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"Emotion Processing, Neuropsychiatric Symptoms and Quality of Life after a Stroke"

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November 2010

WitsETD

A research project submitted in fulfilment of the requirements for the degree of Master of Science by Dissertation in the field of Psychology for the Faculty of Science, University of the Witwatersrand, Johannesburg

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Declaration

"I declare that this research entitled "Emotion processing, neuropsychiatric symptoms and quality of life after a stroke" is my own, unaided work. It has not been submitted before for any other degree or examination at this or any other university".



Signed:

Jeanine Blumenau

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Abstract

Cerebrovascular disease is one of the leading causes of death among persons aged 50 and above and when a stroke does not result in death, it can cause residual cognitive, motor and behavioural disabilities. Emotional effects of brain injury range from reduced quality of life to various neuropsychiatric disturbances and are of great interest in the South African context and throughout the world as they pose a major obstacle to the rehabilitation process. This study explored the relationship between emotion processing, neuropsychiatric symptoms and quality of life specifically, how they operate following a cerebrovascular accident. In order to achieve this, an adult population of high functioning stroke survivors completed the emotion processing scale (EPS), Minnesota Multiphasic Personality Inventory (MMPI-2) and comprehensive quality of life inventory (ComQOL-A5) and a factor analysis provided statistical evidence suggestive of intercorrelations among the variables. The results lent support to this theoretical relationship and determined the structure of this relationship as follows: The satisfaction with quality of life after a stroke that relates to traditional masculine or feminine roles, when not fulfilled, related to neuropsychiatric symptoms of general maladjustment i.e. schizophrenia and psychopathic deviate. The second factor encompassed symptoms of general anxiety both internally and externally directed: Internally directed anxiety included symptoms of hypochondriasis and hysterical conversion, while externally directed anxiety included neuropsychiatric symptoms of paranoia. The third factor was associated with mood modulation in that elevated mood connected to neuropsychiatric symptoms of hypomania and depressed mood connected to symptoms of depression and social introversion. Finally, emotion processing and psychasthenia made up the last principal component, namely emotion modulation. This meant that avoidance of emotional

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content, suppression of emotion, unprocessed emotion etc. related to neuropsychiatric symptoms of obsessions or compulsions. High functioning stroke survivors' behaviours were thus characterised by general maladjustment, anxiety, and symptoms related to mood and emotion modulation. This study underlies the importance of diagnosing, treating and monitoring stroke survivors' emotional alterations and suggests the usefulness of its application in clinical settings to evaluate the effectiveness of treatments or more general interventions to improve the neuropsychiatric sequelae and quality of life of stroke survivors. Improved understanding of these constructs from the stroke survivor's perspective has obvious impact for the therapeutic interventions inherent in stroke rehabilitation and as such, contributes towards the fields of neuropsychology, neuropsychotherapy and the social sciences.

Keywords: emotion processing, neuropsychiatric symptoms, quality of life

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