

way to model multi-day learning on these subtests to evaluate their potential associations with Alzheimer's disease biomarkers.

**Categories:** Teleneuropsychology/ Technology

**Keyword 1:** computerized neuropsychological testing

**Keyword 2:** technology

**Keyword 3:** learning

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### 85 Smartwatch reminders support prospective memory in Korsakoff's syndrome

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**Objective:** Korsakoff's syndrome (KS) is a neuropsychiatric disorder, caused by malnutrition. Central to KS are severe amnesia and executive dysfunctions. KS patients often fail to remember future intentions (prospective memory), and rely heavily on external support by caregivers. Recently, specialized smartwatches have been developed to support prospective memory verbally and by displaying pictures of future events. We investigated the benefit of a smartwatch and smartphone compared to no aid in supporting time accuracy and the ability to carry out future intentions in one case study. In three subsequent case studies, we investigated the possible benefits of a smartwatch aid for prospective memory (PM) compared to verbal in-person reminders.

**Participants and Methods:** In the first case study, one high-functioning KS patient with a WAIS IQ of 127 points, performed a total of 36 novel prospective memory tasks in three conditions (smartwatch, smartphone and no-aid).

In the second case series, three KS patients with average IQ performed 30 everyday PM tasks in two conditions (smartwatch, in-person).

Two dependent variables were indexed in both studies: PM time accuracy (in minutes), this was calculated as minutes difference from the assigned time, and precision of the PM task (correct or incorrect).

**Results:** In the first study, time accuracy was improved with a smartwatch compared to a smartphone and no-aid condition. Furthermore, the smartwatch and smartphone conditions were more effective than no aid in assisting memory for task content. In the second study, both the smartwatch and in-person instructions were equally effective in supporting prospective memory tasks.

**Conclusions:** Since prospective memory is compromised in KS, patients require assistance throughout the day in performing everyday and non-everyday tasks. The results of our case studies suggest that a smartwatch that gives specific verbal and visual reminders can be particularly helpful in supporting prospective memory for KS patients. Giving in-person instructions was equally effective as the use of this smartwatch, highlighting the possibility to support KS patients with less intensive everyday coaching. Together, these results are promising in applying smartwatches clinically to support prospective memory.

**Categories:** Teleneuropsychology/ Technology

**Keyword 1:** Korsakoff's syndrome/Wernicke's encephalopathy

**Keyword 2:** technology

**Keyword 3:** memory disorders

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### 86 Influence of Psychosocial Coronavirus Pandemic Stressors on Neuropsychological Functioning

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**Objective:** The objective of this study was to examine whether novel pandemic-related stressors have any effect on cognitive functioning. This study aimed to examine whether the overall number of pandemic-related