

KYSELYLOMAKE: FSD3893 PERSPEKTIIVIN VAIKUTUKSET RUUMILLISTUMISEEN VIRTUAALITODELLISUUDESSA 2023

QUESTIONNAIRE: FSD3893 EFFECTS OF PERSPECTIVE ON EMBODIMENT IN VIRTUAL REALITY 2023

TÄMÄ KYSELYLOMAKE ON OSA YLLÄ MAINITTUA YHTEISKUNTATIETEELLISEEN TIETOARKISTOON ARKISTOITUA TUTKIMUSAINESTOA.

KYSELYLOMAKETTA HYÖDYNTÄVIEN TULEE VIITATA SIIHEN ASIANMUKAISESTI LÄHDEVIITTEELLÄ.

THIS QUESTIONNAIRE FORMS A PART OF THE ABOVE MENTIONED DATASET, ARCHIVED AT THE FINNISH SOCIAL SCIENCE DATA ARCHIVE.

IF THE QUESTIONNAIRE IS USED OR REFERRED TO IN ANY WAY, THE SOURCE MUST BE ACKNOWLEDGED BY MEANS OF AN APPROPRIATE BIBLIOGRAPHIC CITATION.

DETTA FRÅGEFORMULÄR UTGÖR EN DEL AV DEN OVANNÄMDA DATAMÄNGDEN, ARKIVERAD PÅ FINLANDS SAMHÄLLSVETENSKAPLIGA DATAARKIV.

OM FRÅGEFORMULÄRET ÄR UTNYTTJAT ELLER REFERERAT TILL MÅSTE KÄLLAN ANGES I FORM AV BIBLIOGRAFISK REFERENS.

Day-to-Day Experiences

Instructions: Below is a collection of statements about your everyday experience. Using the 1-6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what *really reflects* your experience rather than what you think your experience should be. Please treat each item separately from every other item.

1	2	3	4	5	6
Almost Always	Very Frequently	Somewhat Frequently	Somewhat Infrequently	Very Infrequently	Almost Never

I could be experiencing some emotion and not be conscious of it until some time later.	1	2	3	4	5	6
I break or spill things because of carelessness, not paying attention, or thinking of something else.	1	2	3	4	5	6
I find it difficult to stay focused on what's happening in the present.	1	2	3	4	5	6
I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.	1	2	3	4	5	6
I tend not to notice feelings of physical tension or discomfort until they really grab my attention.	1	2	3	4	5	6
I forget a person's name almost as soon as I've been told it for the first time.	1	2	3	4	5	6
It seems I am "running on automatic," without much awareness of what I'm doing.	1	2	3	4	5	6
I rush through activities without being really attentive to them.	1	2	3	4	5	6
I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there.	1	2	3	4	5	6
I do jobs or tasks automatically, without being aware of what I'm doing.	1	2	3	4	5	6
I find myself listening to someone with one ear, doing something else at the same time.	1	2	3	4	5	6

1	2	3	4	5	6
Almost Always	Very Frequently	Somewhat Frequently	Somewhat Infrequently	Very Infrequently	Almost Never

I drive places on 'automatic pilot' and then wonder why I went there.	1	2	3	4	5	6
I find myself preoccupied with the future or the past.	1	2	3	4	5	6
I find myself doing things without paying attention.	1	2	3	4	5	6
I snack without being aware that I'm eating.	1	2	3	4	5	6

MAAS Scoring

To score the scale, simply compute a mean of the 15 items. Higher scores reflect higher levels of dispositional mindfulness.

IMMERSIVE TENDENCIES QUESTIONNAIRE
(Witmer & Singer, Version 3.01, September 1996)*
Revised by the UQO Cyberpsychology Lab (2004)

Indicate your preferred answer by marking an "X" in the appropriate box of the seven point scale. Please consider the entire scale when making your responses, as the intermediate levels may apply. For example, if your response is once or twice, the second box from the left should be marked. If your response is many times but not extremely often, then the sixth (or second box from the right) should be marked.

1. Do you easily become deeply involved in movies or tv dramas?

NEVER		OCCASIONALLY				OFTEN

2. Do you ever become so involved in a television program or book that people have problems getting your attention?

NEVER		OCCASIONALLY				OFTEN

3. How mentally alert do you feel at the present time?

NOT ALERT		MODERATELY				FULLY ALERT

4. Do you ever become so involved in a movie that you are not aware of things happening around you?

NEVER		OCCASIONALLY				OFTEN

5. How frequently do you find yourself closely identifying with the characters in a story line?

NEVER		OCCASIONALLY				OFTEN

6. Do you ever become so involved in a video game that it is as if you are inside the game rather than moving a joystick and watching the screen?

