Associations between Meeting 24-Hour Movement Guidelines with Internalizing and Externalizing Problems in Children and Adolescents

Kaixin Liang¹, Sitong Chen², Xinli Chi¹, Liye Zou¹

1 School of Psychology, Shenzhen University, Shenzhen, China

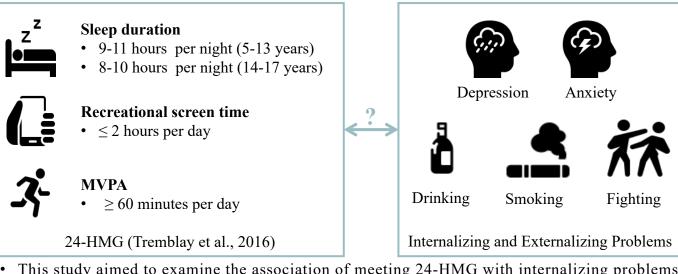
2 Institute for Health and Sport, Victoria University, Melbourne, Australia

Presenter: liangkaixin2020@email.szu.edu.cn



Background and Aim

• Meeting 24-Hour Movement Guidelines (24-HMG) is associated with better physical health, but less is known about its associations with mental and social health.



 This study aimed to examine the association of meeting 24-HMG with internalizing problems (depression and anxiety) and externalizing problems (drinking, smoking, and fighting) among children and adolescents.

Methods

- A large cross-sectional sample of Chinese children and adolescents aged 10-17 years (N = 67,281, 51.9% boys and 48.1% girls) was analyzed.
- Associations were examined using generalized linear models adjusted for socio-demographic variables.

Results

- Meeting three recommendations of 24-HMG was associated with lower levels of depression and anxiety than meeting none, with associations mainly attributed to meeting sleep and screen recommendations.
- Meeting three recommendations of 24-HMG was associated with lower odds of drinking and fighting than meeting none, with associations mainly attributed to meeting the screen recommendation.

Discussion and Conclusions

- Adherence to 24-HMG, especially the screen use and sleep recommendations, was linked to a lower possibility of developing internalizing and externalizing problems among children and adolescents.
- Results supported another similar study on U.S. samples aged 9-11 years old (Sampasa-Kanyinga et al., 2021).
- More longitudinal and intervention studies are needed to verify the associations.

References

- Tremblay et al. (2016). Canadian 24-Hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep. *Applied Physiology, Nutrition, and Metabolism*
- Sampasa-Kanyinga et al. (2021). 24-Hour Movement Behaviors and Internalizing and Externalizing Behaviors Among Youth. Journal of Adolescent Health