Examining the Nature of Resilience and Executive Functioning in People with Brain Injury and People with Multiple Sclerosis

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ABSTRACT

This study describes, identifies, measures and nurtures traits of resilience and executive functioning in two groups of participants, (a) ten with traumatic brain injury; 6 males, 4 females, (Mean Age = 42 years, SD = 6.23) and (b) ten with Multiple Sclerosis, 3 Males, 7 Females (M = 44, SD = 10.80). Participants who fulfilled the selection criteria underwent a six month individualized psychosocial intervention. The intervention was based on principles of person centred and cognitive behaviour therapy. Skill building exercises, problem solving training, appropriate management of mood disorders and support for building social networks were fundamental components of the intervention. Outcome data were collected using the Resilience Scale (Wagnild & Young, 1993), the Dysexecutive Functioning Questionnaire (DEX) (Wilson, Alderman, Burgess, Emslie, & Evans, 1996), and Goal Attainment Scaling (GAS) (Kiresuk & Sherman, 1968) on three occasions; (01) baseline, (02) post intervention and (03) at six months follow up. Supporting data were obtained through case studies, medical records, psychological reports, interviews and participant observation. Statistical analysis of scores (Spearman Correlation Coefficient) indicates that there was a significant correlation between executive functioning and resilient behaviours. As resilience improved for the MS group, so did executive functioning abilities. Significant improvements in resilience scores post intervention (Wilcoxon Signed Rank) were reported by both groups. However, due to the severity of cognitive impairments in participants with TBI, an increase in DEX scores post intervention was not obtained. Despite low scores, significant behavioural changes were identified. Amongst them was the ability to set and persist at tasks, set goals, demonstrate insight and the ability to problem solve. Successful achievement of personal goals was dependent on the availability of support. Only then, were resilient behaviours more perceptible in both groups. Resilient behaviour was also dependent on mood states. When experiencing sustained personal equilibrium,(ie an
optimistic and resilient state) participants were better able to respond to feedback, make decisions and plan activities. Given the right circumstances and support, even the most impaired participants (impaired because of serious frontal lobe damage for people with TBI or people with primary progressive MS experiencing considerable pain and loss of mobility) were capable of resilient behaviour which in turn, was motivating for them and inspiring for their family and friends.
SUPERVISOR’S CERTIFICATION

The researcher’s supervisor confirms that he has approved all aspects of the research project detailed in this thesis, including the content of the literature review, the collection and analysis of data, reporting and the storage of data.

Supervisor: ............................................

Dr Brian Matthews

ETHICAL APPROVAL

The project titled: "Examining the nature and relationship of resilience and executive functioning in people with traumatic brain injury and multiple sclerosis has been granted ethical approval by the Social and Behavioural Ethics Committee of Flinders University, South Australia.

DECLARATION OF AUTHENTICITY

I certify that this thesis does not contain any material previously published or written by another person except where due reference is made in the text.

Signed: .............................................................

Nivashinie Mohan
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To my Guru, Professor Roger Rees for giving me a dream. For turning my vision into reality. For taking me from the darkness of ignorance to the light of wisdom. It is not only words, it is a gratefulness felt by every fiber of my being – it is gratitude. You always said that completing a PhD is a journey. One which will change my life forever. I thank you for the journey and being instrumental in this change.

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IF…..

IF you can keep your head when all about you
Are losing theirs and blaming it on you,
If you can trust yourself when all men doubt you,
But make allowance for their doubting too;
If you can wait and not be tired by waiting,
Or being lied about, don’t deal in lies,
Or being hated, don’t give way to hating,
And yet don’t look too good, nor talk too wise:

If you can dream – and not make dreams your master;
If you can think – and not make thoughts your aim;
If you can meet with Triumph and Disaster
And treat those two impostors just the same;
If you can bear to hear the truth you’ve spoken
Twisted by knaves to make a trap for fools,
Or watch the things you gave your life to, broken,
And stoop and build ‘em up with worn-out tools:

If you can make one heap of all your winnings
And risk it on one turn of pitch-and-toss,
And lose, and start again at your beginnings
And never breathe a word about your loss;
If you can force your heart and nerve and sinew
To serve your turn long after they are gone,
And so hold on when there is nothing in you
Except the Will which says to them: ‘Hold on!’

If you can talk with crowds and keep your virtue,
‘Or walk with Kings – nor lose the common touch,
if neither foes nor loving friends can hurt you,
If all men count with you, but none too much;

If you can fill the unforgiving minute
With sixty seconds’ worth of distance run,
Yours is the Earth and everything that’s in it,
And – which is more – you’ll be a Man, my son!

Rudyard Kipling