Reviewer's report

Title: Web-based guided self-help for employees with depressive symptoms (Happy@Work): design of a randomized controlled trial

Version: 3 Date: 9 October 2012

Reviewer: Jordan Silberman

Reviewer's report:

Summary:

This study protocol describes an investigation that will be conducted to evaluated the effectiveness and cost-effectiveness of an Internet-based worksite depression program. The study population is white-collar adults. The intervention utilizes treatment approaches from the Problem Solving Treatment and Cognitive Therapy paradigms.

Strengths:

The study is generally well-designed. Study details are well-planned.

Major Compulsory Revisions

1. Your data structure is nested (repeated measures nested within subjects, subjects nested within companies), but your analysis plan does not account for non-independence in your data structure (eg, non-independence of subjects nested within the same company). I would recommend using a multilevel analytic approach to account for the non-independence of observations.

2. The control condition controls for the passage of time, but it does not control for placebo effects and for many other things. This, in my opinion, is the greatest weakness of the study design. You might consider substantially modifying the control condition.

Minor Essential Revisions

1. You mention that you will investigate mediators. Given the many methods that have been proposed for testing mediation, and to be consistent with the thorough description you provided of other analytic methods that you plan to utilize, you might state explicitly which test of mediation you plan to use.

Discretionary Revisions

1. For the self-report measure of employee productivity, you plan to use the time since last assessment as the recall period for all assessments. Thus, your time 1, 2, and 3 measures will have recall windows of roughly 2, 4, and 6 months, respectively. This may prevent you from being able to meaningfully test the simple effect of the intervention for treatment group subjects, because you would
expect different numbers of illness episodes for different recall windows. To make this measure comparable across time points but within study conditions, you might adapt the measure such that:

a. At T1, you might ask something like: During the past 2 months, about how many times per month did you...

b. At T2, you might ask something like: During the past 4 months, about how many times per month did you...

c. At T3, you might ask something like: During the past 6 months, about how many times per month did you...

This is of course just an example; you will probably wish to word differently, but you get the idea. In the example above, the time window of one month is consistent across measurements. You could of course choose a different time window, as long as this window is consistent across measurement occasions.

2. Given that PST assumes that depression is caused by problems, you might consider including a self-report instrument to measure the number, frequency, severity, etc., of personal problems. I realize that perceived environmental mastery may overlap somewhat, but this overlap is far from complete. Inasmuch as depression is caused by problems, the number/frequency/severity of problems may be an important moderator of intervention effectiveness. This is not a major issue, just a minor suggestion to take or leave.

3. Writing is ambiguous at times. Examples of ambiguous sentences are noted in hand-written comments.

4. See other hand-written comments in the text.

For other specific issues, please see hand-written comments in the attachment.

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

Quality of written English: Not suitable for publication unless extensively edited

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

Declaration of competing interests:

I was formerly employed by an organization (Health Media, Inc., Ann Arbor, MI) that develops and sells Web-based depression treatment programs (and other Web-based health promotion programs) to corporate clients. I am no longer employed by this organization, but I continue to collaborate with them.