

Dear Dr Karhulathi and the managing board of PCI Registered reports,

REF: PCI Registered Report #783 Identifying relevant experiences to the measurement of social media experience via focus groups with young people: A registered report

Thank you to Matti, Amy, Jana, Elena for taking the time to review our stage 2 manuscript and for your generous comments and insight. We have made significant revisions in line with the feedback, in particular revising the themes and re-structuring the findings and discussion. We hope that this has improved the manuscript and more clearly demonstrated the contributions of the study.

Comments	Responses	Page no.
Veli-Matti Karhulahti		
<p>1. My main methodological concern was not addressed by the reviewers, but I am confident that this should be given careful attention. You've done a wonderful job at describing the research process and its details, yet the generated themes do not match the RTA model where themes serve as meaning-driven interpretive stories; this is the most commonly occurring problem in reflexive TA reporting. The current themes and subthemes are closer to thematic framework or template analysis, where the function of a theme is often a "topic summary". Themes in RTA should not serve as topics but convey specific meanings. Please allow me to re-refer to the sources indicated at Stage 1.</p> <p>Braun and Clarke 2021: https://doi.org/10.1080/14780887.2020.1769238 [doi.org] -- 2023: https://doi.org/10.1080/26895269.2022.2129597 [doi.org] :</p> <p>Topic summary themes are so widely used in reflexive TA that we have identified this as the most common problem in reflexive TA ... Theme names can suggest a topic summary through, for instance,</p>	<p>Thank you for this very helpful feedback. Focusing on this in the first instance has, we think, immeasurably improved the paper. We have now revised the themes, broadly retaining the original sub-themes, but nesting them within themes that no longer simply mirror the research questions, but cut across them.</p>	<p>P20-21 (Table 3)</p>

<p>a one-word name that identifies the topic, such as “Doctors,” or something like “Experiences of...,” “Barriers to...,” “Influences on...,” suggesting diverse experiences, barriers and influences will be discussed (sometimes meaning-based themes may just be badly named, see Braun & Clarke, 2022b). By contrast, themes as interpretative stories built around uniting meaning cannot be developed in advance of analysis. They contain diversity, but they have a central idea that unifies the diversity (instead of “good experiences of healthcare” you might have the theme “validation of my personhood”). (p. 2)</p> <p>For more references, see “What’s the difference between a topic summary and a theme?” in https://www.thematicanalysis.net/faqs/ [thematicanalysis.net]</p> <p>The meaning of a theme is always a matter of subjective interpretation to some degree, for which it doesn’t make sense to exert too much review effort on them. That said, please read the indicated sources carefully and reconsider a) what are the meanings/stories you wish to convey through the themes, b) does each theme have independent meaning, could some be combined?, c) rename themes as you see best, please avoid Braun and Clarke’s problematic examples (“Motivations for..”, “Experiences of..”, etc.).</p>		
<p>2. Two reviewers were hoping for more clear and detailed responses to the RQs and especially on the aspects of mental health (and your hypotheses about that). They also point out useful directions/sources, which could serve as bases of further reflection. I understand the intention has been to report 3 themes that correspond with each RQ, however, as reviewers note, the answers to the RQs still remain partly uncommunicated. I suggest creating a separate Discussion section, which could potentially include a subsection for addressing RQs/QHs with further</p>	<p>Revising the themes has encouraged a deeper engagement with the data in terms of what is directly related to mental health, what is indirect, and what is more useful as context for young people’s use. We have taken your suggestion on board to separate the findings and discussion, and now have a subsection that addresses the RQs/QHs in relation to the mental health literature, followed by a section on how our findings relate to the measure. This also has more concrete detail on how the findings are being used for measure development:</p> <ol style="list-style-type: none"> 1. The core domains of experience 	<p>P40 L738-743 (point 1)</p> <p>P41 L753-765 (point 2)</p>

