised if many members of these marginalized groups actively avoid conflict as a coping strategy. The world isn’t safe for people of sexual and gender minorities, regardless of how much progress has been made. At times, close relationships with loved ones, like family, can feel like they are tenuous – that the revelation of too much sexual or gender difference will lead to rejection. So even if one isn’t “in the closet” one may still be conflict averse to not test or push on a relationship too much. In other words, members of gender and sexual minorities may perceive that they have “fragile relationships” with loved ones, which leads to certain social coping behavior like the avoidance of conflict.
2. This paper did reveal a problem in my understanding of replicable science. In general, it seems like many solutions to open and replicable science are often to be more conservative in one’s analyses. However, all other things being equal, that leads to fewer observed group differences – which can lead to false negatives for research questions about social problems facing marginalized groups. In other words, a tendency towards more conservative methods can bias replicable science against perceiving social harms. Again, I do not have a solution to this nor do I think this paper is particularly responsible for this – this paper simply revealed to me what could be a problem for a certain kind of socially important question in replicable science.

I hope my comments are useful to the authors and I wish them well in this project.

**Author Response**
Mar 1, 2023

Dear Dr. Tullett,

Thank you for the invitation to revise and resubmit our manuscript, “The Hazards of Daily Stressors: Comparing the Experiences of Sexual and Gender Minority Young Adults to Cisgender Heterosexual Young Adults during the COVID-19 Pandemic” to *Collabra: Psychology*. Details about the changes we made, and other revisions in line with your own and each reviewers’ comments, are described below, with responses indicated in **bold text.** The corresponding changes in the revised manuscript are indicated by red font.

We thank you and the reviewers for helping us to improve the manuscript and for your furthered consideration for possible publication in *Collabra: Psychology.*

Sincerely,

The authors

**Editor’s comments:**

1. Reviewer 1 notes the possibility of ceiling effects in your data (i.e., perhaps SGM individuals typically experience more stressors than CH individuals, but both are maxed out during the pandemic). This struck me as something that could be addressed in the manuscript, potentially with exploratory analyses (e.g., considering cohort differences).

**We agree that it was possible that ceiling effects could be present in the data. Given Reviewer 1’s and your own comment about the possibility of cohort differences in explaining the associations between SGM status and the hazard of daily stressors, we conducted some exploratory analyses to look at this directly. Specially, we re-ran MSA Models 1-4 adding interaction terms between SGM status and each cohort comparison. We have attached the results of these exploratory analyses in a supplementary file. We did not find any significant interactions between SGM status and the cohort comparisons in predicting the hazards of any of the stressors we examined (see Table S1 in attached Supplementary Material). We would be happy to include these exploratory analyses in a further revised version of this manuscript at the Editor’s discretion.**

1. Reviewer 2 expresses thoughtful and nuanced concerns about the care required in conducting and reporting research on sexual and gender minority populations. As someone who also identifies as an SGM individual, I share the reviewer’s concerns that findings could be misinterpreted, or even used against the SGM community. That being said, I think those concerns need to be weighed against the alternatives, like excluding these topics and identities from the research literature, or selectively publishing results that seem to support a particular narrative or cause. To me, these alternatives seem to pose a greater risk than that posed by publishing high quality research highlighting the experiences of SGM individuals (such as the current paper).

**We greatly appreciate these issues and the care with which the Editor and Reviewers have raised them. We share these concerns ourselves. The lead author on this manuscript is also an SGM individual. Our decision to submit this work was guided by the same principles as what you express above, and also by the perspective that there is the possibility of harm when methods are inappropriately applied to specific types of data (such as the ignoring of right-censored cases when making inferences about the frequency or likelihood of common, day-to-day events). We address this in our discussion on page 22 that inappropriate inferences can take needed and valuable time, care, and effort when figuring out the needs of a specific minoritized community. We also discuss on pages 22 to 23 that context is crucially important in this (and any) type of work—i.e., that the challenges the SGM community is facing in a university in Western Canada in 2020-2021 are likely to be different than the needs of that same community throughout the US prior to the legalization of same-sex marriage. The lead author has chosen to include a positionality statement in Method section (see page 8) further contextualize this work.**

**Reviewer 1:**

This manuscript describes an interesting study that assessed stress exposure and stress/mood reactivity in a large sample of Canadian undergraduates during several phases of the COVID 19 pandemic. In a set of pre-registered analyses, the authors examined whether sexual/gender minority (SGM) students differed in their experience and/or reaction to stressors compared to cisgender heterosexual (CH) students from early 2021 through early 2022. Results showed no group differences in these analyses. The writing is clear. The analyses were appropriate, specifically controlling for the issue of right censoring, which is common in data of these type. I have only a few comments below.

