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Sarah Morrison, BA(Hons) M.Sc. O.T. (Candidate, 2014), McMaster University, Theresa Bernard, BA(Hons) M.Sc. O.T. (Candidate, 2014), McMaster University, Elizabeth Steggles, OT(C), OT (Reg) Ontario, Canadian Association of Occupational Therapists (CAOT) and MAVAN, and Stephanie Kawka, M.Sc. OT (Reg), MAVAN

Abstract

Currently the use of assessments by Canadian occupational therapists (OTs) working with clients through Military and Veteran’s Affairs is highly varied. To date, there is no compilation of assessments used by Canadian OTs working with this population that includes psychometric properties. Evidence-based evaluation is imperative in the field of OT. Therefore, within this area of practice there is a need for literature review and best-practice guidelines to ensure all military and veteran personnel are receiving the best care. Thirteen OTs across Canada were polled regarding assessment use with military and veteran populations. Assessments were compiled into categories based on themes and a literature review was conducted using the following databases: Medline, Pubmed, CINAHL and EMBASE. Assessments were divided into the following categories: cognitive, physical, pain, role and goal-based, vocational, mental health, work-based functional, home-based functional, and general health. Thirty-five percent of assessments identified by OTs in this study were not standardized. Findings demonstrate that the psychometric properties of standardized assessments used by these OTs vary widely. Assessments used by OTs across Canada with military and veteran populations reflect the diverse and multi-factorial challenges these clients face. In addition, these results demonstrate that the large scope of this profession is necessary and appropriate to address the psychological, physical, and functional needs of this population. Finally, these findings support the need for increased evidence-based practice with assessment in this area.

INTRODUCTION

Co-morbid physical and mental health issues are common in individuals receiving health services through Veteran Affairs Canada (VAC; Thompson et al., 2011). The prevalence of these health conditions demonstrates the need for primary healthcare services that focus on both the mental and physical well-being of each individual. One of the strengths of the occupational therapy profession is its comprehensive knowledge base of the psychological-emotional, cognitive-neurological, physical, and environmental factors that facilitate or create barriers to participation in occupation (Law et al., 1996).

METHODS

Prior to the initial literature search, thirteen OTs from across Canada working with military and veteran populations were surveyed. From these responses, a list of 52 assessments was compiled. From this, assessments were categorized into themes based on researcher consensus. Of the 52 assessments originally compiled, 18 (35%) were excluded, as they were not standardized. A list of 57 databases available through the McMaster University library was examined and four relevant databases were selected for this review: Medline, Pubmed, CINAHL and EMBASE.

The two principal investigators predetermined search terms, as well as exclusion and inclusion criteria to maintain uniformity throughout the data collection process. Once a consensus has been reached regarding search methodology, the assessments were divided between the two investigators.

Subsequent to search completion, relevant articles were gathered, and the following psychometric terms were corroborated based on initial abstract reviews and reference to a statistical manual (Kielhofner, 2006): purpose, internal consistency, test-retest reliability, inter-rater reliability, concurrent...
and convergent validity, divergent validity, known-groups method, predictive validity, sensitivity, and specificity. Assessments were labelled by purposes: descriptive, predictive and evaluation. Furthermore, psychometric qualities were presented based on significance and non-significance.

RESULTS
Assessments were categorized into the following groups of varying themes: cognitive, physical, pain, role and goal-based, vocational, mental health, work-based functional, home-based functional and general health. For 32% of the standardized assessments identified by members of MAVAN, the literature search did not uncover articles investigating relevant psychometric properties. Preliminary findings indicate that assessments used by OTs in this field have varied amount of available evidence and a range in strength of psychometric properties. Further analysis is required to determine best-practice assessment recommendations for these contexts.

DISCUSSION
The primary focus of this project was to present the reliability and validity of this list of assessments. Additionally, it is essential for clinicians to consider the intended purpose of the assessment when evaluating psychometric strength (Law, 1987). This project is not intended to serve as a comprehensive guide for the selection of assessments by OTs, but rather to display the varying ranges of assessments used with these populations and their psychometric properties. It is essential in the field of occupational therapy and healthcare at large, that clinical reasoning is supported by evidence-based sources.

