February 17, 2020

Professor Dr. Stephen D. Merinery

Department of Neuroscience

University of Pittsburgh

Pittsburgh, PA, USA

Re-submission: MS number brainsci-719168

Dear Professor Merinery,

We are pleased to send you our revised manuscript, “The Relation between Sustained Attention and Incidental and Intentional Object-Location Memory.” We are grateful for the reviews and were pleased to learn that the reviewers acknowledged the potential contribution of our manuscript.

We followed the reviewers’ recommendations and made the following changes in the manuscript (colored in blue):

First reviewer:

* We provided the data regarding the PVT-B task (p.
* We corrected the grammatical errors (p.
* We removed the comma as suggested (p.

Second reviewer:

* Reviewer 2 pointed out that the novelty of the present study is not clear. Indeed, the first aim of the present study was to replicate previous research findings using a within-subject design. However, the second aim of the present study was to explore the role of sustained attention in object-location memory. To the best of our knowledge, we are the first to investigate this research question (p.
* We added a procedure section, in which we elaborate on the experimental methods (p.
* Reviewer 2 suggested to state in the abstract the reason for using an all women sample. We added the suggested clarification to the abstract (p. 1)
* We addressed the contextual cueing literature and related it to the present study (p. )
* Reviewer 2 suggested resolving the limitations in the present study. Unfortunately, we are unable to resolve the limitations at the present time. However, we believe that our preliminary findings are innovative and shed light on the role of executive attention on memory performance. We plan to conduct a follow-up study in which we will implement the insights from the present study.
* We omitted the sentence regarding episodic memory (p. )
* We formulated the sentence regarding the role of attention in memory performance (p.
* We re-wrote the paragraph that addresses the cognitive strategies that males and females use (p.
* We elaborated on the power analysis (p.
* Reviewer 2 addressed autonomic operations versus effortful processes. Indeed, based on Hasher and Zacks (1979), the automaticity hypothesis refers to the capacity to process stimuli without awareness, whereas effortful processes require attentional resources (p.

Third reviewer:

* We addressed the research on the different cerebral areas involved in object-location memory in the introduction (p.
* Given that our participants' objective sleep patterns were all within normal range, we did not include sleep measure calculations in our main study analyses (p. )
* We elaborated on the physiological mechanisms in the discussion section (p.
* Reviewer 3 suggested to address the utility of this study in clinical practice. We addressed this suggestion in the discussion (p. and p.
* We reviewed the references to confirm that they are in line with author guidelines

We believe that we have addressed all the issues raised in the reviews and hope that you will find the article acceptable for publication in the journal of *Brain Sciences*.

We thank you again and look forward to hearing from you.

## Sincerely,

## Efrat Barel and Orna Tzischinsky