Reviewer's report

Title: Long-term stability of return to work after a workplace-oriented intervention for patients on sick leave for burnout

Version: 2  Date: 18 March 2014

Reviewer: Gunnar Bergström

Reviewer's report:

Evaluations of interventions for burnout or common mental disorders are important. The human and societal costs due to mental disorders are very high both in Sweden and several other OECD countries. In this controlled observational study a long-term follow-up of an intervention aimed at work retention among individuals with stress-related and adjustment disorders is presented. Intervention studies with follow-up periods of two or three years are rare within this field of research. After reading this interesting manuscript I have some methodological issues that the authors need to consider.

Major Compulsory Revisions

1. Aim a: In the statistical analysis you use the entire follow-up period but in the figure you concentrate on weeks 80 to 130. However, since the aim is to analyze whether "sick leave due to burnout was sustained or increased after an additional twelve months" I think it would be helpful to the reader to picture the entire follow-up period in the figures. Especially since you split the original intervention and control groups by age, which means that the reader have no chance to get a visual impression of how the actual development of sickness absenteeism even if the former publication is consulted (Karlsson et al 2010). I also wonder if there may be possible to use a more formal statistical test to evaluate this aim where the first 80 weeks are contrasted to the following 50 weeks?

2. Aim b: It was not clear to me how you evaluated this from a statistical point of view. It seems more that you attempt to answer this aim by reasoning than by applying formal statistical testing? Could you be clearer about how these aims were analyzed in the statistical analyses?

3. Aim c: Even here (as in aim a) it would be beneficial to see the entire follow-up period (Weeks 0-130) depicted in a figure.

4. It would be beneficial if you could give some more descriptive data on the development if sick leave in the intervention and control group, for instance, percentages in the groups (older and younger) that have returned to work at some time points during the follow-up (at least at the start of the study, at 18 months and at the end of the follow-up). You gave these data in your former
study (18-month follow up) but because you now analyze data separately for younger and older individuals, and moreover have dealt with attrition, it should be informative.

5. In the first paragraph of the Discussion you say that “the formerly reported superior results from the workplace intervention compared to the “care as usual” control condition were sustained.” The problem, though, is that the results appear to be sustained for the younger group but not for the older group. I think you should modify this formulation in line with the results.

6. Below methodological issues you say that “the dropouts were found almost entirely in the older half…” and you suggest that this “…eliminated the former differences between the intervention and the control groups among the older subjects.” How do you know this? I recommend that you describe the dropouts on the data you have, that is age, gender and sick leave during the first 18-month follow-up.

7. Is the more positive result for the intervention group explained by a higher proportion working part-time? Have you tried to standardize data into whole sick leave days?

8. Is it possible that figures 1 and 2 have been mixed up? You are reporting that there was no GROUP x WEEK effect for the older group, however, in figure 1 (the older group) a clear and stable difference is shown between the groups. Is this only mirroring a GROUP effect that has been at hand from the start of the follow-up? The figure for the younger group clearly shows converging lines. Does this mean that the participants in the younger group returned to work at a faster speed during the first 18-month?

Minor Essential Revisions
9. Results, first paragraph, first line: I became unsure of what you mean with “with increased degree of sick leave”. Why not just say “There were no group differences in number of episodes at a length of at least two weeks between the intervention and the control group”?

10. You are using well known and validated instruments. It would nevertheless, be good if you could give references to Swedish language evaluations of these instruments if such are at hand (except for KSQ).

11. You submitted two almost, but not exactly, identical manuscripts. However, in the supplementary file (the other almost identical manuscript) you have included figure legends, so please use these legends. Legends are missing in the manuscript. You should also adjust the blue (control group) line, in the figures (1 and 2) it is dashed but in the legend it is continuous.

12. Is Table 1 referred to anywhere?

Discretionary Revisions
If you have data for sickness absence for some time before the follow-up period it
would be very valuable to show this. Since the study uses a quasi-experimental
design the risk of selection bias is high and by depicting sick leave data for some
time before the study period important information about the intervention and
control could be given.

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

**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