Tablet Use is Associated with Physical Activity and Loneliness in Older Adults

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BACKGROUND

• About 67% of adults aged 65+ years are now using the internet, 32% own tablets, and 42% own smartphones
• New technology may have tremendous potential to contribute to successful aging

RESEARCH AIM

Examine the use of different types of tablet functions (exercise, social) and their associations with changes in physical activity (PA), loneliness, and cognitive function

METHOD

N = 83 adults from Vancouver, 63% female
Age = 68 years (SD = 8.9), range: 51–85
57% East Asian, 34% Caucasian

Pre-tracking sessions 6-month tracking period Post-tracking session

Measures at pre- and post-tracking sessions:
• Socio-demographics
• Physical activity4 (vigorous: M = 2.8 hrs, SD = 4.7; moderate: M = 4.7 hrs, SD = 6.6; walking: M = 8.6 hrs, SD = 9.3; sitting: M = 4.9 hrs, SD = 2.7)
• Loneliness5 (social: M = 2.1, SD = 0.9; emotional: M = 1.6, SD = 0.8)
• Executive functioning6,7 (trail making B: M = 113.4 s, SD = 56.4; animal naming: M = 12.1, SD = 3.8)

Biweekly measures during 6-month tracking period:
• Exercise function use (M = 25.1%, SD = 33.4)
• Social function use (M = 81.8%, SD = 27.7)
• Overall hours of tablet use (M = 22.3 hrs, SD = 18.6)

RESULTS

1. Use of exercise functions is associated with increases in moderate-intensity PA and sitting time

2. Use of social functions is associated with increases in social loneliness and decreases in emotional loneliness

3. Use of exercise and social functions is not associated with changes in executive functioning

DISCUSSION

• Access to exercise apps or fitness-related information may help older adults to be more physically active
• Tablet-based programs may also increase screen time and the need to rest, resulting in more sedentary time
• Social technology use may mitigate emotional loneliness, but at the same time increase social loneliness by inducing upward social comparison
• More research is needed on whether tablet use may promote cognitive functioning

CONCLUSION

New technology could carry tangible physical and social well-being benefits, but effects depend on type of use

REFERENCES

2. BMI = body mass index
4. PA = physical activity

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