Assessments used by OTs across Canada with military and veteran populations reflect the diverse and multi-factorial challenges these clients face. In addition, these results demonstrate that the large scope of the occupational therapy profession is necessary and appropriate to address the psychological, physical, cognitive and functional needs of this population.

Limitations of the current study include the restricted number of databases and searched terms used in the literature review due to temporal constraints. As well, the exclusion of articles which used alternate language versions of these assessments is a further limiting factor. A more extensive search may reveal additional articles with additional psychometric evaluations. Future studies addressing occupational therapy assessment with this unique and diverse population would be beneficial to ensure the best care for these clients with diverse and complex needs.

ACKNOWLEDGEMENTS
The authors would like to acknowledge the support of their supervisors, Stefany Kawka and Elizabeth Steggles.

REFERENCES
Hiring People with Disabilities: A Scoping Review

ABSTRACT

Purpose. The overall aim of this review is to capture the current state of knowledge about the hiring process for people with disabilities. Methods. A scoping review of the available literature focused on hiring processes and practices as they relate to people with disabilities was conducted utilizing the framework developed by Arksey and O’Malley (2005) and advanced by Levac et al. (2010). To build on the literature review, a series of consultations were conducted with key informants, including: people with disabilities who have first-hand experiences; employment support service providers; and human resource professionals. Results. Findings from consultations and the literature revealed seven interrelated themes: requirements versus practice; stigma; disclosure; accommodations; relationship building and use of disability organizations; information and support for employers; hiring practices that invite people with disabilities. Conclusion. Future research focused on identifying and evaluating viable strategies to address the current issues related to hiring practices for people with disabilities in Canada is warranted and should be made a priority.

INTRODUCTION

Many individuals with disabilities want to work but face barriers to finding, securing and keeping jobs. Employment rates for people with disabilities are consistently lower than that of people without disabilities (Fraser et al., 2011; Jans et al., 2012; Ju et al., 2013). Despite the importance of employment for people with disabilities and efforts to improve employment outcomes, many people with disabilities continue to encounter challenges trying to secure employment (Jans et al., 2012). The purpose of this study is to capture the current state of knowledge about the hiring process for people with disabilities.

METHODS

In order to take stalk of existent knowledge and identify a future research agenda, a scoping review of hiring processes and practices as they relate to people with disabilities was conducted. The scoping review framework developed by Arksey and O’Malley (2005) and advanced by Levac et al. (2010) was utilized. Specifically, the research question was: “What is currently known and what do we need to better understand about hiring practices for people with disabilities in Canada?” The initial phase of this scoping review began with a search of nine electronic databases: CINAHL, PubMed, ASSIA, PsychINFO, Sociological Abstracts, Web of Science, Embase, Business Source Complete, and Social Science Abstracts. Additionally, the authors reached out to networks focused on work disability policy and searched relevant organizational websites to identify relevant reports on the topic. The inclusion/exclusion criteria were initially stated broadly. All papers that were available in English, published between 2000 and April 2014, and focused on hiring people with disabilities were included. Throughout review of the abstracts, the authors engaged in an iterative process of further refining the inclusion and exclusion criteria. Specifically, articles about hiring intentions and about employment accommodations in general were excluded. This broad search resulted in a total of 842 articles. However, after checking article titles and abstracts, and reviewing full-texts a total of 53 articles were deemed relevant and included in the review. To build on the literature review, a series of consultations were conducted with seven key informants, including: four people with disabilities who have first-hand experiences; three employment support service providers; and one human resource professional (who also identified as a person with a disability).

RESULTS/DISCUSSION

The findings from the literature and consultations are presented together. From the 53 articles and the seven key informant consultations, seven key topics were identified that have been examined to date:

