Reviewer's report

Title: Associations between implementation characteristics and evidence-based practice sustainment: A study of the adolescent community reinforcement approach

Version: 2 Date: 22 September 2015

Reviewer: Laurence Roy

Reviewer's report:

Major Compulsory Revisions

Methods: It is not clear what conceptual framework the authors have chosen to ground their methodological plan for the study under review. It appears that they used variables from several conceptual frameworks, but the justification for that decision is not provided. In relation to that, an issue that needs to be clarified is that of the decision of what variables to include in the data collection and analytic plan. In particular, staff turnover since the start of the implementation is one variable that: 1) has been shown to be associated with EBP sustainment in previous studies and 2) is an issue of particular relevance for community organizations, particularly those in the mental/behavioural health field, such as those included in this specific study. It should at least be acknowledged in the study limitations. Overall, a clearer justification for the inclusion of some of the variables in the conceptual frameworks cited and not others is warranted, as well as a stronger articulation between conceptual framework(s) and the study design. Including a figure for that purpose might be helpful.

Discussion: The findings of the study under review are interesting and relevant to the field of implementation of complex behavioural interventions. Of particular interest is the fact that the factor most associated with sustainment was organization focus (substance use vs mental health/substance use + mental health/other?) – I believe the authors should take the time to discuss this and share their hypotheses on the processes involved. Could one imagine, for example, that A-CRA is harder to implement with adolescents who have a range of issues, not only substance use, but also mental health and justice involvement? One could also hypothesize that perhaps the clients’ characteristics and needs in some implementation settings were different from those of the clients involved in the RCT that tested the intervention. These are elements that should be presented in the discussion as they have relevance for implementation policy.

The authors could also reflect on potential interactions between some of their predictor variables. In particular, one could argue that perceived complexity could be associated with organizational focus (or staff characteristics).

Another element that warrants additional discussion is the inclusion of the three
variables that were statistically significant at 0.1 only. Table 1 indicates that there are actually very little differences in descriptive characteristics: e.g. for perceived implementation difficulty, there is a difference of 1.42 on a scale ranging from 1 to 35. The authors should comment on the actual (clinical/organizational) significance of this difference.

Overall, this warrants additional discussion of nature of each of the variables that influence sustainment of the A-CRA. At the end of p. 16, the authors state “In sum, we found that funding stability, political support, implementation quality during the funding period and perceptions of the intervention in terms of complexity and implementation difficulty by key staff are important factors associated with program sustainment » As the organization’s focus was actually the strongest predictor of sustainment time, it should be included in this sentence.

Discretionary Revisions

Methods: It would have been relevant to document the psychometric properties of the various measures used, including the Program Sustainability Assessment Tool, or to comment on the state of development of these measures.

Results: The authors should mention whether differences (e.g. size of the program, client characteristics, etc.) exist between the programs who participated in the study and those who did not, in addition to time since funding loss.

Time since funding loss is an important variable as it is directly related to the analytic strategy used in the current study. Although the range for this variable is provided, a complete set of descriptives and, ideally, a table with descriptive information of the organizations with regards to time since funding loss should be provided (e.g., number of organizations within 1-6 months of funding loss, 6-12 months, > 1 year, etc.).

Level of interest: An article of importance in its field

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 no competing interests.