

Responses to Recommender's Comments

Dear Marta Topor and co-authors,

Thank you for submitting the revised Stage 1 version of your manuscript. I have reviewed the revised manuscript file as well as the responses to the reviewer feedback, based on which I did not consider it necessary to initiate a new round of external reviews. However, I personally made note of points that are necessary to revise before IPA. I start with minor points.

Thank you for reviewing the re-submitted version of the manuscript. We are very grateful for the insightful comments and suggestions. We have adapted the manuscript accordingly and we provide responses to all points below. Some minor changes have been added to the COREQ checklist. All changes in the documents can be seen in red font. The documents have been updated on the OSF <https://osf.io/2ueha/>

1. Line 102: “However, within the RR context, hypotheses are normally discussed as *quantitative* hypotheses” --> I recommend using the term “testable” instead of “quantitative,” as the idea of non-testing is most important in the present context, I believe.

Thank you, we followed your advice and the word “quantitative” was replaced with “testable”.

2. Line 108: the reference to our work here is incorrect; we have two Stage 1 RRs in the PCI and the qualitative one is “Phenomenological Strands for Gaming Disorder and Esports Play: A Qualitative Registered Report”

Thank you for pointing out this error. This has now been fixed and the correct reference is used.

3. Line 132: I like the new RQ2 and I agree the link to RQ1 is now clearer. Yet to make it even more explicit, I suggest integrating the link to emotional findings, e.g. along the following lines: “How does self-identity change following the emotional events of a late DCD diagnosis...”

Thank you for this suggestion. We agree that linking the two questions even more clearly would be beneficial. We believe that self-identity changes might emerge alongside the different emotions experienced over time, so we specified RQ2 as:

“How does self-identity change alongside the emotional consequences of a late DCD diagnosis and what impact does this have on one’s perception of the past, present, and future?”

4. You have now justified the use of OSF for data sharing, which is totally ok. Nevertheless, please allow me to add a bit of context, which was perhaps the intention of the reviewer but was left unspecified. Sharing qualitative health data can be difficult and comes with unique risks; anonymizing human experiences takes a lot of time and requires carefully assessing the risk-benefit ratio i.e., what parts of the text should be shared for the data to be useful for other

researchers and what should be erased to protect the participants. Due to these challenges, it is common that expert repositories are collaborated with so that they can assist with de-identification and, as is often the case, control data access so that only people with scientific interests can reuse the data. These services are not provided by the OSF. Naturally, you have the full right to share the data via OSF following the ethical principles outlined, but do not hesitate to contact me if you wish to further discuss the plan for and potential issues related to data sharing.

Thank you for providing further clarification to this point. We have not considered the fact that a platform which could only be accessed by professionals would be more appropriate to protect against de-anonymisation. In this project, we were driven by the wishes of the community of individuals with DCD who wish to share their experiences to raise awareness especially among professionals from different fields who might work with older adults with DCD or suspected DCD. Considering the fact that these include diverse fields such as medicine, occupational therapy and psychology, we believe that a platform that allows for general access is the most suitable. We are grateful for your point that anonymization is likely to be challenging and we will certainly contact you once/if we encounter any issues.

5. You are using the ADC as an inclusion criterion, which is ok. However, I am thinking, as you are also inquiring about official clinical diagnosis in the questionnaire, wouldn't that be the gold standard? I.e., wouldn't someone with an official diagnosis meet a sufficient alternative inclusion criterion, regardless of what their ADC score is? Of course, it's likely that the participants meet both, but in case of false negative outcomes from ADC, it seems that a clinical diagnosis should suffice, too. What do you think?

Unfortunately, because there is so little knowledge of DCD in both medical and educational practice (Missiuna et al 2006) there is little standardisation of official diagnosis for DCD. This means that different parameters are regularly applied during assessment, especially in the case of adult diagnoses. To ensure that researchers used standardised measures the European Academy of Childhood Disability developed the International clinical practice recommendations for DCD and the ADC is frequently used by researchers to allocate participants to the DCD group.