- Requirements versus practices: Despite the existence of legislation there is a disconnect between what is required and expected of employers and their actual hiring practices.
- Stigma: There is a negative connotation associated with disability that can discourage employers from hiring.
- Disclosure: The type and timing of disability disclosure varies according to disability type, past experiences, and perceptions of stigma.
- Accommodations: Accommodations should be offered during the hiring process and after an offer for employment has been made. However, employers lack knowledge about how to negotiate and provide reasonable accommodations.
- Relationship building and use of disability organizations: Building relationships between community employers and disability organizations that specialize in placing people with disabilities into jobs is critical to successful hiring.
- Information and support for employers: There was a call for the provision of information and support to employers in order to improve hiring practices and employment opportunities for people with disabilities.
- Hiring practices that invites people with disabilities: Organizations require commitment to equity and diversity from across the organization, including top levels of management, in order to establish practices that invite applicants with disabilities.
The model Hiring People with Disabilities: Summary of Existing Research (Fig. 1) was created to describe and organize existing research through the depiction of these interrelated themes. From the scope of the literature and consultations with key informants it became clear that the hiring process occurs in the context of existing laws and policies which influence hiring practices. The remaining themes are presented as two clusters. Stigma, disclosure and accommodations are factors that affect hiring people with disabilities. The themes of relationship building and use of disability organizations, information and support for employers, hiring practices that invite people with disabilities are needs that have been identified in the literature and by key informants that relate to hiring people with disabilities. The findings highlights that the interaction between these two clusters which together strongly influence hiring of people with disabilities. Furthermore, the successful hiring of people with disabilities seems to positively impact future hiring practices.

Limitations. The current scoping review contains some limitations. Due to the quantity of uncovered evidence the reference lists of included studies were not searched and hand-searching of key journals was not completed. In addition, the quality of included literature was not assessed and the research team was unable to recruit any employers to participate in consultation. This limits the findings considering employers are key stakeholders in the hiring process. Lastly, the sample was not inclusive of a range of disabilities, as the research team were only able to recruit people with physical and learning disabilities. As a result, it is likely that key issues surrounding the hiring process were missed, as the literature, as well as consultations with employment support service providers did highlight differences in experience across types of disabilities.

Implications for Occupational Therapy. Occupational therapists can play a key role in helping persons involved in the hiring process to identify and implement accommodations that promote a person-environment-occupation fit for people with disabilities during the hiring process.

CONCLUSION/FUTURE DIRECTION
The current scoping review sought to explore what is currently known and what needs to be better understood regarding hiring practices for people with disabilities in Canada. A thorough review of the literature and consultations with seven key informants revealed seven key topics regarding what is currently known about hiring practices for people with disabilities, which highlight critical gaps that require further study. It is clear that while much has been established regarding the existence of problems related to the hiring process, very little research exists that proposes solutions to such issues. Future research related to identifying and evaluating viable strategies to address the current issues related to hiring practices for people with disabilities in Canada is warranted and should be made a priority.

ACKNOWLEDGEMENTS
We would like to express our gratitude to our supervisor Rebecca Gewurtz for her guidance and support throughout this project, as well as the key informants for their valuable time and contributions to further the insights in this research area.

SEMINAL REFERENCES
Student Occupational Therapists’ Shadowing Experiences in the Intensive Care Unit: Using Reflective Journaling to Develop Grounded Theory
Jocelyn Harris, Sue Baptiste, Michelle Kho, Alyssa Howe, Sheila Whitehall

Rationale: Currently, the delivery of services in intensive care units (ICU) closely resembles a medical model of care that focuses primarily on the physical aspects of the person, resulting in a neglect of other factors that influence health and well-being, such as the environment or occupation. With the focus on survival, the role of rehabilitation at this stage of care is not well understood; this rings especially true for occupational therapy (OT). Limited research has been conducted to conceptualize OT practice in the ICU in terms of practice models, best practice, and evidence for OT in ICU treatment in general.

Purpose: This study aims to conceptualize the fit of OT in the ICU, through student shadowing experiences. This study is intended to explore an area of health care about which little is known to gain novel understanding and to obtain details about students’ shadowing experiences, something difficult to uncover through conventional research methods.

Methods: A qualitative research approach using grounded theory methods was implemented to contribute to the basis of theory that OTs can utilize in the ICU. Two students engaged in five shadowing experiences with one physiotherapist and four OTs, across four intensive care units in Southern Ontario. Reflective journaling was done individually after each shadowing experience and was used to generate data. Deductive analysis was used to pull emergent themes from the data through categorization of prominent topics.

