

COGNITIVE SCIENCES AND HUMAN DEVELOPMENT

Does Gender Difference Play a Significant Role in Verbal and Visuospatial Working Memory Performance?

Chan Zhi Shan & Mohamad Azhari Bin Abu Bakar*

Faculty of Cognitive Sciences and Human Development, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia

ABSTRACT

The present study investigates gender differences in working memory performance, both verbal and visuospatial working memory performance. Quasi-experimental research was conducted individually on 32 undergraduates at a public university in Malaysia, using a reading span task and rotation span task. The performance was based on the total number of correct recalled and the total time taken. Results showed a significant gender difference in the verbal and visuospatial working memory performance. The observation was based on the total time taken, in which males performed more rapidly than females in both tasks. In terms of accuracy, female participants recalled better than their male counterparts in the verbal task, which is consistent with numerous past studies. However, no gender difference was identified in the visuospatial task performance, based on the total number of correct recalled. The study also found that male participants did not show an advantage in visuospatial abilities, contradicting findings by past studies.

Keywords: gender differences, verbal working memory, visuospatial working memory, cognitive functions

ARTICLE INFO

Email address: abmazhari@unimas.my (Mohamad Azhari Bin Abu Bakar) *Corresponding author

https://doi.org/10.33736/jcshd.3744.2021

e-ISSN: 2550-1623

Manuscript received: 6 August 2021; Accepted: 14 September 2021; Date of publication: 25 September 2021

Copyright: This is an open-access article distributed under the terms of the CC-BY-NC-SA (Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License), which permits unrestricted use, distribution, and reproduction in any medium, for non-commercial purposes, provided the original work of the author(s) is properly cited.