11 April 2025

Dear editors of ***Virtual Reality***,

Please find enclosed our manuscript for your consideration, “***The Effect of Virtual Curved Path on Spatiotemporal Gait Parameters in Older Adults:*** ***A Pilot Study***”, for consideration in ***Virtual Reality.***

In this submitted research paper, we explored whether visually simulated curved walking paths, presented in a low-immersion virtual reality (VR) environment combined with a fixed-speed treadmill, could elicit gait adaptations in healthy older adults. Real-world curved path walking could induce natural gait asymmetries that resemble those seen in post-stroke gait. We aimed to test whether similar effects could be achieved using only visual cues under low-cost and accessible conditions. Our findings suggest that virtual curved paths can induce turning-related gait changes—specifically in centre of mass shift and temporal gait parameters despite the use of low-immersion VR and conventional hardware. These results may inform the design of accessible and visually guided VR gait rehabilitation program.

We believe this paper fits well within the scope of your journal. Each of the authors has read and concurs with the content in the final manuscript. The material presented in this study has not been published and is not under consideration for publication elsewhere, except as a conference abstract.

Yours sincerely (on behalf of the authors),



Yanxin Zhang

Associate Professor

Department of Exercise Sciences

University of Auckland, New Zealand

Email: yanxin.zhang@auckland.ac.nz