<p>interpretations and reflections with mental health literature. A second subsection could be dedicated to measure development (as you already have it), and as one reviewer notes, this section would also benefit from more detail about how the findings can be utilised for measurement development in practice. For example, I could vision a preliminary list of potential (~100) draft items based on codes in the data as a supplement, which could serve as a helpful starting point for a future measure development EFA (not only for you but others too).</p>	<ol style="list-style-type: none"> 2. The use of motivations and behaviours in items 3. The exploration of age and gender differences in cognitive interviews 	<p>P42 L769-782 (point 3)</p>
<p>3. In the current version, the results and discussion are mixed so that some of the themes involve brief links to earlier literature and nods toward measurement. If you choose to follow the above suggested structure, those could be moved to Discussion so that Results and Discussion are clearly separate. Also, with reference to the stated goal on p. 14 (“The aim of the focus groups was therefore to highlight potential gaps in previous conceptualisations and identify constructs that may have been omitted from existing conceptual frameworks”), it would be valuable to spell out what exact gaps were identified, and what new constructs omitted by previous literature were discovered.</p>	<p>We have revised the structure as per your suggestion above. In terms of identifying gaps in previous conceptualisations, we now note two things in particular:</p> <ol style="list-style-type: none"> 1. Digital stress (Steele et al., 2020) appears more likely to as a consequence of the first 3 aspects: availability stress, approval anxiety, and FoMO, and less related to the fourth aspect, connection overload 2. Vicarious victimisation is an element of cyberaggression that has not be fully recognised in the literature around young people’s mental health experiences. 	<p>P34 L599-613 (point 1) P35 L620-627 (point 2)</p>
<p>4. One reviewer makes an appropriate reminder to be careful about age/gender comparisons. Comparisons are always tricky with qualitative data, as individuals can be very different. Depending on how the next version looks and considering the qualitative nature of the data, I'd advice communicating any such differences by presenting two cases next to each other, so that the reader can observe closely how two individuals (representing different groups) deal with a similar situation differently, i.e. showing a case of qualitative difference (which does not necessarily entail quantitative difference).</p>	<p>We agree that age/gender comparisons are difficult to draw from qualitative data, thank you for this reminder. The restructure of the findings has allowed us to discuss some potential gender differences observed in the data, but in a cautious way. Given this restructure, the side-by-side comparison did not feel necessary.</p>	
<p>5. Finally, one reviewer asks for a revision to a Stage 1 sentence. If you agree with that, you have a permission to make such change even though it’s Stage 1 text.</p>	<p>We have now revised this sentence to <i>“To add to this landscape, the field is highly polarised with unclear conclusions, likely contributing to</i></p>	<p>P3 L57-58</p>

	<i>public panic and concern (Orben, 2020a)</i> ”, signposting to a broader reference around technology panics.	
Amy Orben		
1) At the end of results sub-sections, e.g. line 548-550, the authors sometimes refer back to the scale development in a very off-hand/brief way. It would be good to remind the reader more specifically what these results could show for the scale development, e.g. defining what is meant by 'items' as they might have forgotten that the ultimate aim of this paper is to do scale development.	Thank you for this suggestion. We have removed the brief references back to scale development throughout and focused these in one section ('measure development'). We have added in some opening sentences to help guide the reader as to the process of scale development more generally.	P40 L735-738
2) I think a bit more care should be given about talking about age/gender differences due to the small sample size and due to there only being one group for each age group (or two for one) and for the groups often being mixed gender, it might be that this would have changed the results substantially. This should be noted in the limitations, and potentially in the results.	We agree that age/gender comparisons are difficult to draw from qualitative data. The restructure of the findings has allowed us to discuss some potential gender differences observed in the data, but in a more cautious way, and note the limitation of the sample size. We have also now explicitly acknowledged this as a limitation in the 'strengths and limitations' section.	P41 L767-769 P43 L795-798
Jana Papcunova		
Experiencing bullying, racism, or other forms of online harassment (ex. <i>Like there's just people that bully people. Like I actually experienced racism on Roblox, like how is that even possible</i>) may lead to feelings of sadness, anxiety, depression, or low self-esteem. Persistent exposure to such negative experiences can exacerbate these effects over time and contribute to long-term mental health issues. More to read: https://doi.org/10.3389/fpsyg.2023.1118736 [doi.org]	Thank you for these additional resources, they are extremely helpful to inform our thinking moving forward. However, in relation to drawing lines between the experiences young people discussed having on social media and the potential mental health implications we have aimed to exercise caution, to avoid overreaching in terms of what the data is telling us. For example, in relation to the quotes presented here they come from the same participant, which suggests that their negative experiences may not have contributed to poorer mental health (i.e, they 'don't care' anymore).	
Furthermore, adolescents may gradually become desensitized to online harassment or discrimination. Phrases like " <i>you get used to it now, so it's kind of like you don't care</i> " indicate a normalization	In addition, in this resubmitted manuscript we have tried to focus more strongly on what the direct and indirect <i>overarching</i> mental health outcomes are (especially given that the data captured by this	

