Author’s response to reviews

Title: Memory Complaints and Depressive Symptoms Over Time: A Construct-Level Replication Analysis

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We thank the reviewers for their comments. We have provided a response below each comment. The changes are highlighted in red text in the manuscript.

Fan Zhang (Reviewer 1)

Previous suggestions have been well addressed in the revision. Here are a few points that may need further clarification.

- In the first paragraph of background (P.5), the authors mentioned that memory complaints and depressive symptoms have "unique predictive utility". However, the cited research only covered that compared with depressive symptoms, memory complaints has a unique and stronger predictive effect for cognitive decline. How about depressive symptoms? Any literature may support the unique role of depressive symptoms in aging cognition?

RESPONSE: Thank you for this comment. We have now added text about the predictive utility of depressive symptoms on page 5.

- In the second paragraph on P.6, the variability in assessment of memory complaints was mentioned as one of the limitations. What problems might be caused if perceived memory declines and memory ratings were confused as the same thing? Since the two were analyzed separately in the current study, this should be elaborated a bit more in the background.
RESPONSE: Thank you for this comment. We have now included an example of how these two types of assessments could result in different responses and are assessing fundamentally different aspects of memory functioning on page 6.

Rick Kwan (Reviewer 2)

I think you have answered all the questions I raised properly. Just after you revision, with better understanding of your statistics, there are still some minor questions:

1. Do you mean that you use both the lagged IV to predict the DV (depression or memory decline) in the last observation? or your DV is also a change score? You said on p. 13 line 256 that your DV is depressive symptoms but on p. 13 line 258 that your DV is "future changes of depressive symptoms". Is it really a change score?

RESPONSE: Thank you for this clarification. We have revised the text on page 13 to say future depressive symptoms rather than changes in depressive symptoms.

2. On your table 4, your re-coded your DV (i.e., memory complaint) as binary variables. Why do you use beta to report the strength of association with the Self-rated memory, and the other you use OR to report? I suggest to standardize using OR in all models for easy comparison.

RESPONSE: Thank you for this suggestion. We report the effects of self-rated memory (and depression) as raw regression coefficients (rather than standardized) because these variables were treated as continuous in the multilevel models. In contrast, the memory decline variables are binary variables and require a nonparametric approach to modeling to appropriately represent their distribution. Using ORs in the continuous models would obscure the linear relationships that have been identified as these variables are normally distributed. We now include a statement about how effects in each of the models should be interpreted in the statistical analysis section on pages 12,13.