

THE MODEL OF OCCUPATIONAL SELF EFFICACY: A MODEL FOR THE REINTEGRATION OF PERSONS WITH BRAIN INJURIES TO THEIR WORKER ROLES



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WFOT 2018



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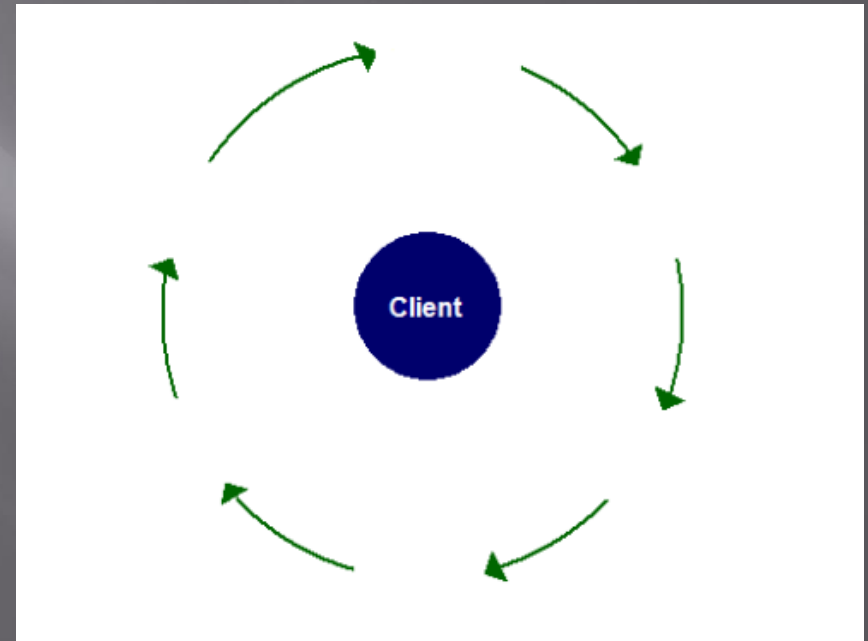
Nature of the condition

- ▣ The overall incidence of TBI in developed countries is 200 per 100 000 persons annually (National Health Laboratory Services, 2013) and about 89 000 new cases of TBI are reported in South Africa annually (Kwazulu Natal department of Health, 2013)
- ▣ Research statistics in the USA states- 61% return to work rate- individuals with brain-injuries (Fraser, Machamer, Temkin, Dikmen & Doctor, 2006)
- ▣ However research also indicates a 40% return to work rate (Stergiou & Dawson, 2012; Cuthbert et al., 2015)

Need for a new approach

Research revealed a lack of studies that address the **personal experience** of brain injured individuals when adapting to their worker role

Quality of intervention programmes tend to be ineffective when the health professional does not take the BII's **self identified needs** into consideration, hence **client centeredness** (Darragh, Sample & Krieger, 2001)



Aim- Phase One

- ▣ To **implement** and **operationalise** the Model of Occupational Self Efficacy by exploring and describing the experiences of **10 individuals with mild to moderate brain injury** and **5 Occupational Therapists** regarding the use of the model (over 1 year).

Aim- Phase Two

- ▣ To **evaluate** the **effectiveness** of the Model of Occupational Self Efficacy by determining whether cognition and the RTW rate of **10 individuals with a mild – moderate brain injury** improves after participating in the model.

Methodology

- ▣ Phase One and Phase Two
 - Mixed methods
 - Phase One: Qualitative component
 - Data collection: Semi structured interviews
 - Phase Two: Quantitative component (Pre- post non experimental research design)
 - Data collection: Use of the Montreal Cognitive Assessment Questionnaire

Selection of participants

- ▣ **Simple random sampling**
 - Statistical records of Tertiary Hospitals, Community Health Centres, Non Governmental Organizations (support groups for individuals with brain injury)
 - Nine males
 - One female
- ▣ **Inclusion and exclusion criteria**
 - Mild to moderate brain injury
 - No psychiatric condition (DSM IV)

