Reviewer's report

Title: Perceived connections between ICT use and mental symptoms among young adults

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Reviewer: Bengt Arnetz

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The aim with the current study was to explore users' own perception of relationships between high use of information and communication technology (ICT) and stress, depression, and sleep disorders.

The aim/purpose is clearly stated.

The background section is appropriate but fail to site earlier work of high relevance. For example, original work by Brod in 1988 who coined the term Techno-stress in his book with the same name (Techno-stress: The Human Cost of the Computer Revolution). There was a publication in JOEM 1992 by our own research team, Berg et al. Furthermore, a study by Arnetz in JOEM 1996 discussed ICT/Techno-stress. The authors should connect their current study, also involving cell/mobile phone ICT to the earlier work re ICT stress. In that way, the reader can trace the development of the field of ICT stress and health and also recognize the impact of new technology and behavior, including PDAs.

The method section is confusing and needs some clarification. For example, the authors list information re ICT use in Tables 1 and 2 by gender, based on the original 2004 study. All other information from that study is not gender-specific. The current manuscript does not provid gender-specific information. Further, there is NO information as to the health status of participants at baseline, 2004. Only the relationship between baseline ICT use and stress/health outcomes at 1 year follow up in 2005. Information is needed as to baseline symptoms as it relates to ICT use. Then 2005 data should be adjusted for baseline. However, I do not understand why the authors include these tables. They do not add to the current study.

The authors originally defines high ICT users as top quartile. Then, the define it in the current study as top 50%. It is not clear why this change in cut points for high ICT user. It is very difficult to follow how many subjects were identified (high users) and asked to participate in the current study and how many actually accepted. Were some subjects counted twice, that is, allocated to both high computer and high cell phone use groups, respectively?

Who did the actual coding of the written interviews - the same person that did the interviews? Were there any other person taking part in the interviews, for example, someone who noticed, tracked non verbal responses among the participants. Qualitative data collection methods are important and difficult to do. There needs to be more details re this since that is the key method data was collected in the
current study. There are excellent books on Grounded theory and qualitative methodology that could function as good reference when revising the methods section.

The result section is easy to follow. I have no major comments. The proposed model is interesting. However, the model should be related to some more general psychosocial, systems stress model. The ICT health model is after all partially modelled after such original model. Further, the result section also discusses possible positive effects form ICT, that is not reflected in the model as far as I can tell.

The Discussion section is to a large part a repeat of the results but relates to some pertinent literature. The authors are encouraged to add more references based on the older techno-stress studies discussed above.

Finally, the Abstract/Summary is a fair representation of the manuscript. However, the Conclusion part is basically a repeat of the Result section. The authors might want to consider adding something in terms of implication for theory and practice based on results found.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have not competing interests.

Bengt Arnetz