

CONCLUSION

In the present study, involving 10 patients with different degree of disabilities, we reported preliminary data about the screening of needs of potential end-users of a hybrid-BCI device for communication and we also reported the matching AT solutions. The overall aim was to generate profiles of patients that would potentially use the BCI as an additional/alternative channel for AT-access.

Results showed that a range of input channels customized on the basis of patients motor, sensorial and cognitive (dis)abilities was used to solve/improve problems related to reading and writing abilities, communication ability and smartphone access ability.

In the next step, their performance in controlling a P3-based BCI for communication will be investigated and the relationship with the user's characteristics (among witch eye movement's peculiarities) will be established. We consider this as an important step for the integration of BCI with daily/commercial AT devices, for the consequent development of a personalized hybrid BCI device for communication and for BCI inclusion AT-centers portfolio.

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