Research

MOTIV - A validity and test-retest reliability study of smart eyeglasses to detect eye movements and evaluate motor imagery ability in patients after stroke

Trial registration number:	BASEC-Number 2019 – 00348, 2020 - 00545
Duration:	2019 - 2020
Status:	Completed
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Funding:	Stiftung zur Förderung von Wissenschaft, Forschung, Bildung und Gesundheit, Vaduz
Publication:	DOI: 10.3389/fnins.2023.1225440
Short summary:	Imagining movements, also called motor imagery (MI), is a powerful training technique that originated in sports psychology. It is successfully used as a complementary therapy to physical training in the rehabilitation. However, the main challenge in measuring MI performance in clinical practice is the lack of valid and reliable mobile measurement devices that could quickly and easily be attached to patients without restricting normal activities of daily living. A new wearable sensor technology could potentially provide a mobile solution to measure MI performance. The 'J!NS MEME' glasses (JIN CO., LTD., Japan) are equipped with a six-axis accelerometer, a gyroscope, and three-point electrooculography sensors To use smart eyeglasses as a wearable MI performance measure its validity and test-retest reliability must be assessed. Specific research question: Are the 'J!NS MEME' smart eyeglasses a valid and reliable measurement device compared to conventional EOG?

Erstellungsdatum: 09.07.2020	SzGae
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