6. Line 241: You mention “neurodevelopmental, neurodegenerative, or psychiatric” conditions as exclusion criteria but only survey about the first one (line 245). Unless otherwise justified, please remove neurodegenerative and psychiatric conditions as exclusion criteria (this would also help you to find participants, and as I see it, psychiatric conditions such depression are so common that there is no reason to exclude participants with them if they are willing to participate).

Thank you for this suggestion, and we agree that we should remove psychiatric conditions from the exclusionary criteria. To ensure that we meet the DSM-5 criterion 4 for DCD (motor skills deficits are not better explained by a neurological disorder affecting movement, such as cerebral palsy)” we will exclude participants if they mention a neurological disorder, however we are not screening for this. It is also extremely unlikely that individuals with neurological disorders such as CP would have a co-occurring diagnosis of DCD, so this particular situation is very unlikely to occur. We have removed the reference to

neurodegenerative conditions in the manuscript and specified two of the neurodevelopmental disorders we will be excluding as ADHD and ASD.

Finally, I have three more general points that need attention. I try to be as clear as possible, so this takes a bit of explaining (apologies if I sound too instructive below, but I think these are discrepancies that could be criticized by future readers unless we clarify them here and now).

- There's a lot of conversation around Braun and Clarke's TA across fields these days, and the authors themselves have been very actively reconceptualizing their method into "reflexive" TA – a position that was not clearly present in their 2006 paper yet (and this paper is the basis of your MS). In the 2006 paper, the authors indeed discuss many possible ways of doing (all kinds of) TA, including realist approaches, but in the more recent papers they have divided TA into "reliability", "codebook" and "reflexive" schools (many of the which they do *not* represent -- historically, there are likely more than a hundred different types/schools of TA). In Braun and Clarke's view, the "reflexive" school (which they have now coined and represent explicitly) is strongly tied to researcher subjectivity instead of realist or (as they call it) neopositivist epistemologies that assume there to be one "real truth". Therefore, as you since line 340 note that the study is based on realist epistemology and "real truth" but elsewhere mention that reflexive TA is followed, there seems to be a conflict between these positions (also recall that you dropped the second coder because in reflexive TA there isn't necessarily one truth but both coders could've been correct!). In summary, it would seem logical for this study to be carried out with an epistemology that matches reflexive TA (of if not, *why* is realist epistemology more optimal for your RQs?). On the other hand, I wouldn't want to enforce anyone to assume an epistemological position that they do not actually hold -- so I leave this comment to be discussed in your team

Thank you for your comments and highlighting the conflict between our epistemology and the use of reflexive TA, this has been valuable feedback for developing our understanding of conducting TA. Having discussed this point within the research team, we have agreed that a realist epistemology is appropriate for the current study as we are concerned with capturing the "real truth" of individual experiences of receiving a late diagnosis and understanding participants' own perceptions of their identity and experiences. Therefore, it is important that themes emerge from the data rather than be constructed subjectively by the researcher and realist thematic analysis will be used. However, we are aware that in qualitative research, data cannot be completely objective, and we have included reflexive practices such as the qualitative hypotheses and our reflexivity statement to declare our expectations and preconceptions/biases ahead of completing the data analysis. This is most probably how the conflict has emerged. As we will no longer be using a reflexive analysis, we instead will be using a codebook TA as this fits with our epistemology. We will be using 2 coders as originally planned. We hope this has now been clearly addressed in our manuscript at lines 338, 348 and 405.

(please also consider rephrasing "emerging" themes; in reflexive TA themes are constructed subjectively rather than them emerging objectively, see e.g., Braun and Clarke 2006; Table 2 point 15).

Thank you for highlighting this point, as we have agreed to use a realist thematic analysis approach, we have decided to use the terminology of "themes emerging from the data".

Again, I am sorry to point at this issue in such detail, but as this is one of the first qualitative RRs in the world, I must ensure that these meta-scientific issues, which are very much discussed in the qualitative domain at the moment, are not left unresolved. For further reading, see e.g.,

Virginia Braun & Victoria Clarke (2019) Reflecting on reflexive thematic analysis, *Qualitative Research in Sport, Exercise and Health*, 11:4, 589-597, DOI: 10.1080/2159676X.2019.1628806

Virginia Braun & Victoria Clarke (2021) One size fits all? What counts as quality practice in (reflexive) thematic analysis?, *Qualitative Research in Psychology*, 18:3, 328-352, DOI: 10.1080/14780887.2020.1769238

We would like to thank you for providing such detail in your response and clear direction to resources for further reading on the subject.

