JCGS-24-465R1: unbiased mixed variable distance

I would like to thank the authors for submitting their revised manuscript to JCGS for consideration for publication. As stated previously, this manuscript discusses an important research topic, i.e., mixed variable type distances, and reports on a novel definition for an unbiased mixed variable distance. The authors have addressed many of the previous comments, and the manuscript has been considerably improved.

Major Comments:

1. The manuscript could benefit from a thorough review to tighten the presentation, i.e., improve conciseness. The focus should be on novel material and results, with supporting and review material either removed or placed in supplemental.
2. P10L39. The authors state that when combining skewed variables with uniform or normally distributed ones, the later dominate the overall distance. I am not seeing this from Table 1. I am assuming that by 'standardization' the authors are referring to all three scaling approaches? The only column where normal and uniform are larger than skewed and biomodal is SD scaling. Please clarify or remove.
3. Section 4.1. This section contains repetitive and background material when the focus should be on the novel research contributions. This section needs to be rewritten with a focus on novel contributions and review or background material moved to supplemental.
4. Section 4.2. This section could go into the supplemental unless it contains a novel research contribution. The current version appears to be background information.
5. P18L1. Is this sentence included because there are best practices that are NOT being followed? If so, then these practices should be mentioned. If not, there is no need to include this sentence.
6. Figures 1 and 2. Please include error bounds or CIs on these plots as well as the mean. The simulations involve LOO on the distance matrix over 100 instances and the plots show only the mean result. Adding a measure of variability would help the reader better assess not only the mean but the level of stability.
7. Figure 3. The authors claim that 'u_dep performs better when dealing with more than 2 categories' yet there is minimal difference in u_dep across categories. Ther authors may consider testing for any significant differences across methods (between boxplots) to support their claim.

Minor Comments:

1. Abstract: it would benefit the reader to mention the simulation and real data examples and the role that they play in the manuscript. A mention that Gower's is a special case of the framework (as stated on P6L28) would place the work in a more familiar context and hence support broader adoption.
2. P2L13. I would either drop the word 'trivially' or replace it with 'substantively'. The use of 'trivially' makes the reader think that the impact is trivial or not important. Same for P3 Line 33.

3. P4L40. Replace ‘joined’ with ‘joint’
4. P15L29. The mention of philentropy should note that this is an R package and provide a reference.
5. P19L12. In several places dkss is used and I think this should be dkps?