NEVER		OCCASIONALLY				OFTEN

7. How physically fit do you feel today?

_____	_____	_____	_____	_____	_____	_____
NOT FIT		MODERATELY		EXTREMELY		FIT
		FIT				

8. How good are you at blocking out external distractions when you are involved in something?

_____	_____	_____	_____	_____	_____	_____
NOT VERY		SOMEWHAT		VERY GOOD		
GOOD		GOOD				

9. When watching sports, do you ever become so involved in the game that you react as if you were one of the players?

_____	_____	_____	_____	_____	_____	_____
NEVER		OCCASIONALLY				OFTEN

10. Do you ever become so involved in a daydream that you are not aware of things happening around you?

_____	_____	_____	_____	_____	_____	_____
NEVER		OCCASIONALLY				OFTEN

11. Do you ever have dreams that are so real that you feel disoriented when you awake?

_____	_____	_____	_____	_____	_____	_____
NEVER		OCCASIONALLY				OFTEN

12. When playing sports, do you become so involved in the game that you lose track of time?

_____	_____	_____	_____	_____	_____	_____
NEVER		OCCASIONALLY				OFTEN

13. How well do you concentrate on enjoyable activities?

_____	_____	_____	_____	_____	_____	_____
NOT AT ALL		MODERATELY		VERY WELL		
		WELL				

14. How often do you play arcade or video games? (OFTEN should be taken to mean every day or every two days, on average.)

|_____||_____||_____||_____||_____||_____||
NEVER OCCASIONALLY OFTEN

15. Have you ever gotten excited during a chase or fight scene on TV or in the movies?

|_____||_____||_____||_____||_____||_____||
NEVER OCCASIONALLY OFTEN

16. Have you ever gotten scared by something happening on a TV show or in a movie?

|_____||_____||_____||_____||_____||_____||
NEVER OCCASIONALLY OFTEN

17. Have you ever remained apprehensive or fearful long after watching a scary movie?

|_____||_____||_____||_____||_____||_____||
NEVER OCCASIONALLY OFTEN

18. Do you ever become so involved in doing something that you lose all track of time?

|_____||_____||_____||_____||_____||_____||
NEVER OCCASIONALLY OFTEN

Last version: March 2013

Original version : Witmer, B.G. & Singer, M.J. (1998). Measuring presence in virtual environments: A presence questionnaire. *Presence : Teleoperators and Virtual Environments*, 7(3), 225-240.

**Questionnaire sur la Propension à l'Immersion
(QPI):**
Laboratoire de Cyberpsychologie de
l'UQO

Validation of the French version developed by the UOO Cyberpsychology Lab :

- 94 French-Canadian participants completed the questionnaire ;
- Cronbach's Alpha = .78.

Scoring :

Total : items 1 à 18

- « Focus » : Items 1 + 2 + 3 + 8 + 13
- « Implication » : Items 4 + 5 + 10 + 12 + 18
- « Émotions » : Items 11 + 15 + 16 + 17
- « jeu » : items 6 + 9 + 14

Norms (French version) :

	Moyenne	Écart type
Total	64.11	13.11
« Focus »	24.81	7.54
« Involvement»	15.33	8.67
« Emotions »	14.25	6.70
« Jeu »	6.56	4.95

Original version : Witmer, B.G. & Singer. M.J. (1998). Measuring presence in virtual environments: A presence questionnaire. *Presence : Teleoperators and Virtual Environments*, 7(3), 225-240.

Embodied Mindfulness Questionnaire

Available online:

https://link.springer.com/referenceworkentry/10.1007/978-3-030-77644-2_74-1

Appendix: Scale in Its Current Version

Instructions: Listed below is a collection of statements about your everyday experiences. Please read each statement carefully, and using the scale below, please indicate how often you experience each of the following. Please answer according to what accurately reflects your experience rather than what you think your experience should be.

(1) Almost Never

(2) Rarely

(3) Sometimes

(4) Often

(5) Almost Always

1. I get absorbed by my thoughts.
2. I feel detached from my body.
3. I am attached to my thoughts.
4. I feel separated from my body.
5. I tend to believe my thoughts.
6. I feel disconnected from my body.
7. I get caught up in my thoughts.
8. I give a lot of importance to my thoughts.
9. I feel removed from my body.
10. I am able to feel sensations throughout my body.
11. I notice the link between feeling anxious and unease in my body.

12. I notice the link between feeling sad and sensations of heaviness in my body.
13. I notice how my negative thoughts impact my mood.
14. I feel distanced from my body.
15. I distract myself from unpleasant sensations.
16. I notice my physical sensations.
17. I distract myself from my negative feelings.
18. I notice the association between feeling angry and tension in my body.
19. I try to escape negative feelings.
20. I avoid unpleasant physical sensations.
21. I am aware of my physical sensations.
22. I can easily direct my attention to my physical sensations.
23. I try to escape unpleasant physical sensations.
24. I notice changes in my physical sensations.

