

Which mobility issues affect how people with Traumatic Brain injury (TBI) participate in community activities?

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Aim: The aim of this study was to investigate which factors, in relation to balance and mobility, influence activity and participation in people with Traumatic Brain Injury (TBI).

Design: Correlational study.

Methods: Twenty-five participants with TBI living in the community, 17 males and 8 females, mean age of 45±15.65 years completed a battery of outcome measures around balance and mobility in addition to the International Classification of Functioning Measure of Participation and Activities Scale (IMPACT-S).

Results: Several measures significantly correlated with the IMPACT-S. These included Activities-specific Balance Confidence ($r = .746$, $p < 0.001$), Modified Falls Efficacy Scale ($r = .744$, $p < 0.001$), the Fullerton Advanced Balance Scale ($r = .664$, $p < 0.001$), Berg Balance Scale ($r = .639$, $p = 0.001$) and measures of mobility including the 10-meter walk test ($r = -.511$, $p = 0.009$) and 6-minute walk test ($r = .531$, $p = 0.006$). The Global Fatigue Index ($r = -.517$) ($p = 0.008$) and the Dizziness Handicap Inventory ($r = -.432$) ($p = 0.031$) also showed significant correlation.

Conclusion: Several aspects of mobility correlate with activity and participation in people with TBI. Balance confidence, fear of falls and balance function correlated most strongly in this group.

Key Practice Points:

- Objective measures of balance and mobility correlate with participation and activity levels in people with TBI.
- Balance confidence and fear of falling show strong correlation and need further consideration in future research and clinical practice in people with TBI.

Nicole is an APA Neurological Physiotherapist at [Advanced Neuro Rehab](#) having completed a Bachelor of Applied Science in Physiotherapy, UniSA, in 1997 and a Master's in Clinical Rehabilitation (Neurological Physiotherapy) at Flinders University in 2017. Nicole has extensive experience including work as Superintendent Physiotherapist at the Bobath Centre in London & Senior Consultant Physiotherapist at Advanced Neuro Rehab since 2005. Nicole provides therapy both in the rooms, home visits and hydrotherapy sessions and provides support and mentorship to the therapy team at Advanced Neuro Rehab.