Reviewer’s report

Title: Social Relationships and Cognitive Functioning in Healthy Older Adults: A Systematic Review

Version: 0 Date: 23 Jul 2017

Reviewer: Jason Flatt

Reviewer’s report:

The manuscript, "The Relationship between Social Engagement and Cognitive Function in Healthy Older Adults: A Systematic Review," is a systematic review of the relationship between social engagement and cognitive function in older adults. Authors found a relationship between social relationships (social activity, social networks, social support, and social integration) with a range of cognitive outcomes. The authors conclude that while there is a relationship between social engagement and cognition, the directionality and nature of the relationship is still unclear. Several strengths of this study include the inclusion of several domains of social relationships and examination of several cognitive domains. Despite several strengths, there are a number of research and conceptual issues that if addressed, would significantly improve the manuscript. These are explained below in no particular order.

1. Authors should consider strengthening their conceptualization of social engagement and provide clearer definitions of what they mean by social activity, social networks, social support, and social integration. Much of the literature has provided a conceptual framework suggesting that social activity and support are products of one's social network (downstream) and that social integration represents broader upstream levels of social resources (community, family, etc). Also social engagement has often been depicted as both social and productive activities (volunteering and work).


2. Less clear how authors examined healthy cognitive function and impaired function. Should touch more on the causality concerns (e.g., "Is it the chicken or the egg?") in introduction. Also what about how cognitive impairment results in a decreased ability to maintain social relationships?

3. Should further justify why studies with combined data for participants with normal cognition and those with impairment were excluded. Many studies have both and seems important to take these studies into account and how those studies might impact your findings.
4. Also should describe in the introduction why/justification for global cognition, and episodic memory and executive function domains were the primary outcomes and other domains of cognition were not investigated. Moreover, were studies that focused on other cognitive domains excluded?

5. Should clarify whether quality assessment/checklist was used critically appraise quality of studies.

6. Unclear why a meta-analysis was not done. Understanding of effect sizes would be extremely helpful to the field. Also should consider whether subgroup meta-analysis may be feasible for studies on social activity, social networks, social support, and social integration.

7. Should expand a bit more on studies looking at relationship between social engagement and cognitive decline. What about social activity, social networks, social support, and social integration and cognitive decline?

8. Should consider other recent systematic reviews:


9. Should be more explicit in discussion about the potential heterogeneity among the studies included in this review.

Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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