

LETTER TO THE EDITOR

doi:10.1017/S1041610223000881

Depression, childhood trauma, and physical activity among older adults**Key words:** Physical activity, depressive symptoms, childhood trauma, older adults

Rowland *et al.* (2023) valuated the risk factors of depression in indigenous older adults with special reference to childhood trauma and current physical activity. Childhood trauma severity and intensity of physical activity predicted depressive symptoms, and poor mental health, trauma, and illness acted as barriers to physical activity. I have comments regarding the moderating effect of childhood trauma on the relationship between physical activity and depression.

Tao *et al.* (2023) conducted a meta-analysis to examine the effect of non-pharmacological interventions on psychological outcomes among older people with frailty, and physical exercise had significant beneficial effects on depressive symptoms. In general, older adults have some comorbidities and frailty, which would lead to some psychological problems in their lives. Regarding the moderating effect of childhood trauma on the relationship, Royer and Wharton (2022) examined the link between adverse childhood experiences (ACEs), physical activity, and depression among U.S. adults. ACEs were significantly related to lower physical activity and depression. Namely, ACEs and physical activity were inversely related, and physical activity and depression were also inversely related. In addition, physical activity mitigated the link between ACEs and depression. I suppose that appropriate intervention in physical activity may reduce the risk of depression in subjects with adverse childhood experiences.

Boisgontier *et al.* (2020) observed the mediating tendency of depressive symptoms on the association between ACEs and functional dependence in older subjects. They also observed that physical activity reduced the effect of ACEs on subsequent depressive symptoms. As a consequence, the effect of ACEs and depressive symptoms on functional dependence in activities of daily living (ADL) and instrumental ADL was nonsignificant in subjects with keeping physical activity.

Although there is an effect of childhood trauma on depression in older subjects without habitual physical activity, physical activity may reduce the risk of depression by childhood trauma. In conclusion, an acceptable physical activity should be recommended for managing depression in older adults with and without childhood trauma.

Conflict of interest

None.

References

- Boisgontier, M. P. et al.** (2020). Adverse childhood experiences, depressive symptoms, functional dependence, and physical activity: a moderated mediation model. *Journal of physical activity and health*, 17, 790–799. <https://doi.org/10.1123/jpah.2019-0133>.
- Rowland, G. et al.** (2023). Depression, childhood trauma, and physical activity in older indigenous Australians. *International Psychogeriatrics*, 35, 259–269. <http://doi.org/10.1017/S1041610221000132>.
- Royer, M. F. and Wharton, C.** (2022). Physical activity mitigates the link between adverse childhood experiences and depression among U.S. adults. *PLoS One*, 17, e0275185. <https://doi.org/10.1371/journal.pone.0275185>.
- Tao, A., Ho, K. H. M., Yang, C. and Chan, H. Y. L.** (2023). Effects of non-pharmacological interventions on psychological outcomes among older people with frailty: a systematic review and meta-analysis. *International Journal of Nursing Studies*, 140, 104437. <https://doi.org/10.1016/j.ijnurstu.2023.104437>.

TOMOYUKI KAWADA Department of Hygiene and Public Health,
Nippon Medical School, Bunkyo-ku, JapanCorrespondence should be addressed to: Email: kawada@nms.ac.jp