Results: Six themes emerged: Environment as good and poor fit for patient needs, OT presence, OT Competencies in ICU, OT Forgotten, OT is dependent on many factors and Potential for OT in the ICU.

Conclusions: The findings from the students’ shadowing experiences, in tandem with the literature already exploring OT in the ICU proposes that OT is feasible, necessary and already has a wide scope in some ICU locations.

Introduction:
In the ICU, patients typically recover from their original acute issue; however, negative effects linger long after their discharge and can include cognitive deficits, increased disability and physical health deficits, and death. Rehabilitation in the ICU through OT and physical therapy has been shown to be feasible during the earliest stages of critical illness and to positively affect outcomes of ICU exposure. While OT is often part of the team multidisciplinary team in the ICU, responsibilities and involvement vary widely. Barriers to OTs working in the ICU include specific skill development, challenges with time allocation, referrals, and knowledge of the OT profession from other health care workers (Foreman, 2005). Students possess a unique perspective of experiencing practice environments, and have developed the skill set to be able to identify the learning needs of a clinician who is transitioning from a generalist education to a specialized set of skills required. Thus the student lens is helpful in understanding the ICU environment and seeing the potential for OT.

This study aims to conceptualize the fit of OT within the ICU, contribute to the basis of theory that OTs can utilize in the ICU, and identify the knowledge and skills required by OTs to work effectively in the ICU.

Seminal References:


Acknowledgments: We would like to thank the healthcare professionals who volunteered their time and efforts to provide the student shadowing experiences.
Methods:
Grounded theory methods were implemented using reflective journaling that was completed individually after each shadowing experience to generate data. **Figure 1** outlines the steps taken in the analysis. Deductive analysis was used to pull emergent themes from the qualitative data through categorization of prominent topics, completed in stages:

- Pre-shadowing expectations: researchers wrote preliminary journals outlining assumptions, researchers coded their own journals for themes, and then important themes were discussed and compiled.
- Emergent themes from the shadowing experiences: all journals from the shadowing experiences were read and coded by the opposing researcher, the themes were complied and member checked by the original researcher.

Results:
From the shadowing experiences six themes emerged:

1. Environment as good and poor fit for patient needs - Observations of how the physical and social environments either promoted or hindered patient recovery.
2. OT presence - Refers to a combination of the OT’s impact, time spent in the ICU, scope of practice, and role within the interdisciplinary team; prominent factor were job description, and personality.
3. OT Competencies in ICU - A lot of specific learning required to be competent in the ICU: physical medicine an understanding of wiring and machinery, and the ability to reflect on personal concerns.
4. OT Forgotten – A lack of understanding or full awareness about the abilities and role of OT among the other health care professions.
5. OT is dependent on many factors - Time and funding, appropriate referrals, ability to self-refer, collaboration with the interdisciplinary team, OT service model, environmental factors, resources.
6. Potential for OT in the ICU - The potential for the OT role to address both the person, as well as the environment, in the context of occupation, but the scope of OT is not being utilized across all ICUs.

Discussion:
Several of the findings from this study are supported by the existing literature, and the theoretical contributions drawn from the results of this study are grounded in data. Using a Person-Environment-Occupation framework allowed practitioners to address occupational issues of those in the ICU from a variety of angles. Although the amount of OT involvement in the ICU varies across locations, the requirements of an ICU OT fit well with those already laid out by the Canadian Association of Occupational Therapy (CAOT, 2012).

Conclusions:
This information, in tandem with the literature already existing exploring OT in the ICU, proposes that OT is feasible, necessary and already has a wide scope in some ICU locations. Of those institutions shadowed, there was huge range of how much and what OT services were provided to patients in the ICU. This research further shows that ICU’s with more OT involvement may have a benefit for patients via interventions in all aspects of the occupation of recovery.

