

Haydays with Horses: How Equine-Assisted Learning Benefits Seniors



“Can spending time with horses improve the well-being of seniors?”

By 2030, around one in four Singapore citizens will be aged 65 and above. This demographic shift poses significant physical, mental, and social challenges for older adults, impacting their overall quality of life. There is therefore a need to engage the older adults and improve their well-being.

What our latest study aims to find out!

The Research Division of IMH has partnered with National University of Singapore to evaluate how Haydays with Horses, an Equine-Assisted Learning (EAL) programme conducted by EQUAL, can enhance physical and psychological health of seniors.

In this EAL programme seniors undergo 10 weekly sessions which are conducted at the nursing homes or active ageing centres (5 sessions) and on EQUAL’s premises (5 sessions). The seniors will be given an opportunity to interact with miniature horses through guided activities such as, petting the horses, feeding them, and engaging in basic animal care.

Horses are known for their calming presence, and research suggests that interacting with them can boost mood, reduce stress, and improve physical coordination. Studies conducted in our western counterparts are showing beneficial results for the seniors. We are conducting pre- and post-programme surveys with participants to measure changes in their well-being and daily functioning. Additionally, after the programme, we will hold a focus group discussion to gather insights on their experiences and explore ways to make the programme even better.

This study is not only about data but it’s about understanding how meaningful interactions with horses can bring joy, confidence, and improved mobility to seniors. Through this, we hope to refine the program and create more impactful, engaging, and accessible sessions in the future.

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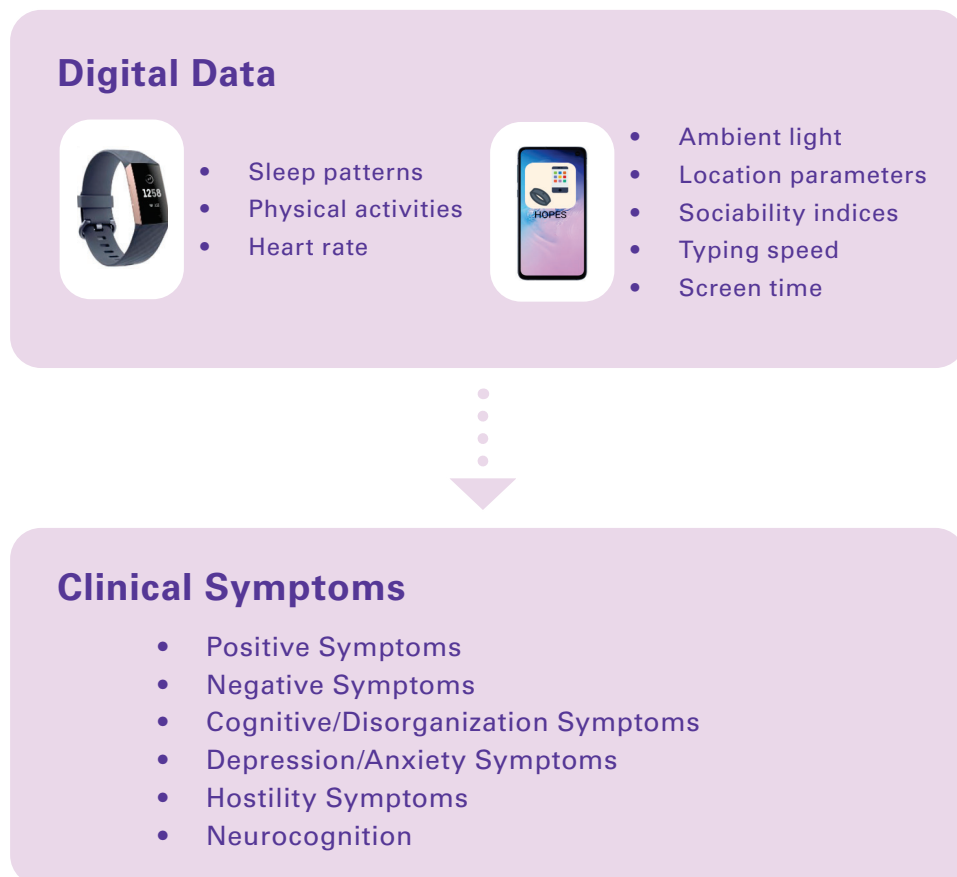
Smart Tech for Clinical Care: Can Wearables and Phones Help?

Digital phenotyping involves collecting and analyzing data from digital devices to understand human behavior and health. A collaborative study between the Institute of Mental Health (IMH) and the MOH Office for Healthcare Transformation (MOHT) explored how **data from wrist-worn devices and smartphones** could help monitor and understand symptoms and functioning in individuals with schizophrenia.

Study Overview

The study aimed to identify digital biomarkers — data collected from wearable devices and smartphones — that correlate with clinical symptoms and daily functioning in patients with schizophrenia and find patterns that reflect the severity of symptoms and overall well-being in these individuals. (Figure 1)

Figure 1. Digital Markers and Clinical Outcomes measured in the study



Key Findings

Activity levels

Data from wrist-worn devices showed that lower physical activity levels were associated with more severe negative symptoms (such as lack of motivation) and poorer daily functioning.

Sleep patterns

Irregular sleep patterns, detected through wearables, were linked to increased severity of both positive symptoms (e.g., hallucinations) and negative symptoms.

Phone usage

Smartphone data revealed that reduced communication (fewer calls and messages) correlated with more pronounced negative symptoms and decreased social engagement.

Implications

These findings suggest that digital phenotyping could serve as a valuable tool in mental health care. **By continuously monitoring data from everyday devices, healthcare providers might detect early signs of symptom changes, allowing for timely interventions.**

This approach could lead to more personalized and responsive treatment plans for individuals with schizophrenia.

Conclusion

The study demonstrates the potential of using wearable devices and smartphones to monitor and understand the experiences of individuals with schizophrenia. While further research is needed to refine these digital biomarkers, integrating such technologies into mental health care could enhance the monitoring and management of schizophrenia, ultimately improving patient outcomes.

Study Reference: Yang Z, Heaukulani C, Sim A, Buddhika T, Abdul Rashid NA, Wang X, Zheng S, Quek YF, Basu S, Lee KW, Tang C, Verma S, Morris RJT, Lee J. Utility of Digital Phenotyping Based on Wrist Wearables and Smartphones in Psychosis: Observational Study. *JMIR Mhealth Uhealth*. 2025 Feb 5;13:e56185. doi: 10.2196/56185. PMID: 39912304; PMCID: PMC11822399.

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