Review of: "Physical exertion at work and addictive behaviors: tobacco, cannabis, alcohol, sugar and fat consumption: longitudinal analyses in the CONSTANCES cohort"

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Potential competing interests: No potential competing interests to declare.

This is an original paper with a relevant and interesting question. Also, the database is large so there is considerable statistical power. I also have a few concerns that I would like to share. I realize that my response is very late but still I hope that my comments may be useful.

Introduction: Words that imply a direction / causation should be used with caution, as biases in observational studies are residual confounding and ongoing uncertainty around the direction of associations (Galan et al., 2022). For example, “substance use could lead to somatic disorders… (ref 3: Corroa e.a. 2004)”. The reference of Corroa e.a. speaks of risks, not of causes. The same counts for the central aim of the study, to examine the “potential consequences” of working conditions on substance use and sugar and fat consumption. There is so much confounding possible, that I feel that words such as “consequences” should be treated with greater caution. Not only to clarify the nature of the relationship to peer reviewers, but also to for example the lay press. (I feel that this issue is better addressed in the discussion).

Methods: I am curious to the rationale to compute the various numbers of substance use outcome modalities (for example: I read 10 different types of smoking outcome variables). Why would it be useful to choose all these different outcomes? And if so, has multiple testing correction been considered? This question is also relevant to the fact that additional analyses (Cox) have been performed.

Is there a reason why the outcomes of alcohol, cannabis and smoking were not operationalized in the same way? For example all in a continuous measure, or all in a “previous / current” format, or all according to WHO criteria, etc.?

I would also think it would be informative to explain the rationale behind selecting the covariates. For example, why should depressive symptoms be a covariate? And if so, which other psychological/psychiatric variables were considered? For example, I could imagine that psychiatric vulnerabilities such as addiction, ADHD, etc. could be possible confounders.

Was the follow-up duration always 1 year? And should employment status and physical exertion both at follow-up also be considered?

What is the number of missing data?

Discussion: “The lack of association in women while studying tobacco relapse is most likely the result of a reduction in statistical power.” > I was wondering why this should be the sole explanation, it could be well possible that there is a negative association. In addition, the database is large so there is considerable statistical power.