OCCUPATIONAL SELF EFFICACY

AN OCCUPATIONAL THERAPY PRACTICE MODEL

FOR THE RETURN OF THE BRAIN INJURED INDIVIDUAL TO WORK



Stage two: Intervention

| Memory | Thinking skills | Problem solving |
|--|--|--|
| <p>Methods to improve memory – chunking/ groups</p> <ul style="list-style-type: none"> - Images - Chaining | <p>Critical thinking – using logic and reasoning to answer problems</p> <p>Traffic signs with the rules of the road</p> | <p>Situational skits</p> <p>Agony aunt letters</p> |
| <p>Kims game</p> <p>Remembering rounds (group)</p> | <p>Creative thinking-</p> | <p>Individual – crosswords, puzzles , board games, card games</p> |
| <p>Remembering instructions using images</p> | <p>Allowing the client to find ways to solve their own problems at work</p> | <p>Luminosity (online cognitive therapy)</p> |
| <p>Recalling faces to names</p> <p>Instruction retention</p> | <p>Group activities – telling the group the problem, getting feedback from peers</p> | <p>Printable worksheets that can be incorporated into the workplace</p> |

Individuals with TBI demographics

| Name | Gender | Education | Work experience | Diagnosis | Rehabilitation | Employed |
|------|--------|-----------|--------------------------------|-----------------------|----------------|---|
| W | Male | Grade 12 | Fast Food | Moderate Brain Injury | PT | Machine Operator (Soft Drink Company)- 6 months |
| J | Female | Grade 09 | No work experience | Moderate Brain Injury | OT and PT | General Assistant (Fast Food Restaurant)- 20 months |
| H | Male | Grade 10 | Assistant Plumber | Moderate Brain Injury | PT | General Assistant (Fast Food Restaurant)- 20 months |
| X | Male | Grade 12 | Water and Sanitation inspector | Moderate Brain Injury | OT and PT | General Assistant (Fast Food Restaurant)- 20 months |
| H | Male | Grade 06 | Cleaner | Moderate Brain Injury | PT and OT | General Assistant (Fast Food Restaurant)- 20 months |
| N | Male | Grade 10 | Packer | Moderate Brain Injury | PT | General Assistant (Fast Food Restaurant)- 08 months |
| P | Male | Grade 10 | Security Guard | Moderate Brain Injury | PT | General Assistant (Fast Food Restaurant)- 20 months |
| M | Male | Grade 12 | Insurance Broker | Moderate Brain Injury | PT | Packer (Soft Drink Company)- 06 months |
| S | Male | Grade 12 | Driver Assistant | Moderate Brain Injury | PT and OT | General Assistant (Fast Food Restaurant)- 20 months |
| S | Male | Grade 06 | Packer | Moderate Brain Injury | PT | General Assistant (Fast Food Restaurant)- 20 months |

Phase One (Findings): Barriers (Individuals with TBI)

- ▣ Theme One: Effective participation in the model is affected by financial assistance

“I owe people in street, because I don't have money”

- Money needed to attend work not enough
- Salary earned during the job is not enough to survive
- Entrepreneurship is not financially viable

Findings: Enablers (Individuals with TBI)

▣ Theme Two: A sense of normality

“I don’t like to maybe to work with people like me, disabled people. I want to, maybe I would like to work with normal people”

- Engagement in real work facilitates growth
- Engagement in educational activity
- A sense of responsibility

Results: interviews with occupational therapists

- ▣ **Barriers: Challenges related to the use of the model**
 - Poor insight into the condition
 - Inadequate number of treatment sessions
 - Lack of co operation from employers
- ▣ **Enablers: The model as an enabler of work skills**
 - Reflection stage aided recovery
 - Graded aspect of intervention
 - Real life social intervention

