Reviewer's report

Title: The effects of mid-life socioeconomic disadvantage and perceived social support on trajectories of late-life depressive symptoms among older Taiwanese women

Version: Date: 24 December 2013

Reviewer: Dana Garbarski

Reviewer's report:

I enjoyed reading “The effects of mid-life socioeconomic disadvantage and perceived social support on trajectories of late-life depressive symptoms among older Taiwanese women,” a well-written manuscript. The research question is well-defined, cites appropriate literature, the data seem appropriate to answer the question, and the abstract and title convey what is found. There are some concerns about the analysis. Below are suggested revisions to improve upon the manuscript:

Discretionary revisions
1) Classifying the trajectories as “late life” is a misnomer for some women if they are 50 at baseline and followed for only 12 years. Consider revising.

Minor essential revisions
1) Some more discussion of the implication of these results for future research in Taiwan and other populations (and both men and women) would situate this particular analysis with other research.

Major compulsory revisions
1) One issue with growth curve models in general that is concerning is that the covariates of interest (socioeconomic disadvantage and perceived social support) are treated as time-invariant (accounting for their measurement at midlife) but are actually time-varying covariates. If the data do not contain repeated measures of these covariates, then the model cannot treat them as time-varying. If this is the case, some discussion of potential model misspecification seems to be in order, as socioeconomic disadvantage and perceived social support in theory may vary over time in relation to depression trajectories in a way that is not accounted for here.

2) The manuscript discusses “cumulative effects.” The literature on cumulative disadvantage and inequality is rather broad and disparate, and it is unclear which sort of accumulation the authors are seeking to address.

3) The methods need to be clearly explicated in the manuscript. There are many ways to specify growth curve models, and it should be clear in the manuscript beyond providing a citation which methods were used.

4) Similarly, it is not clear on page 6 why there are two distinct factor domains of
depressive symptomatology, especially since one domain only has two indicators. Some evidence that these are distinct domains in these data rather than separating because other studies have is warranted.

5) In addition, it appears that the slope of each trajectory is not statistically significant. How is the reader to interpret this finding?

6) Table 2 is hard to understand if one is not familiar with growth curves. Explanation of the terms *mean growth would aid in interpretation. (Also, “affect” rather than “affects” in the labels.)

7) Figures would be important to display the results more substantively. In particular, figures that plot the trajectories of negative affect and lack of positive affect with no covariates, and each of the covariates that significantly impacted the intercept and slope of the trajectory.

8) Again, for readers that are not familiar with growth curves, using the same language with respect to changes over time (such as “rate of change”) would be useful.

9) Page 13: the discussion of why measures of physical health were not included is unclear. It seems like physical health should be accounted for in this analysis if the data are available.

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.