<p>of harmful online conduct. The normalization of toxic online behavior is concerning.</p> <p>More to read: https://doi.org/10.1080/14675986.2023.2187350 [doi.org]</p>	<p>research was very wide-ranging). We now have two distinct discussion sections on direct and indirect experiences.</p>	
<p>Overall, comments like the ones you described can have significant implications for adolescents' mental health and well-being. It is important to recognize these potential effects and provide support and resources to help adolescents navigate the challenges of online interactions in a healthy and constructive manner. I was just wondering whether "Closure and Feedback" was provided: A debrief session that can offer closure and allow the participants to provide feedback on their experience, including what they found valuable and any concerns they may have.</p>	<p>We agree that online experiences, and discussing these have the potential to negatively impact on young people. To this end we spent considerable time considering and developing our safeguarding approach. More details can be found in the supplementary material: https://osf.io/6u3pr. All research participants were provided with a debrief sheet sign-posting to organisations they could get in touch with if they wished to speak to someone. We have also now added a line in the methods section highlighting this.</p>	<p>P14 L311-313</p>
<p>The methodology employed in the study is robust, focusing on qualitative insights from adolescents in North-West England. The authors have commendably acknowledged the limitations regarding the generalizability of the findings, primarily due to the regional focus on North-West England and the socio-economic background of the participants. To enhance the study's robustness and provide a broader context, it would be beneficial to incorporate comparative data from sources like Eurobarometer or Eurostat. These sources offer extensive data on social media use and mental health across various European regions trends (ex. Eurobarometer, Media & News Survey, Eurostat, Young people and digital world etc), allowing for a more comprehensive understanding of how the findings of the study align or differ from broader European trends.</p>	<p>Thank you for this suggestion. A review of the Eurobarometer and Eurostat sources suggests that they do provide some context on social media usage, but are more broadly focused on digital skills and use, and do not focus on experience. For this reason, and to avoid confusion, we have not referenced them in the study, but we explicitly draw from and contrast with other Non-UK focus groups.</p>	
<p>Elena Gordon-Petrovskaya</p>		
<p>My only significant point is around the organisation of the paper in a way which answers the RQs and tests the hypotheses.</p>	<p>This is a very helpful reflection, and we appreciate that whilst the QHs were discussed, they may not have felt fully addressed. In terms of the inclusion of the QHs more generally, this came from a place of being transparent in our approach to this research (i.e., following Karhulahti</p>	<p>P39 L700-735</p>

<p>The authors' hypotheses were twofold:</p> <p><i>H1: We expect heterogeneity in the motivations and experiences of social media use and types of platforms used, especially between different age groups.</i></p> <p><i>H2: We expect that social media experience will be multidimensional with key dimensions like cyberbullying, social comparison, fear of missing out, and social support and connection to be discussed.</i></p> <p>These are framed as having relevance for all three research questions, which encompass motivations underpinning social media use, social media experiences in light of mental health, and views of risks and benefits associated with using social media.</p> <p>I did not feel that the two hypotheses were meaningfully addressed or referred to in the text at any point in the results and discussion, beyond one reference to each. I understand that to an extent, their assessment emerges naturally, for instance, with points such as "More broadly, whilst some young people found motivation or inspiration in the content that others shared, others felt demotivated by feeling that they did not match up," which serves to answer H2. However, the hypotheses have been formulated and presented for a reason, and it feels like they should be referred to continuously throughout the results and discussion, with specific reflection dedicated in text to each hypothesis and whether it has been met. Indeed, how do you decide whether hypothesis 1, for instance, is met? When do you make the decision that heterogeneity does, in fact, exist? More detail on this would be good.</p>	<p>et al. 2023). However, they are now more explicitly addressed in a subsection of the findings 'Social media experience: heterogeneity and multidimensionality'.</p>	
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<p>Similarly, I was a little confused by the lack of discussion of social media experiences in light of mental health in the Results section. In terms of the other two RQs, the themes are literally grouped to address them, but mental health is only mentioned within the descriptions of themes which address those other research questions. Given that this is a focus of your work, it would be useful to see mental health more drawn out and highlighted throughout the Results and Discussion sections.</p>	<p>Thank you for this very constructive feedback. In response to this comment and others we have now revised the themes, broadly retaining the original sub-themes but nesting them within themes that no longer simply mirror the research questions, but cut across them. Revising the themes has encouraged a deeper engagement with the data in terms of what is directly related to mental health, what is more proximal, and what is more useful as context for young people's use. We have separated out the findings and discussion sections and now have a subsection within the discussion that addresses the RQs/QHs in relation to the mental health literature, followed by a section on how our findings relate to the measure.</p>	
<p>Finally, a very minor point. On page 3, you write, "To add to this landscape, the field is highly polarised with some work arguably aiming to instil a sense of alarm (e.g., Twenge, 2020)." This is strong language - I'm aware of the polarisation in the field, but do not believe researchers like Twenge carry out their work with the intention of creating alarm, and more likely share a common goal with the rest of us to add to knowledge in the most meaningful way. I would advise rephrasing this sentence.</p>	<p>Thank you for this feedback. We have now revised this sentence to "<i>To add to this landscape, the field is highly polarised with unclear conclusions, likely contributing to public panic and concern (Orben, 2020a)</i>", signposting to a broader reference around technology panics.</p>	<p>P3 L57-58</p>