Reviewer’s report

Title: Describing associations between child maltreatment frequency and the frequency and timing of subsequent delinquent or criminal behaviors across development: Variation by sex, sexual orientation, and race

Version: 0 Date: 06 Jan 2019

Reviewer: Joshua Mersky

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This study aims to use the Add Health dataset to examine main-effect and moderating connections between child maltreatment and offending behavior throughout adolescence and early adulthood. This is a well-worn scientific path, and it is unclear how the present study advances the literature. When making revisions, the authors may wish to consider the following critiques:

To begin, the title of the manuscript implies that the study addresses the effects of maltreatment by timing (when) and frequency/dosage (how much). However, the measurement and analysis plan does not answer the question as to whether the effects of maltreatment vary as a function of timing (i.e., when the events occur). Frequency is estimated as a retrospective, point-in-time count. This is a fair way to measure maltreatment in general, but it is unable to tease apart the effects of frequency from the effects of chronicity and severity (on p. 5, the manuscript mistakenly contends that frequency and chronicity are the same, but they are distinct nosological features).

The manuscript repeatedly confuses moderating effects with basic group differences. To wit, the abstract states: "Evidence of moderation was found across sex and sexual orientation such that males were more likely than females to engage in both violent and nonviolent offending behavior…” This is not an example of moderation.

The Background section of the manuscript does not establish a strong or coherent rationale for the study. It does not appropriately synthesize the mature body of interdisciplinary scholarship in this area, and it does not identify an important gap in the evidence that the current study aims to address. The literature review shortchanges the prospective, longitudinal research that has been conducted in this area over the past 4 decades, including the many studies that have mined the Add Health dataset. As a result, the manuscript makes exaggerated and unfounded claims regarding the unique contributions of current study. For instance, the manuscript indicates that the use of self-report maltreatment data enhances the study's validity and novelty. Both points are debatable. Self-report data, like administrative CPS records, have limitations, and the Add Health dataset certainly does not offer rich and nuanced information on child maltreatment. Plus, again, scores of similar studies have used self-report measures of maltreatment.

The study would be strengthened substantially by articulating research questions and hypotheses at the end of the Background section. As it stands, the study's aims are unspecific. The large number of analyses that were performed leaves the impression that the study was a methods- and results-driven expedition rather than a conceptually grounded one.
Owing perhaps to the study's lack of specific aims, the Discussion section is diffuse and suffers from overgeneralized claims that stray too far from the data. Study limitations should be moved from the Conclusion to the Discussion. Additional limitations should be acknowledged such as the substandard reliability of the outcome measures.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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