Future directions:
This study furthers the dialogue on OT in the ICU by providing experiential accounts of practice. Future research needs to be conducted to quantify the effects of OT interventions in Canadian ICU’s, as well as more widespread surveying of what is already being done in ICU’s across the country.
Where has all the leisure gone? An exploration of leisure participation post-stroke
Caroline Gimblett & Samantha Fellows, MScOT Candidates (2014), McMaster University
Jessica Huynh & Joon Hyung Tak, MScPT Candidates (2014), McMaster University
Supervisors: Dr. Jocelyn Harris, OT Reg. (Ont.) PhD & Dr. Ada Tang, PT PhD

Abstract

**Purpose:** To examine physical, cognitive, psychoemotional and environmental factors associated with 1) the types of leisure activities that people with stroke are interested in and 2) the degree of satisfaction of their current level of engagement. **Methods:** A cross-sectional study design was employed. Participants (n= 17) attended McMaster University for a single visit, 2.5 hours in duration, to complete assessments and questionnaires. Primary outcome measures were the Leisure Interest Measure and Leisure Satisfaction Measure. Secondary outcome measures spanned across all ICF domains. **Results:** Multivariate regression analyses revealed three significant models. Leisure interests within the physical domain were highly influenced by the physical environment, societal attitudes, psychoemotional wellbeing and gender (R²=.73, P = 0.001). Satisfaction in leisure activities related to education was associated with depression, cognition, physical limitation, and attitudinal barriers within the environment (R²=.84, P = 0.005). Within the psychological domain, leisure satisfaction was correlated with cognition, physical limitations, and the physical and structural environment (R²=.54, P = 0.042). **Conclusion:** This study demonstrated that individuals’ interests and satisfaction with their leisure pursuits are associated with a variety of personal and contextual factors. There is a need for rehabilitation professionals to continue to address ADLs, while simultaneously providing their clients with opportunities to discuss and explore leisure activities.

Introduction

The International Classification of Functioning, Disability & Health (ICF) views disability through a biopsychosocial lens, purporting that disability and functioning are outcomes produced from the interaction of personal and contextual factors (World Health Organization, 2002). A stroke is a significant life event that impacts an individual’s physical, psychological and social wellbeing, and exerts an influence on one’s environment as well (O’Sullivan & Chard, 2010). Therefore, the ICF model, which considers a range of factors within- and external to the individual, is a logical model to utilize in order to view the impact that a stroke has on one’s health, well-being and functioning.

Leisure refers to activities performed in a person’s free time, which employ a sense of meaning, purpose, and pleasure (O’Sullivan & Chard, 2010). Following a stroke, participation in leisure activities decreases, yet the reasons for this have not been thoroughly explored. According to Hartman-Maeir et al., (2006), individuals who had a stroke gave up 57% of their leisure activities compared to healthy older adults, who reported a 29% decrease in leisure participation as a result of aging.

Though the literature suggests that various factors impact a person’s ability to engage in leisure activities, the factors associated with the types of leisure activities in which people who have had a stroke are interested in, and their satisfaction with their current level of leisure participation is unknown. This study aimed to examine impairment, activity, and personal and contextual factors associated with 1) the types of leisure activities that people with stroke are interested in and 2) the degree of satisfaction of their current level of engagement.

Methods

**Design.** An observational, cross-sectional design was used to answer the current research question. Ethical approval was obtained from the Hamilton Integrated Research Ethics Board. **Participants.** Participants were initially recruited from a database of individuals who took part in the supervisors’ previous research studies. Additional participants were recruited from local Stroke Recovery Groups, whereby the researchers provided an explanation of the study and gathered contact information from those interested. Inclusion criteria are as follows: 18 years or older, at least six months post-stroke, and completed formal rehabilitation. Individuals were excluded if they had additional neurological conditions or had a significant cognitive or communication impairment impacting their ability to participate in the study. **Procedure.** The researchers contacted all potential participants via telephone. After determining eligibility, individuals who demonstrated interest were mailed a package containing the study’s purpose, benefits and potential risks. Follow-up phone calls were conducted and individuals who continued to demonstrate interest were scheduled an appointment. Participants attended a single visit to McMaster University, which was two and a half hours in duration, to complete the study protocol. **Primary Outcome Measures.** Leisure Interest Measure (LIM): a 29-item questionnaire assessing the types of leisure activities that individual’s prefer to participate in; categorized into physical, outdoor, mechanical, artistic, service, social, cultural and reading domains. Leisure Satisfaction Measure (LSM): a 24-item questionnaire investigating an individual’s degree of contentment with their current leisure participation; categorized into psychological, educational, social, relaxation, physiological and aesthetic domains. Both measures required participants to rate how accurately each statement applied to them on a 5-point
Likelihood factors >5 were removed. **Secondary Outcome Measures.** Secondary outcome measures were categorized according to the ICF model. **Body Structure & Function**

**Chedoke-McMaster Stroke Assessment Impairment Inventory** (CMSA): the arm, hand, leg and foot scales were used to identify the presence and severity of physical impairments.

