Reviewer’s report

Title: Older adults with lower autobiographical memory abilities report less age-related decline in everyday cognitive function

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Manuscript: "Older adults with lower autobiographical memory abilities report less age-related decline in everyday cognitive function"

Authors: Fan, C., Romero, K., & Levine, B.

In the reviewed manuscript, Fan and colleagues explore the relation between autobiographical memory ability and everyday cognitive function. The authors report greater age-related declines in daily functioning in individuals with high trait-level episodic autobiographical memory. This is my third time seeing this manuscript (second time for this journal) and I thank the authors for addressing all of my comments so thoughtfully. In particular, I thank the authors for taking the time to clarify this fascinating interaction. I think that this finding could be incredibly influential to the field of cognitive aging, as it introduces an important trait-level individual difference that has not been discussed previously. Understanding how baseline differences in processing autobiographical memory relate to cognitive changes over time might help us to understand why older adults' cognitive trajectories don't all look the same. Because of this importance, I really want to make sure I fully grasp how the variables relate to one another. I think making clearer distinctions between how trait-level episodic AM and laboratory-based episodic memory ability are conceptualized in this framework has helped tremendously.

There are just two additional things that I would appreciate additional clarification on, but I believe are mostly just an issue of terminology:

-First, I appreciate the addition to the abstract concerning the hypothesized direction of the interaction. However, the statement that "those with higher trait-level episodic AM would have enhanced sensitivity to age-related cognitive changes due to their tendency to rely on their perceived above-average memory function" suggests that the effects are driven, at least in part, by the high AM group being more likely to notice changes in daily function between they are used to superior memory ability. I do not believe that this is what the authors intend to hypothesize, since it is not how they explain the interaction and, in fact, they argue against this in the discussion. But I think the way that this is phrased leads the reader down the wrong path.

-Second, I thank the authors for clarifying the relation between the variables. What I am getting from the current argument is that people with low and high trait-level episodic autobiographical memory do not differ in their underlying cognitive ability, including the ability to access specific details. This extends to their ability to access specific details of their autobiographical memories,
where people with both low and high trait-level episodic autobiographical memory can access these details if probed. The difference between these groups is in what they automatically do when retrieving memories in their everyday lives. People with high trait-level episodic autobiographical memory automatically retrieve their personal memories with a high degree of autonoetic subjective recollection and also tend to rely more heavily on episodic memory processes in daily tasks. In contrast, people with low trait-level episodic autobiographical memory automatically retrieve their personal memories at more of a gist level and also use this sort of gist processing in daily tasks. Importantly, and this is where I think I have been stuck, this is just a tendency. If probed, people with low trait-level episodic autobiographical memory still have the ability to access specific details of their memories and could utilize episodic memory processes for daily tasks, since they do not have lower episodic memory abilities compared to those with high trait-level episodic autobiographical memory. It is just that, for whatever reason, it is not their base inclination to do either. Because of this tendency, the age-related decline in episodic memory abilities does not impact daily tasks to the same extent as the high AM group.

Is this all a correct interpretation of the authors' logic? If so, I would ask that the authors think about their use of the term "autobiographical memory abilities" in the title and throughout. As a reader, I see this term as suggesting that people with low trait-level episodic autobiographical memory are unable to recall episodic autobiographical memory details. If this is not the case, and it is really more of a preference or tendency, then I think the term "ability" might be misleading. If my interpretation was not correct, and people with low trait-level episodic autobiographical memory would not be able to access memory details when probed, I think it is worth discussing what might be underlying this deficit if it isn't episodic memory ability.

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

Yes

**Does the work include the necessary controls?**
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Yes

**Are the conclusions drawn adequately supported by the data shown?**
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