User Engagement Scale (UES)- Long Form

<u>Administration Instructions for UES:</u>

Instructions for administrators: When administering the UES and UES- SF, all items should be randomized and dimension identifiers (e.g., "Focused Attention or F") should not be visible to participants. Below we provide general instructions to participants than can be modified to suit the study context; the five-point rating scale should be used to allow for comparisons across studies/sampled populations. The wording of the questions may be modified to your context of use. For example, item PU.1 "I felt frustrated while using this Application X" may be reworded to "I felt frustrated while using this search engine.

Instructions for respondents: The following statements ask you to reflect on your experience of engaging with Application X or "this study". For each statement, please use the following scale to indicate what is most true for you.

Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1	2	3	4	5

Focused Attention (FA)

FA.1 I lost myself in this experience.

FA.2 I was so involved in this experience that I lost track of time.

FA.3 I blocked out things around me when I was using Application X.

FA.4 When I was using Application X, I lost track of the world around me.

FA.5 The time I spent using Application X just slipped away.

FA.6 I was absorbed in this experience.

FA.7 During this experience I let myself go.

Perceived Usability (PU)

PU.1 I felt frustrated while using this Application X.

PU.2 I found this Application X confusing to use.

PU.3 I felt annoyed while using Application X.

PU.4 I felt discouraged while using this Application X.

PU.5 Using this Application X was taxing

PU.6 This experience was demanding.

PU.7 I felt in control while using this Application X.

PU.8 I could not do some of the things I needed to do while using Application X.

Aesthetic Elements (AE)

AE.1 This Application X was attractive

AE.2 This Application X was aesthetically appealing

AE.3 I liked the graphics and images of Application X.

AE.4 Application X appealed to be visual senses.

AE.5 The screen layout of Application X was visually pleasing.

Reward Factor (RW)

RW.1 Using Application X was worthwhile

RW.2 I consider my experience a success.

RW.3 This experience did not work out the way I had planned.

RW.4 My experience was rewarding.

RW.5 I would recommend Application X to my family and friends

RW.6 I continued to use Application X out of curiosity.

RW.7 The content of Application X incited my curiosity.

RW.8 I was really drawn into this experience.

RW.9 I felt involved in this experience.

RW.10 This experience was fun.

Scoring Instructions for UES:

Instructions for administrators: When administering the UES and UES-SF, all items should be randomized and dimension identifiers (e.g., "Focused Attention or FA") should not be visible to participants. Below we provide general instructions to participants than can be modified to suit the study context; the five-point rating scale should be used to allow for comparisons across studies/sampled populations. The wording of the questions may be modified for one's context of use. For example, item PU.1 "I felt frustrated while using this Application X" may be reworded to "I felt frustrated while using this search engine."

Instructions for respondents: The following statements ask you to reflect on your experience of engaging with Application X or "this study". For each statement, please use the following scale to indicate what is most true for you.

1. Reverse code the following items: PU-1, PU-2, PU-3, PU-4, PU-5, PU6, PU-8, and RW-3.
2. Scale scores are calculated for each participant by summing scores for the items in each of the four subscales and dividing by the number of items:
   a. Sum FA-1, FA2, ... FA7 and divide by seven.
   b. Sum PU-1, PU-2, ... PU-8 and divide by eight.
   c. Sum AE-1, AE-2, AE-3, AE-4, and AE-5 and divide by five.
   d. Sum RW-1, RW-2, ... RW-10 and divide by ten.
3. If participants have completed the UES more than once as part of the same experiment, calculate separate scores for each iteration. This will enable the researcher to compare engagement within participants and between tasks/iterations.
4. An overall engagement score can be calculated by adding the average of each subscale as per #2.

Citation:

O'Brien, Heather L., et al. 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*, vol. 112, Apr. 2018, pp. 28–39. https://doi.org/10.1016/j.ijhcs.2018.01.004.