**Mini Balance Evaluation Systems Test** (MiniBESTest): evaluates a range of balance subsystems including responses to external perturbations, anticipatory postural adjustments, stability in gait and sensory orientation.

**Montreal Cognitive Assessment** (MoCA): screening tool used to assess the presence of mild cognitive impairment including memory, language, visuoconstructional skills, attention and concentration, conceptual thinking, executive functioning, calculations and orientation.

**Centre for Epidemiologic Studies- Depression Scale** (CES-D): a 10-item self-report questionnaire used to assess the severity of depressive symptomology.

**Activity & Participation**

**Chedoke Arm and Hand Inventory** (CAHAI): an upper-limb measure that utilizes a 7-point activity scale to determine the functional ability of the affected arm and hand during the performance of bilateral tasks.

**6-Minute Walk Test** (6MWT): determines an individual’s submaximal aerobic endurance.

**5-Meter Walk Test** (5MWT): assesses gait speed to indirectly measure impairment and activity limitation.

**Reintegration to Normal Living Index** (RNLI): an 11-item questionnaire used to determine the impact of a disease on an individual’s ability to resume normal life.

**Contextual Factors**

**Craig Hospital Inventory of Environmental Factors** (CHIEF): a 12-item questionnaire used to determine the impact of contextual factors within a person’s environment, and how they are perceived to facilitate or hinder their daily activities.

**Data Analysis.** Descriptive statistics were performed for all participant characteristics. Bivariate correlation analyses were used to determine associations between leisure participation and leisure satisfaction within dimensions of body structure and function, activity and participation, and contextual factors. From these analyses, variables (P<0.20) associated with leisure participation were entered into a multivariate linear regression model. Statistical significance was set at p<0.05. To ensure assumptions of the multivariate regression were met, variance inflation factors (VIF) were examined for multi-collinearity. Variables with VIF factors >5 were removed.

**Results**

**Descriptive Statistics.** The current study assessed 17 participants, 12 of whom were men. Mean age was 65.3 years and mean time post-stroke was 6.8 years.

**Multivariate Regression.** The analyses revealed three significant models, which demonstrated the relationship between factors associated with leisure interest and satisfaction, among adults post-stroke. The presence of depressive symptoms, gender and the physical and attitudinal environment demonstrated a significant relationship with participants’ interest in physical types of leisure activities (R²=.73, P = 0.001). Also, the presence of depressive symptoms, cognition, balance, leg impairment and the attitudinal environment demonstrated a significant relationship with participants’ satisfaction in leisure related to education (R²=.84, P = 0.005). Cognition, balance, lower-extremity impairment and the natural and physical environment demonstrated a significant relationship with participants’ psychological satisfaction in leisure activities (R²=.54, P = 0.042).

**Discussion & Conclusion**

Despite the benefits that leisure activities have on one’s physical, cognitive, and psychoemotional well-being, participation in leisure, which provides a sense of meaning, accomplishment and pleasure, is often significantly reduced following a stroke. The results of this study support the ICF model, suggesting that individuals’ interest and satisfaction with their leisure pursuits are associated with a variety of personal and contextual factors. Though rehabilitation professionals tend to focus on the physical implications following a stroke, environmental factors were present in each of the models in which statistical significance was found. Occupational therapists are well suited to facilitate re-engagement in leisure activities post-stroke, as they consider the fit between personal and contextual factors that serve as enablers or barriers to participation.

Rehabilitation professionals should continue to address activities of daily living and mobility, while also providing their clients with opportunities to discuss and explore leisure activities. Also, more emphasis should be placed on linking clients with appropriate community supports which incorporate leisure activities beyond their rehabilitation experience (inpatient & outpatient) (Boosman et al., 2011).

