**Supplementary Material**

1. **Goodness-of-fit indices and factor loading per item in the CFA model**

***Table SM1.*** *Goodness-of-fit indices and factor loading per item in the CFA model*

|  |  |  |
| --- | --- | --- |
| Goodness-of-fit indicators |  | Factor loadings |
|  |  |  | Item | Loading |
| *χ*2 | 57.72 |  |  |  |
| df | 14 |  | 1 | .70 |
| *p* | <.001 |  | 2 | .64 |
| CMIN/df | 4.12 |  | 3 | .53 |
|  |  |  |  | 4 | .45 |
| CFI | 0.96 |  | 5 | .64 |
| TLI | 0.95 |  | 6 | .41 |
| NFI | 0.95 |  | 7 | .54 |
| GFI | 0.98 |  |  |  |
| AGFI | 0.97 |  |  |  |
|  |  |  |  |  |
| RMSEA [90% CI] | 0.06 [0.05 0.08] |  |  |  |
|  |  |  |  |  |
| SRMR | 0.10 |  |  |  |

***Notes.*** The wording of the items (and the symptoms they refer to, in brackets) were as follows:Item 1 - *Did you think about using VR all day long?* [Salience]*;* Item 2 - *Did you spend increasing amounts of time in VR?* [Tolerance]; Item 3 - *Did you use VR to forget about real life?* [Mood modification];Item 4 - *Have others unsuccessfully tried to reduce your VR use?* [Relapse]; Item 5 - *Have you felt bad when you were unable to use VR?* [Withdrawal]; Item 6 - *Did you have fights with others (e.g., family, friends) over your time spent in VR?*[Conflict]; Item 7 - *Have you neglected other important activities (e.g., school, work, sports) to use VRs?* [Problems].

1. **Variance Inflation Factors.**

The Variance Inflation Factor (VIF), for each predictor in each model, was calculated to assess potential multicollinearity in our binomial logistic regression models (Daoud, 2017; Thompson et al., 2017). The *check\_collinearity()* function within the *performance* package (Lüdecke et al., 2021) in *R* was used for this purpose. As shown in Table SM.1 below, all the VIF values are below the suggested cut-off value of 5.00 (James et al., 2013), indicating that our models are not seriously affected by multicollinearity.

**Table SM.1.** *Values of VIF for each predictor variable in the three binomial logistic regression models*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Model 1 (monothetic) | Model 2 (polythetic) | Model 3 (polythetic, strict) |
|  | VIF | VIF | VIF |
| Age | 1.06 | 1.04 | 1.06 |
| Gender | 1.13 | 1.09 | 1.20 |
| Hours per week | 1.53 | 1.14 | 1.13 |
| Application: Social VR | 1.17 | 1.23 | 1.30 |
| Application: Other | 1.44 | 1.06 | 1.21 |
| Spatial presence | 1.43 | 1.39 | 1.28 |
| Embodiment | 1.46 | 1.42 | 1.32 |

**References**

Daoud, J. I. (2017, December). Multicollinearity and regression analysis. In *Journal of Physics: Conference Series* (Vol. 949, No. 1, p. 012009). IOP Publishing.

James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). *An introduction to statistical learning* *with applications in R*. Springer.

Lüdecke, D., Ben-Shachar, M., Patil, I., Waggoner, P., & Makowski, D. (2021). Performance: An R package for assessment, comparison and testing of statistical models. *Journal of Open Source Software, 6*(60), 3139. https://doi.org/10.21105/joss.03139.

Thompson, C. G., Kim, R. S., Aloe, A. M., & Becker, B. J. (2017). Extracting the variance inflation factor and other multicollinearity diagnostics from typical regression results. *Basic and Applied Social Psychology, 39*(2), 81-90. https://doi.org/10.1080/01973533.2016.1277529