(if you choose to stay with reflexive TA, please use "reflexive TA" systematically in the manuscript every time you refer to TA)

Thank you, we have opted not to use reflexive TA for the current project.

- Related to the above, about the sample size. In brief, I do not believe that N=5 would be enough for this TA study. In fact, this is also suggested by Braun and Clarke; I don't have their 2013 book with the sample size discussion at hand, but they summarize the point online as follows: "generally speaking 5 interviews (however long and detailed) is probably a bit too small for a TA. This is because TA focuses on the identification of patterns *across* data... 6-10 (rich and detailed) interviews [fit] for a small TA project e.g. UK undergraduate" (<https://www.thematicanalysis.net/faqs/>). To ensure the production of themes across data, I would suggest setting the minimum to 10 interviews (which is still not much for TA but could be sufficient, trusting on your team's assessment). That is not to say that less data could not be informative at all; however, with less than 10 interviews other methods would be more suitable for analysis, such as interpretive phenomenological analysis or case study approaches.

We have adjusted the minimum to 10, which will be increased appropriately, as per our protocol, this is now at line 265. We feel thematic analysis is most appropriate in answering our research questions, rather than IPA or case study approach, as we hope to capture patterns across a number of individual experiences to highlight themes or ideas surrounding this experience.

TA is not idiographic, i.e., not focused the analysis of individuals per se but rather the themes across individuals [on line 174 it is noted that "thematic analysis has an ideographic focus", what does that mean and where does it come from?]

Thank you for highlighting this comment, it has been corrected.

- Finally, regarding the use of inductive coding, please allow me to point at possible issues with this specific choice. I quote from Braun & Clarke 2006 again, as that is the method you've chosen: "Inductive analysis is therefore a process of coding the data without trying to fit it into a preexisting coding frame, or the researcher's analytic preconceptions." (83). While there are many ways of doing inductive coding, you currently highlight also working with strong analytic preconceptions, i.e. clear RQs with clear QHs: "Initial codes will be noted for ideas that fall in line with our hypotheses as well as novel insights specific to DCD." To be safely on the inductive side, I would suggest not involving your hypotheses in the coding. Coding through the RQs works well, but you might additionally wish to explain *how* the coder is instructed to interpret the data through the RQs? Do you trust their intuition, or will there be mutually agreed guidelines/limits regarding what counts as a reflection of RQ1-RQ2?

Thank you for highlighting this issue, we have amended this section (starting from line 363) to explain that coding through RQs will be used to identify initial codes in order to support the coders in identifying possible ideas relating to the main general concerns of the current study, emotional function (RQ1) and self-identity (RQ2).

We will now have two coders and they will both use this inductive approach, which fits within the codebook approach, to identify codes and generate initial themes. Data synthesis will occur at the next stage (step 4) where both coders will work together to refine emerging themes from both codebooks, this will be a fluid and exploratory step, in line with similar methodology (Braun & Clarke, 2022; King, 2012). This will hopefully allow to ensure an appropriate interpretation of the data which will not be specific to the views of just one coder.

I hope these comments will further help your team to make this as good study as possible. Needless to say, I can be contacted directly if some of the feedback is unclear or if you have concerns regarding how to solve some issues.

Response-Thank you again for your recommendations and feedback.

Best wishes,
Veli-Matti Karhulahti

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, 9(1), 3.

King, N. (2012). Doing template analysis. *Qualitative organizational research: Core methods and current challenges*, 426(10.4135), 9781526435620. Kirby, A., Edwards, L., Sugden, D., & Rosenblum, S. (2010). The development and standardization of the adult developmental co-ordination disorders/dyspraxia checklist (ADC). *Research in developmental disabilities*, 31(1), 131-139.

Missiuna, C., Moll, S., Law, M., King, S., & King, G. (2006). Mysteries and mazes: Parents' experiences of children with developmental coordination disorder. *Canadian Journal of Occupational Therapy*, 73(1), 7-17.