**Acknowledgements**

We would like to thank Dr. Tang and Dr. Harris for their guidance and support.

**References**


Abstract: This research presents an environmental audit of 18 walking trails in the Hamilton area done to assess characteristics and rate the walkability of the trails. It is a component of the Let’s Take a Walk health promotion project which aims to educate and increase the participation of older adults in walking trails for physical exercise. The project is part of initiative by the Hamilton Council on Aging to make Hamilton an Age-Friendly city. Two audit tools, the Path Environmental Audit Tool (PEAT) and the Universal Trail Assessment Process (UTAP) were used to collect trail data. Results identified 8 trails as ‘easy’, 3 as ‘moderate’ and 7 as ‘difficult’ based on the surface conditions, slopes and cross slopes of the trails. Three trails were fully walkable by users of all abilities, seven have features of walkability and eight were difficult and were not considered to be walkable by persons with reduced mobility function. Authors concluded that the number of trails accessible for individuals of all types of mobility were limited. Trails of moderate level of difficulty were lacking from the sample.

Introduction

While the Hamilton area has many walking trails, older adults may not be aware of the trails or of the health benefits of walking. Both points could be barriers to older adults’ use of recreational trail systems in Hamilton.

Walking is an inexpensive activity that is widely available. It is rarely associated with physical injury and people of different ages and abilities can exercise by walking since the activity is open to adaptation (Westby, 2001). Some studies show that people are more likely to walk when compared with other forms of exercise because of convenience and potential to overcome barriers such as time, lack of fitness or skill (Lamb, Bartlett, Ashley, & Bird, 2002). Studies have shown an association between walking and decreased rate of death, preventative effects on many chronic conditions such type-2 diabetes, cardiovascular disease (heart disease and stroke) and musculoskeletal conditions, as well as relief from the symptoms of depression and anxiety, as well as improved cognitive performance. The Let’s Take a Walk project undertaken by the Hamilton Council on Aging (HCoA) aims to educate older adults on the health benefits of walking for exercise, and to increase the opportunities for recreational walking along the trail systems in Hamilton. The trail audit and data analysis described in this presentation provide knowledge on the levels of walking difficulty, levels of access and accessibility for selected trails in the Hamilton area, along with recommendations on gaps in trail features to the Hamilton Council on Aging.

Methods

The HCoA selected eighteen trails for audit by groups of three or four volunteers using the PEAT.UTAP audits of two trails identified as difficult through analysis of the PEAT data were conducted by the authors. PEAT audit data were collected and collapsed into a composite audit for each trail by the authors. Discrepancies in original audit responses were resolved by a systematic process including review of original audit forms, trail photos taken by auditors, the PEAT manual, information provided by HCoA (e.g., maps) and Internet searches to gather details necessary to make achieve consensus regarding the discrepancy. Trails were described in terms of walkability which was defined as a measure of how physically easy it is to move about in the environment. To gauge the walkability of the trails we divided the trails into three levels of difficulty: easy, moderate and difficult based on path conditions and percent grade of slopes and cross slopes on the path. In addition, access (getting to the trail) and accessibility (using the trail once there) were also investigated.

Results

Trails were looped, straight or oval. Times to complete trails ranged from 15 minutes to 1 hour and 30 minutes. They were predominantly pedestrian and were generally accessible by transit. Trail surfaces were categorized as excellent, moderate, good or and poor and the majority of the surfaces were moderate/good. Points of interests were mainly landscapes, water bodies and city views. Very few trail offered services such as food or access to other community venues, civic institutions or commercial destinations. There were
Discussion

We explored the walkability of eighteen trails in the Hamilton area to inform the HCoA of the availability of trails which could facilitate older adults’ participation in recreational walking along the trail system in Hamilton. The sample of trails accessed demonstrated a limited range of walkable trails in terms of level of difficulty and low levels of accessible trails for users of mobility devices. As occupational therapists, this project provided the opportunity to encourage health promotion through understanding and improving the environment to support individuals’ goals and control over their own health.

