

# Item Response Theory analyses of DSM-5 criteria for internet gaming disorder adapted to electronic screen use disorder: An exploratory survey in a suburban community sample

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**Background:** Screen use is part of daily life worldwide and morbidity related to excess use of screens is reported. Some use of screens in excess could express a screen use disorder (ScUD).

**Objectives:** Our goals were (1) to describe screen uses in a general population sample and (2) to test the unidimensionality and psychometric properties of the 9 DSM-5 Internet Gaming Disorder (IGD) criteria adapted to screen use in a community sample.

**Methods:** This cross-sectional survey in a French suburban city targeted adults and adolescents. A self-questionnaire covered main types of screens used and for which activities in the past month, and ScUD diagnostic criteria in past 12 months. Factor and 2-parameter IRT analysis were used to investigate the dimensionality and psychometric properties of the ScUD criteria.

**Results:** Among the 300 participants (57.0% female, mean age 27), nearly all (99.0%) used screens and 1.7% endorsed a ScUD. Screen types used and screen activities differed between participants with no ScUD criteria and those with at least one ScUD criterion. Unidimensionality was confirmed by all fit indices. The Loss of interest in other recreational activities criteria had the highest factor loading.

**Conclusions:** We described screen uses in a French community sample and have shown that the adaptation of the DSM-5 IGD to “screen use disorder” had good psychometric

validity and is discriminating. We suggest to use those criteria to assess potential “screen use disorder”. Further studies should determine if all criteria are needed and if others should be added.

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**Funding:** University of Bordeaux et CH Charles Perrens

**Conflicts:** Authors declare no conflicts of interest related to this work.