

TRAINING PATIENTS: A CHALLENGE FOR THE USE OF BRAIN-COMPUTER INTERFACES

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Brain-computer interfaces are highly developed technical systems. However, the feasibility of BCIs for the target group, for example, severely disabled or brain damaged patients, have to be considered. Training patients who are diagnosed with intractable neurological diseases to self-regulate their brain potentials poses several difficulties. The following questions will be discussed:

- 1) Which patients should be selected if there is a choice? Are there any predictors for good performance?
- 2) How to communicate with locked-in patients? How do they perceive their environment?
- 3) How to take the patient's social environment into account? Who wants that the patient can communicate? Who is going to conduct the training?
- 4) How to motivate patients for weeks and months of training during which patients have to maintain their effort?
- 5) Are patients with intractable neurological diseases always depressive?
- 6) In case of a failure: When to stop training?
- 7) What about burn-out of research associates?