



Interpretative Phenomenological Analysis of Community Exercise Experiences after Severe Traumatic Brain Injury

Enrico L. Quilico ^a, William J. Harvey ^{b,c}, Jeffrey G. Caron ^d and Gordon A. Bloom ^b

^aRehabilitation Science Institute, University of Toronto, Toronto, Canada; ^bDepartment of Kinesiology and Physical Education, McGill University, Montreal, Canada; ^cClinical Research Division, Douglas Mental Health University Institute, Montreal, Canada; ^dSchool of Kinesiology and Physical Activity Sciences, Université de Montréal, Montreal, Canada

ABSTRACT

Traumatic brain injury (TBI) is a major public health concern due to its growing incidence and resulting long-term or lifelong impairments. Exercise is a non-stigmatising approach proposed to alleviate the physical, cognitive, social, and emotional consequences after TBI. We used Interpretative Phenomenological Analysis (IPA) to explore the exercise experiences of seven individuals living with a severe TBI, 5–31 years after rehabilitation. We engaged in semi-structured interviews with the participants and we used IPA to explore their post-TBI exercise experiences outside of the clinical setting. Based on our analysis, we found three themes encompassed how TBI-related impairments affected the participants' abilities, self-perceptions, and perspectives on life. The participants also identified optimal environments for exercise participation, as well as perceived physical, social, and psychological effects of exercise. Future recommendations include developing community-based exercise programmes to assist with social reintegration and exploring the full range of benefits obtainable from exercise after a TBI.

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KEYWORDS

Traumatic brain injury; community-based exercise; interpretative phenomenological analysis; participation; social reintegration

Introduction

Traumatic brain injury (TBI) is often called a 'silent epidemic' because of the millions of people worldwide who are affected by the injury, its associated morbidities, and the health-related costs (Langlois, Rutland-Brown, and Wald 2006). In fact, TBI is a leading cause of long-term disability around the world (Dewan et al. 2018). The Centers for Disease Control and Prevention (2019) reported approximately 2.87 million TBI-related emergency department visits, hospitalisations, and deaths in the United States in 2014. TBI is also the leading cause of disability for people under 45 years of age in Canada (Public Health Agency of Canada 2014).

Approximately 80% of TBI cases worldwide can be classified as a mild TBI (mTBI), and the remaining 20% is divided evenly between moderate and severe TBI, which typically involve more lasting impairments (Silver, McAllister, and Arciniegas 2018). Physical, cognitive, and psychosocial consequences resulting from moderate to severe TBI are an important problem in society as these individuals experience a significant reduction in employment, interpersonal relationships, and leisure activities (Wise et al. 2010). For example, increased fatigue, impairment, and injury-related disability, as well as reduced quality of life occur after severe TBI (Diaz et al. 2012). Moreover, the leading comorbid psychiatric disorders linked with TBI are depression, anxiety, and posttraumatic