

## Environmental Barriers to Leisure Participation in Community-Dwelling Individuals Living with Stroke

Billy Sun<sup>1</sup>, Ada Tang<sup>1</sup>, Marco Pang<sup>2</sup> and Jocelyn E. Harris<sup>1</sup>

<sup>1</sup> McMaster University, Hamilton, ON

<sup>2</sup> Hong Kong Polytechnic University, Hong Kong, Hong Kong

**Background:** Engagement in leisure activity is found to be lower in individuals living with stroke. Environmental factors, such as accessibility, social support, and institutional and governmental policies influence participation for individuals living with stroke. The purpose of this study was to use the Craig Hospital Inventory of Environmental Factors-SF to 1) characterize environmental barriers, 2) examine the relationship between environmental barriers and leisure, and 3) examine person factors associated with environmental barriers. **Methods:** Participants were adults recruited from local communities who were at least 6 months post stroke and had completed rehabilitation. A 2.5 hour assessment battery which included evaluation of physical, cognitive, mental, social, and environmental and leisure domains was completed. Descriptive statistics were used to quantify environmental barriers. Non-parametric correlation matrices were performed to find candidate variables ( $P < 0.1$ ) and to create explanatory models for leisure and environmental outcomes. **Results:** For the 52 participants the most frequently encountered environmental barriers were from the Physical and Structural domain (50%) followed by Services and Assistance (31%) and Attitude and Support (27%). No significant model for environmental barriers and leisure outcomes was found. Frequency of barriers encountered were found to be positively associated with depressive symptoms and negatively associated with level of reintegration to social activities producing 3 significant models ( $R^2 \frac{1}{4} 0.183-0.242$ ;  $P < 0.01$ ). **Conclusions:** Individuals in the chronic stage of recovery post stroke encounter environmental barriers to leisure pursuits. Our findings suggest that depression and reintegration into community level are associated with an individuals' perspective of these barriers. Many of the environmental barriers identified in this study as well as the factors such as depression and community integration can be positively influenced by rehabilitation professionals.