

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

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Short summary:	Imagining movements, also called motor imagery (MI), is a pow- erful training technique that originated in sports psychology. It is successfully used as a complementary therapy to physical train- ing in the rehabilitation. However, the main challenge in measur- ing MI performance in clinical practice is the lack of valid and re- liable 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 electrooculog- raphy sensors To use smart eyeglasses as a wearable MI per- formance 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 com- pared to conventional EOG?