Reviewer’s report

Title: At-risk dependent internet use and internet addiction among Greek adolescents: A cross-sectional study

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Reviewer: Lawrence Lam

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Major Compulsory Revisions

There are some conceptual issues needed to be addressed. More importantly, there are methodological issues that may affect the scientific merit of the study.

Conceptual issues:

“Internet Addiction” is still a controversial term and is not yet a clinical diagnosis accepted in the current version of DSM-IV-TR nor the ICD-10. It was correct for the authors to note that there is no uniformly accepted definition on “Internet Addiction” (2nd paragraph, Introduction). Whether the Problematic Internet Use (PIU) behaviour should be considered as a disorder or not is still debatable.1-2 Hence, “Internet Addiction” is still a term loosely used in the field representing the problematic use or misuse of the Internet. Although it has been noted that “Internet Addiction” has been accepted as a disorder in some countries or being advocated by some researchers3, however, it has not been recognised internationally. For a proper diagnosis as a disorder or part of the spectrum of obsessive-compulsive disorders or impulse control disorders with clearly defined clinical diagnostic criteria, one has to wait for the DSM-V. Before then, it would be prudent to refrain from using the term “Addiction” for describing the kind of behaviour under study. An alternative possible term to be used is “Problematic Internet Use” (PIU) as suggested by some researchers with the same “signs and symptoms” quoted by the authors in the Introduction section for “addiction”.

The next conceptual issue is the measurement and assessment of the construct which has an impact on the main study thesis that distinction between severe and less severe users may exist. Applying the conventional thinking and theoretical assumptions of measurement and clinical assessment in areas of psychiatry and psychology, there is a gradient or a degree of severity or seriousness in the problematic behaviour or condition under study. This gradient or a degree of seriousness is assumed to follow a certain underlying probabilistic distribution, such as a Normal distribution. In terms of the categorisation or “cut-off” for sub-groups of severity, it could be based on extensive clinical experience and verifications or to be determined empirically using psychometric methodologies. The Young Internet Addiction Scale (YIAS) has been designed based on a conceptual framework similar to gambling addiction. In terms of the validation of the scale, there are only four studies reported in the literature so far. These include one on the original test in the English language, one in French,
one in Italian, and another in Chinese. Three of the four studies reported factor structural and convergent validity as the main focus. However, different factorial structures were reported ranging from 1 factor to 6 factors. In terms of “cut-offs” for sub-group classifications, sensitivity and specificity were not reported in any of these studies. As a result, there is insufficient evidence to say that certain cut-offs can be used definitively to classify a sub-group of problematic Internet users. The scores on the YIAS could be used as a broad categorisation indicatively for certain potential problems as suggested by Young on the Website. Hence, sub-classifications of “at-risk dependent Interest use” and “Internet Addiction” may not be implied by the YIAS. However, broader groupings such as “potential problematic user” and “normal user” may be a more appropriate approach in terms of categorisation of Internet users with various degrees of usage.

Methodological issues:
Few methodological issues have been identified for the improvement of the study. These include:

1. The study design. According to the descriptions in the Methods section, grade 9 and 10 students were recruited from schools randomly selected from the sample frame. Hence, students are nested or clustered in schools, and the study design was not a simple random sample survey. It was a survey using a random cluster sampling technique for generating subjects. Therefore, analyses of data should take into consideration of the clustering effect of schools disregarding how small the effect could be.

2. Other potential risk factors not considered. Information collection from students included demographics, Internet access, usage and experience, the SDQ, and YIAS only. Many other potential risk factors for PIU have been reported in the literature and have also been reviewed by Chen et al. (Euro J Psychi, in press). These identified potential risk factors should be included as part of this study.

3. Data analysis. The authors used multivariate logistic regression technique to examine the associations between Internet, SDQ variables and “at-risk dependent Internet use”, as well as “Internet addiction” separately. Since the outcome of study was a categorical variable with three levels, for the economy of model fitting, why not using the multinomial logistic regression for fitting the a multinomial logit model?

4. Given the low estimated prevalence of “Internet addiction” (n=13, 1.5%), the results obtained on the parameter estimate were grossly imprecise as shown by the large 95%C.I.. Increasing the sample size is one remedial action, however, not practical. Combining these cases with the “at-risk” group is another alternative. However, in doing so, the research question will inevitably changed to examining potential risk factors of problematic Internet use among adolescents. Unfortunately, there have already been many well-designed studies in the literature reporting more comprehensive results.

References


Minor Essential Revisions
NIL

Discretionary Revisions
NIL

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests