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#### What enhances bio-psycho-social outcome in brain injury rehabilitation? Towards a predicting model

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CeDAPS AALBORG UNIVERSITY What enhances bio-psycho-social outcome in brain injury rehabilitation? Towards a predicting model

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Introduction/Objectives

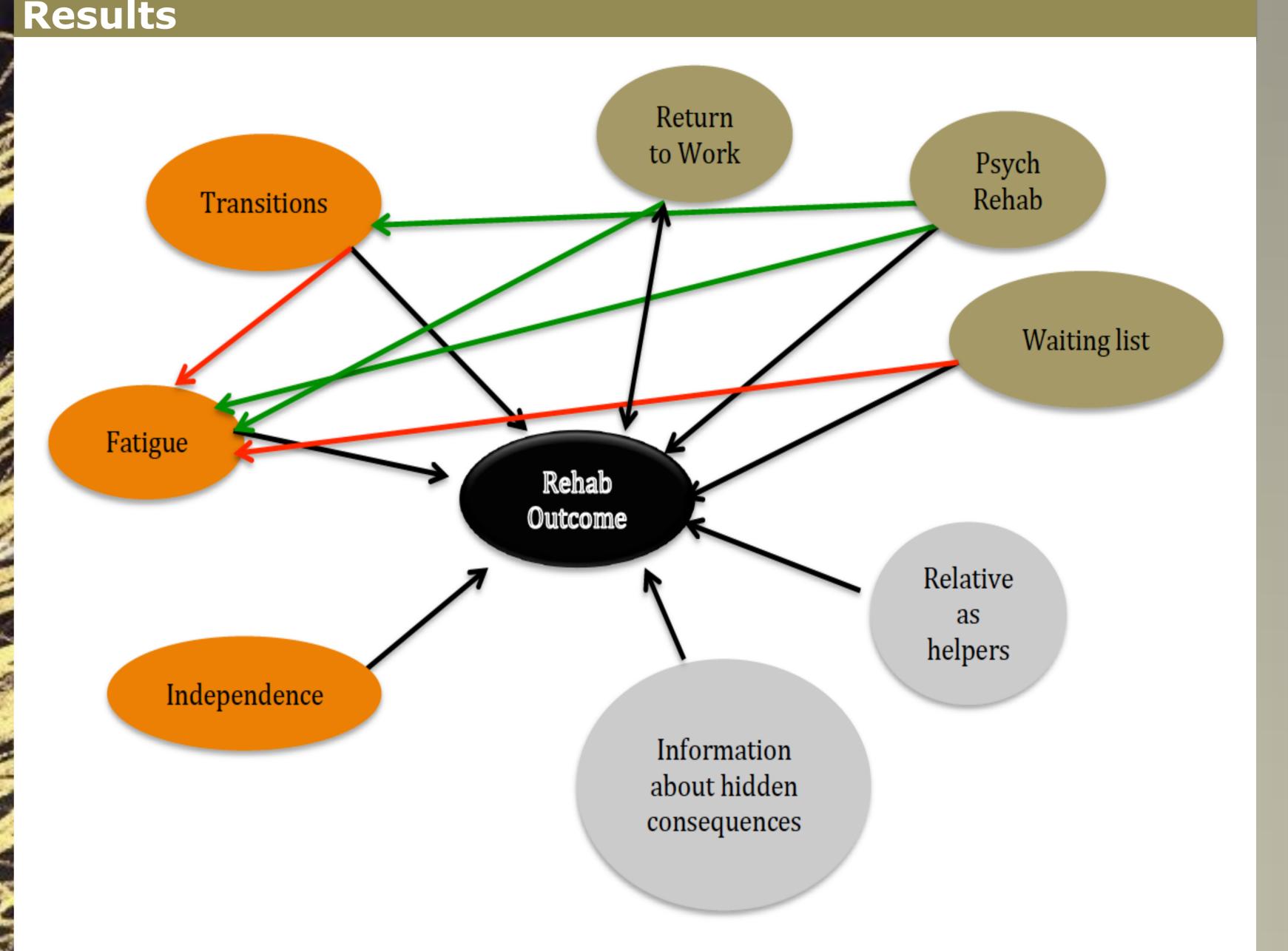
The long term psychosocial consequences following Acquired Brain Injury (ABI) have received little attention in

rehabilitation research as well as in rehabilitation practice, compared to the physical problems. However it is

becoming acknowledged that psychosocial consequences is a major challenge in current rehabilitation (Glintborg &

Hansen, 2014, in prep; Hald, 2013; Morton & Wehman, 1995; Teasdale & Engberg, 2005).

This paper describes a Mixed Methods design and some preliminary results regarding adults with ABI (N=37) two-



year post injury. We investigate the bio-psycho-social rehabilitation outcome, and look for predictors of this outcome

from a patient perspective. The theoretical framework is the bio-psycho-social model represented by International

Classification of Functioning (ICF).



#### Model 2:

This model shows the identified themes from our interviews (N=37) that influence and predict rehabilitation outcome. Furthermore, it shows that some of the themes are interconnected which the green and red arrows illustrate. A green arrow reveals a positive connection/enhancement, and a red arrow reveals a negative/restraining association.

### Methods

A Mixed Methods design using concurrent testing, interview and observations on a sample of 37 adults with ABI. A content analyses, inspired by Grounded Theory, was applied on the field notes from the interviews. Descriptive statistics on five rehabilitation outcomes: Functional Independence Measure (FIM), Impact on Participation and Autonomy (IPAQ-DK), Quality of life (WHOQOL-BREF), Major Depression Inventory (MDI) and Return to Work. These measures are correlated with emerged themes from interviews with adults with ABI in order to see what enhance or restrain outcome.

# **Theoretical frame**



### Conclusions

The majority of the informants reported eight major themes as important predictors of outcome. Based on these themes we developed the above model which illustrates positive, negative and interrelatedness of the themes derived from the interviews. We suggest these themes described by adults with ABI provide input for the development of theoretical model of predictors of rehabilitation outcome. By depicting influences that are likely to increase or decrease the outcome, this model could have practical impact for successful rehabilitation of people suffering from ABI as well as economic benefits for both hospital and the municipality that provide these services. An evaluation of rehabilitation outcome predictors might also assists administrators in making program-level decisions.

### References

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e.g., readiness, support needs, level of disability, self-awareness, confidence, personal autonomy, emotional adjustment, psychological wellbeing, activity and participation

Family factors

e.g., emotional adjustment, psychological well-being, ability to process information, ability to provide post-discharge support and assistance e.g., availability/access to support services, access to post-discharge rehabilitative therapy, coordination between services, communication between services.

Service factors

(Turner et al, 2008)

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FIM license granted by Uniform Data System for Medical Rehabilitation (a division of UB Foundation Activities, Inc.,

"UDSMR").

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