The effects of hope and resilience on emotional and functional outcomes in neurosurgical patients
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Neurosurgical patients experience psychological stress in the form of anxiety and depression due to the awareness of having a life-threatening diagnosis and neurological impairment. In turn, anxiety and depression have been found to significantly hinder neurosurgical recovery. Therefore, it is important to identify psychological traits that aid in the maintenance of emotional stability and functionality in patients post-neurosurgery. Such identification can contribute to targets for psychological treatment of these patients. Hope and resilience are stable psychological traits characterized by the ability to cope with hardship, adapt to loss, manage stressful events, and maintain emotional stability. This study will investigate the impact of hope and resilience on emotional and functional outcome during the recovery of neurosurgical patients. Higher levels of hope and resilience are expected to correlate with greater improvement in emotional and functional outcome during post-surgical recovery. Participants will be adults who have undergone neurological surgery for a variety of diagnoses including brain tumors, strokes, aneurysms, Chiari malformations and epilepsy. Subjects will be given a battery of tests that will measure their hope and resilience levels, as well as their emotional and functional states at two time points in order to determine change over the period of recovery; specifically at 4 to 8 weeks and 6 to 8 months post-surgery. Hope and resilience will be measured using the Adult Hope Scale and Resilience Scale, emotional state will be measured using the Beck Depression Inventory and Beck Anxiety Inventory and behavioral functioning will be assessed using the Adaptive Behavior Assessment System Second Edition, the Frontal Systems Behavior Scale, the Community Integration Questionnaire, and the Modified Ranking Scale. Knowledge of the correlation between relationship between the traits of hope and resilience and states of emotion and behavioral functionality outcome would validate low hope and resilience as an important clinical indicator and treatment target for psychological treatment post-neurosurgery.

Biography
Vanessa Lerma is a graduate student at New York University and currently conducts research at Weill Cornell Medical College alongside her mentor, Dr. Amanda Sacks-Zimmerman. She hopes to become a clinical neuropsychologist and study the behavioral manifestation of neurological disorders. She was first introduced to clinical neuropsychology during a study abroad internship in Angers, France, where she conducted research on executive function deficits in patients with prefrontal lobe damage. One of her current research interests is to study the way positive psychological traits can be used in the treatment and rehabilitation of patients with neurobehavioral problems.

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