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DISSERTATION

"Tele-yoga for individuals with movement disorders"

by

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D.P.T./Ph.D. Program

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1:00 P.M.
Room 920 Stanley S. Bergen Jr. Building
https://rutgers.zoom.us/j/93230721435?pwd=Vmg3TWV3aVprcUhtLzFMQ0FGUlpXdz09

Abstract

Neurological conditions are the leading cause of disability worldwide affecting many voluntary and automatic bodily functions. Movement disorders are a subset of neurological conditions that have a sizeable impact on people's lives. Individuals with movement disorders not only experience motor symptoms and impaired movement but can also experience non-motor symptoms. All of which greatly impact daily function and quality of life. This dissertation presents work pertaining to two movement disorders, cervical dystonia and Parkinson's disease. Standard treatments for these conditions are generally safe and effective. However, people can experience symptom fluctuations and reoccurrences of symptoms. Thus, there is a need for supplementary interventions. Yoga has been shown to improve both motor and non-motor symptoms in people with Parkinson's disease and other chronic conditions. However, individuals with cervical dystonia and Parkinson's disease experience barriers to in-person interventions that impede access. Thus, alternative delivery approaches should be investigated. Tele-yoga, which is when yoga is delivered through telecommunication networks, is an emerging supplementary intervention. Yet, little is known about tele-yoga in general and its application to individuals with movement disorders. Therefore, gaps in the literature were identified through a scoping review and then, the feasibility and safety of synchronous tele-yoga interventions were examined through two separate single group studies, one for people with cervical dystonia and the other for people with Parkinson's disease. The scoping review helped to reveal gaps in the literature indicating the sparsity of synchronous tele-yoga interventions and identifying feasibility challenges associated with the existing synchronous tele-yoga interventions. This information informed the design of the two feasibility studies. Then, the results of the feasibility studies exceeded the predetermined thresholds pertaining to retention, assessment adherence, intervention adherence, safety, and technological challenges demonstrating the feasibility and safety of tele-yoga interventions for people with cervical dystonia and Parkinson's disease. Furthermore, both studies demonstrated the preliminary effectiveness of tele-yoga for elements of disease-related quality of life and other clinically important measures. These findings support potential future applications of tele-yoga as a supplementary intervention for the management of motor and non-motor symptoms in these two populations and highlight the need for future randomized control trials.