One potential explanation for the lack of group differences in daily stressors between SGM and CH groups is that the frequency and salience of daily stressors increased for CH participants during the pandemic. SGM participants may have already been exposed to near-ceiling levels of daily stressors pre-pandemic. The CH group may have merely risen to SGM-levels of daily stressors while the SGM group’s stress exposure did not increase as much during the pandemic.

**Thank you for raising this excellent point. In line with your comment and the Editor’s feedback, we have run additional exploratory analyses to examine whether the hazards of daily stressors varied between SGM and CH groups by Cohort (as a way to examine the potential interaction with pandemic context). All interaction terms were not significant (see Supplementary Table S1). However, as we do not have data from this sample from prior to the pandemic, we are not able to directly answer this question. We have raised this issue in the Discussion section (see pages 23-24) as a possible reason for our null results.**

Minor points:

Page 12, 2nd paragraph: change ‘participated’ to ‘participant’

Page 16, 2nd paragraph: change ‘less risk that’ to ‘less risk than’

**We have corrected both of the typos described above. Thank you for your thoughtful comments and feedback!**

**Reviewer 2:**

In this paper, the authors compared daily stressors in the lives of people who are cisgendered and heterosexual, and those who are members of a sexual or gender minority. They collected data from multiple undergraduate cohorts, using a 14-day daily diary method, while measuring stressors and negative mood. They found no major differences between the cisgendered heterosexual participants and those who are members of sexual or gender minority.

At the highest level, I thought the topic was interesting and worthwhile. I liked that they used a daily diary study. I appreciated the diversity of gender and sexual identity included in the study.

I did have several concerns with the specific methods used. This paper also forced me to ask myself some questions about the role of replicable science in asking questions about vulnerable populations.

From a personal perspective, it may also be worth mentioning that I am a member of at least one of the marginalized groups studied in this paper. Perhaps that biases me to think the topic is particularly important and worthwhile, while also being cautious with how it is studied.

***Methods Concerns***

1. Broadly speaking, I do not find fault with their methods, but I am also not an expert on the specific techniques they used. I defer to others who are more familiar with them.
a. I looked up information about rightcensoring and how they managed it. On a superficial level, it appears the authors handled it correctly, but I cannot say I am now knowledgeable enough to vouch for it.
b. I looked up their pre-registration, and it appears to me that they reported everything as it was there and noted where they deviated.

**Thank you for these comments.**

1. My biggest methods critique is they did not measure the visibility of the person’s marginalized identity. Being “out” is one part of that, but visibility may extend beyond intentionally having a public identity as a member of one of these groups. If part of the rationale why members of this group experience more conflict is that conflict finds them, then how visible they are to be found is critical. Similarly, some of these identifies may be perceived as less normatively deviant than others, leading to less conflict. A member of a marginalized group who still presents heteronormatively may be treated as anyone else who presents heteronormatively, whereas a highly visible member of that group may have a different experience. On the other hand, if the rationale is their visibility is irrelevant because they somehow seek out or cause more conflict, then I think that is a much bigger and harder to support claim.

**Thank you for raising this important concern. We agree that visibility may play an important role in the extent to which SGM individuals may experience some of the stressors we examined in the current study. Although we did not have a measure of this in our study, we have added a discussion of this issue in the Limitations and Future Directions subsection on page 24.**

1. Gender would have been better measured along two different axes: one first asking about being cis, trans, or genderqueer (and related identities), and the other on a specific gender identity like man vs woman. As it stands, the choices the researchers offer (e.g., “man” vs “trans man”) may be othering for members of the marginalized group. For example, in the case of man vs trans man, the researchers (inadvertently) imply that there are real men (cis) and trans men. Offering the choices of “cis man” and “trans man” may have also worked, although this approach could have alienated the cisgendered participants who don’t perceive their own identity that way. This may seem like hair-splitting, but this kind of language could be alienating to the participants from marginalized groups. Their base rate in the study is so low that any disenchantment or alienation on their part could affect their commitment and potentially outcomes to the study.

