Guest Editorial

Technology in the Workplace

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Technologies in the form of telehealth, assistive technology and communication technology are being used by professionals to deliver assessment, intervention and education. Telehealth is a term used to describe the use of electronic technologies including telecommunications to assist with distance healthcare, education and treatment [1]. *Telerehabilitation,* is a branch of telehealth that is growing rapidly to assist with the delivery of rehabilitation services [2].

Tele-occupational therapy is defined as the "remote delivery of occupational therapy services and education through communication and information technologies" [3 p2]. Assistive technology can be low or high tech and enable a person to engage in his or her occupations of choice, including work [4]. Occupational therapists promote workplace health through assessments in collaboration with employers and employees [5]. They provide interventions such as "job analysis, ergonomic assessment, workplace readiness training, resources planning and work modification" [5 p1]. In this issue, three papers explore how technologies are used to address health in the workplace.

In the research paper by Cotton, Russell, Johnston and Legge, entitled *Training therapists to perform pre-employment functional assessments: a telerehabilitation approach,* the authors describe the use of technologies, i.e., videoconference and online modules, to train 53 physical and occupational therapy professionals and senior students to perform Job-

Fit Systems International pre-employment functional assessments. The study compared performances of participants allocated to one of four conditions: face-to-face, real-time videoconferencing, group-based online module, and individual online module. Over 90% of the participants achieved minimum competency and there was no difference between the performances across the four conditions. These results support the use of videoconference for education of professionals and senior students to perform pre-employment functional assessments. According to the authors, the ability for practitioners and students to learn this assessment skill at a distance would increase the number of qualified service providers for clients in rural and remote communities.

Assistive technologies (AT) in the work place is the focus of the paper by Ripat and Woodgate entitled *The importance of assistive technology in the productivity pursuits of young adults with disabilities.* In this qualitative study, the researchers recruited 20 young adult AT users to participate in semi-structured interviews and a photovoice process. The young adults relied on AT for productivity-related activities, however, there were concerns about stigma and advocacy for supportive work environments. These findings point to the importance of the role of occupational therapists in addressing psychosocial issues and "fostering a positive and inclusive environment" [5 p1].

In the third paper by Smallman, Miller and Antle, entitled *A case study detailing key considerations for implementing a telehealth approach to office ergonomics*, the authors compared in-person and telehealth-based ergonomics assessments in a private practice context. They found no significant differences in scoring outcomes which suggests that the use of telecommunications to conduct real-time ergonomic assessments was just as good as in-person

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sessions. The authors suggest that technology could be an alternative to face-to-face assessments when distance, travel time are barriers to accessing service. This paper also provides recommendations about the organization, planning and process of conducting ergonomic services at a distance using videoconferencing technology.

The three papers in this section are examples of the many ways that technologies can be used in the workplace for intervention, assessment and education. As more assistive technologies incorporate universal design principles, issues of stigma may be mitigated. Similarly, as information communication technologies become ubiquitous, they will be more affordable and accessible to clients and practitioners. A key goal of these technologies is to make services more accessible to clients unable to travel and for therapists at remote locations to expand their skills. Thus, we anticipate an increase in applications of telehealth and assistive technologies in workplace interventions and assessments.

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