Note: Each dimension is computed separately using the means of its items. A total score should not be computed for EMQ. R means the item is reverse-scored.

1. EMQ (Detachment from Automatic Thinking) = $(EMQ1R + EMQ3R + EMQ5R + EMQ7R + EMQ8R) / 5$

2. EMQ (Attention and Awareness of Feelings and Bodily Sensations) = $(EMQ10 + EMQ16 + EMQ21 + EMQ22 + EMQ24) / 5$

3. EMQ (Disconnection from the Body) = $(EMQ2 + EMQ4 + EMQ6 + EMQ9 + EMQ14) / 5$

4. EMQ (Awareness of the Mind-Body Connection) = $(EMQ11 + EMQ12 + EMQ13 + EMQ18) / 4$

5. EMQ (Acceptance of Feelings and Bodily Sensations) = $(EMQ15R + EMQ17R + EMQ19R + EMQ20R + EMQ23R) / 5$

Virtual Embodiment Questionnaire (VEQ) - English

References

The scale was published in the following publication, that can be used as a reference (citation) for the use of the scale in further studies:

D. Roth and M. E. Latoschik (2020), Construction of the Virtual Embodiment Questionnaire (VEQ), in *IEEE Transactions on Visualization and Computer Graphics*, doi: 10.1109/TVCG.2020.3023603.

Bibtex:

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@article{roth_veq_2020,  
  author={D. {Roth} and M. E. {Latoschik}},  
  journal={IEEE Transactions on Visualization and Computer Graphics},  
  title={Construction of the Virtual Embodiment Questionnaire (VEQ)},  
  year={2020},  
  volume={26},  
  number={12},  
  doi={10.1109/TVCG.2020.3023603},  
  pages={3546-3556}  
}
```

Predecessor

Roth, D., Lugrin, J. L., Latoschik, M. E., & Huber, S. (2017, May). Alpha IVBO-construction of a scale to measure the illusion of virtual body ownership. In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 2875-2883). ACM.

Instructions

Please read each statement and check the relevant response to indicate how strongly you agree or disagree with each statement (1 through 7). There are no right or wrong answers. Answer spontaneously and intuitively.

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Somewhat disagree</i>	<i>Neither agree nor disagree</i>	<i>Somewhat agree</i>	<i>Agree</i>	<i>Strongly agree</i>
<i>Acceptance/Body Ownership</i>	1	2	3	4	5	6	7
AC1 myBody It felt like the virtual body was my body.	0	0	0	0	0	0	0
AC2 myBodyParts It felt like the virtual body parts were my body parts.	0	0	0	0	0	0	0
AC3 humanness The virtual body felt like a human body.	0	0	0	0	0	0	0
AC4 belongsToMe It felt like the virtual body belonged to me.	0	0	0	0	0	0	0
<i>Control/Agency</i>	1	2	3	4	5	6	7
CO1 myMovements The movements of the virtual body felt like they were my movements.	0	0	0	0	0	0	0
CO2 controlMovements I felt like I was controlling the movements of the virtual body.	0	0	0	0	0	0	0
CO3 causeMovements I felt like I was causing the movements of the virtual body.	0	0	0	0	0	0	0
CO4 syncMovements The movements of the virtual body were in sync with my own movements.	0	0	0	0	0	0	0
<i>Change</i>	1	2	3	4	5	6	7
CH1 myBodyChange I felt like the form or appearance of my own body had changed.	0	0	0	0	0	0	0
CH2 echoHeavyLight I felt like the weight of my own body had changed.	0	0	0	0	0	0	0
CH3 echoTallSmall I felt like the size (height) of my own body had changed.	0	0	0	0	0	0	0
CH4 echoLargeThin I felt like the width of my own body had changed.	0	0	0	0	0	0	0

Scoring process

Acceptance (Ownership) = (AC1 + AC2 + AC3 + AC4)/4
Control (Agency) = (CO1+ CO2 + CO3 + CO4)/4
Change = (CH1 + CH2 + CH3 + CH4)/4

Method

The scale measures virtual embodiment based on the factors Acceptance (ownership), Control (agency), and Change (perceived change in the body scheme). The scale should be measured immediately after exposure/induction of virtual embodiment. A 0-6-point scale can be used instead of the 1-7-point scale.

Additional items (excluded through CFA)

AGX1 bodyControlEnjoyment (AG)

I enjoyed controlling the virtual body.

VOX1 ownOtherBody (BO)

I had the illusion of owning a different body to my own.

CHX1 myBodyCheck (CH)

I felt like I had to check that my own body still looked like I remembered.

VOX2 belongsOtherPerson (BO*)

I felt like the virtual body belonged to someone else. *(recoded)

Contact

[email deleted]

www.virtualembodimentscale.com