Phase two: Results

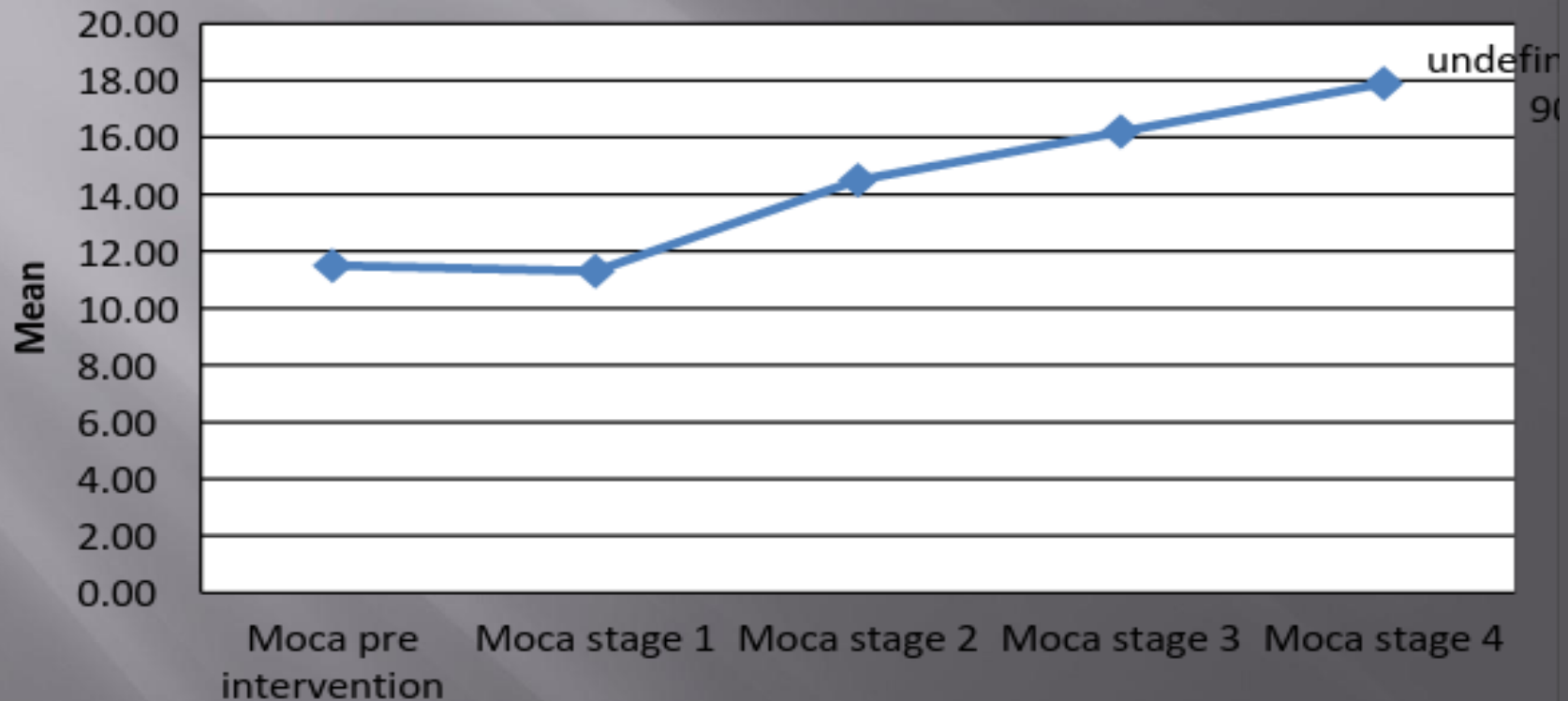
- ▣ Participant's scores related to **memory and attention improved** after participating in the vocational rehabilitation programme
- ▣ Participant's scores related to **language and abstract thinking improved** after participating in the vocational rehabilitation programme
- ▣ Participant's scores related to **delayed recall and orientation improved** after participating in the vocational rehabilitation programme

Results of a repeated measure Anova

- ▣ A significant effect of the intervention on cognitive functioning was found, $F(4, 6) = 15.95, p = 0.002$. (Wilks Lambda test)
- ▣ Comparison of results: Stage 1 to Stage 2-Stage 4 revealed, $F(4, 6) = 15.95, p = 0.001$
- ▣ Comparing the Mean scores of the Pre intervention with scores from Stage 1 to Stage 4 indicated a **gradual improvement** in mean scores

Results of the repeated measure ANOVA on completed cases

MOCA mean score



Conclusion and Recommendations

- ▣ The findings of the study identified that despite the *barriers* relating to operationalization the Model of Occupational Self Efficacy, the results of the study indicates that Model has the *potential to enhance* the work skills, particularly the cognitive functioning of individuals who sustained a TBI.
- ▣ The findings indicate that in order to be *therapeutic*, the treating health professional needs to utilise a *holistic work integrative approach* in returning individuals who sustained a TBI to work

Sponsors

- ▣ National Research Fund
- ▣ University of the Western Cape

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