**Thank you for raising this issue. We agree with these issues identified regarding our measure for gender and we have already improved our measurement of gender in subsequent studies. We have included a discussion of this issue in the Limitations and Future Directions subsection on page 26.**

1. I am concerned that people who experience significant conflict on a given day would not complete the survey for that day. If I was in the middle of a hard fight with my romantic partner, I’m not sure I’d have the energy or desire to respond to a psych survey that popped up on my phone.

**This is an interesting and important concern. In the parlance of survival analysis, this issue is referred to as “informative censoring”, which is when there are censored/missing data on the time to an event that is related to some unknown third variable. Informative censoring is difficult because it is impossible to test. We have added a discussion of this issue specifically in the Limitations and Future Directions subsection on pages 26-27.**

1. Ultimately, I would be open to more exploratory analyses that take these concerns into account, although I don’t expect the results to support the hypotheses, given that the raw percentages are actually lower in the marginalized groups.

**We also acknowledge that, as described in our responses above, we do not have the data that would allow us to test the specific concerns raised.**

***Other concerns***
6. My other big concern is more social and ethical than scientific. I agree that studying marginalized groups is good and necessary – I am also concerned that the world we live in isn’t fully ready for a good-faith study of these groups. Perhaps it’s a symptom of my own media consumption, but I could easily see people who hate these marginalized groups to use the result of this study, that these groups do not experience more conflict than the normative group, and see that as evidence that the marginalized groups are “making it all up,” that it’s “all in their head.”
a. On the other hand, you shouldn’t suppress results just because the results turned out differently than expected – that is just a kind of “ethical file drawer” problem that is still a problem.
b. It is also a question of how the research question is structured. A researcher may take up a project, like this one, wanting to do socially meaningful and positive work by demonstrating the existing of a problem – of greater conflict in these people’s lives. However, that implicitly creates a perceived morally correct answer to the research question.

**Thank you for raising these thoughtful and important points. We share your concerns. We also share the views raised by the Editor that the alternatives of suppressing results that support a particular narrative, which in this case would exclude these topics and identities from the research literature, may pose a greater risk. To this end, we have added more context to this manuscript such as including a positionality statement from the lead author (see page 8), and our lengthy discussion of possible context-related factors that could explain differences from our sample and the Wardecker et al. (2021) study (see pages 22-23). We have also added a statement to the Discussion indicating that we are not suggesting that SGM individuals are not disadvantaged in any way but rather than we are calling for greater methodological rigor in the study of daily events and experiences (see page 22).**

***Additional thoughts***
I also had a couple side thoughts that I separate from the core review critique. These are the equivalent of “more of a comment than a question,” so the editor and authors can take them for what they are worth. Hopefully they are useful to the authors.

1. As a member of one of these groups, I am tempted to theorize why they got the results they did. I would not be surprised if many members of these marginalized groups actively avoid conflict as a coping strategy. The world isn’t safe for people of sexual and gender minorities, regardless of how much progress has been made. At times, close relationships with loved ones, like family, can feel like they are tenuous – that the revelation of too much sexual or gender difference will lead to rejection. So even if one isn’t “in the closet” one may still be conflict averse to not test or push on a relationship too much. In other words, members of gender and sexual minorities may perceive that they have “fragile relationships” with loved ones, which leads to certain social coping behavior like the avoidance of conflict.

**This is a very interesting perspective and we have included a discussion of it on page 24.**

1. This paper did reveal a problem in my understanding of replicable science. In general, it seems like many solutions to open and replicable science are often to be more conservative in one’s analyses. However, all other things being equal, that leads to fewer observed group differences – which can lead to false negatives for research questions about social problems facing marginalized groups. In other words, a tendency towards more conservative methods can bias replicable science against perceiving social harms. Again, I do not have a solution to this nor do I think this paper is particularly responsible for this – this paper simply revealed to me what could be a problem for a certain kind of socially important question in replicable science.

**Thank you for sharing your thoughts on this. We agree that this is an interesting and important concern, and one that we will continue to consider in our current and future work.**

I hope my comments are useful to the authors and I wish them well in this project.

 **Your comments have been immensely helpful—thank you so much for your thought, care, and time with reviewing our work.**

**Editor Final Decision:** Accept

Mar 6, 2023

Dear Jessica P. Lougheed,

I have now had a chance to read over your manuscript “The Hazards of Daily Stressors: Comparing the Experiences of Sexual and Gender Minority Young Adults to Cisgender Heterosexual Young Adults during the COVID-19”, along with the letter describing the changes you made. Thank you for your 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,
Alexa Tullett