

User Engagement Questionnaire

Given that higher engagement is associated with personal visualizations [1], we asked the participants to fill out a questionnaire on user engagement. We used the short version of the User Engagement Scale (UES) presented by O'Brien et al. [2]. The scale has 12 items with three items each measuring

- (i) *Focused Attention* or how absorbed the participants felt in the interaction,
- (ii) *Perceived Usability* or how frustrated or confused they felt when using the interface,
- (iii) *Aesthetic Appeal* or how visually attractive they found the interface, and
- (iv) *Reward Factor* or how rewarding their experience was.

The `User_Engagement_responses.pdf` included in the supplementary material presents the individual items and overall participant ratings for the questionnaire and additional correlations are included in `SpearmanCorrelations.html`.

References

1. Choe, E. K., & Lee, B. (2015). Characterizing visualization insights from quantified selfers' personal data presentations. *IEEE computer graphics and applications*, 35(4), 28-37.
2. O'Brien, H. L., Cairns, P., & Hall, M. (2018). A practical approach to measuring user engagement with the refined user engagement scale (UES) and new UES short form. *International Journal of Human-Computer Studies*, 112, 28-39