Limitations of results included the following: 1) possible decreased inter-observer reliability of the PEAT audit due to volunteers receiving less than the suggested training on the tool prior to the audit, 2) spring timing of audits made it difficult to assess items such as path condition or restrooms as these items which are subject to variation throughout the year, and 3) the lack of segmentation of the trails as prescribed by the PEAT and UTAP meant that the auditor had to rate overall quality of the trails. This was difficult to assess for items such as slope or path condition which tended to vary over the length of the trail. Despite limitations, the research explored sections of the Hamilton trail system, encouraged trail-user perspective, built collaboration between stakeholders and addressed environmental supports that promote a healthy lifestyle.

Recommendation

We recommend that HCoA identify more trails that are easy and moderate to suit the mobility needs of a variety of users. Identification of these trails could be done through consultation with experienced trail users including some of the volunteer auditors, members of the HCoA and members of the Bruce Trail Association. Additionally the descriptions of easy, moderate, and difficult trails created from the audits done in this project can be used as a basis from which to identify future trails.

Increasing the number of easy and moderately walkable trails to be included in the brochure may meet the long term goal of increasing opportunities for older adults to participate in recreational walking along the trail system in Hamilton.

Acknowledgements

We thank Dr. Lori Letts, Dr. Margaret Denton, Shelagh Kiely, the Hamilton Council on Aging and all the trail audit volunteers.

References


Abstract

Purpose: Explore the lived experience of CRPS. Methods: Sixteen semi-structured interviews were transcribed and analysed using narrative inquiry. Results: Five themes emerged: altered participation, re-inventing self, support & understanding, impact on self-efficacy, and symptom profile. Conclusions: CRPS is a unique experience, influenced by numerous factors, affecting participation and identity.

Introduction/Background

Complex regional pain syndrome (CRPS) is a chronic neurological condition which can lead to peripheral nerve damage either through direct or indirect nerve injury (Goebel, Barker, & Turner-Stokes, 2012; Shipton, 2009). This condition is accompanied by a wide variety of symptoms including but not limited to burning pain, altered movement patterns, swelling, sensory changes, and skin changes (Goebel et al., 2012, Schwartzman, Erwin & Guillermo, 2009). In addition to the pathological factors there is a complex interaction with psychological and behavioural factors impacting the person with CRPS (Shipton, 2009). It is clear that CRPS is a perplexing condition, partly due to the variation in symptom type, intensity and frequency, and as a result lacks understanding within the health care system (Harden, 2010). While qualitative research has been completed on individual aspects of the CRPS experience (Rodham, McCabe & Blake, 2009), there has yet to be a qualitative study focused on understanding the overall lived experience of CRPS. Due to this gap in knowledge, this study was carried out to gain an understanding of the lived experience of CRPS through a narrative inquiry approach.

Methods

The research question (what is the lived experience of complex regional pain syndrome?) was addressed using Clandinin’s (2000) constructivist narrative inquiry process. The theoretical underpinnings of this process require the use of conversation as a means to access data. Subsequently, stories are created from data gathered that illustrate themes collated from the data. The approach of presenting results in the form of narrative stories suits the research question well as it provides insight into the lived experience of CRPS in a manner which takes into account time, social circumstances, and place. This analysis is part of a larger mixed methods study that employed cognitive debriefing interviews to examine the content validity of a patient self-reported outcome measure developed specifically for persons with CRPS. This study was approved by the joint ethics board of McMaster University and Hamilton Health Sciences.

Participants: Persons with CRPS were recruited for this study via posters hung in the Pain Management Centre and Hand Therapy Clinic at Hamilton Health Sciences, recruitment notices sent to the Canadian Pain Society, and through recruitment materials sent to PARC/RSD Canada (a national CRPS association) and local pain support groups. Written informed consent was provided by each of the 45 participants who completed the interview. For the current narrative analysis, purposeful sampling was conducted to ensure a cross-section of different ages, genders, and duration of symptoms: this resulted in 16 of 45 interviews being selected to be included in this study.

Data Collection: Data was collected via one-on-one semi-structured cognitive interviews with each participant, which typically ranged from 60 to 90 minutes. The interview format consisted of 35 items from a proposed questionnaire, presented in a random order to each participant in an attempt to minimize order bias. Interviews were audio-recorded and were either conducted face-to-face, over the phone, or via Skype. The primary investigator of the project, who is also a practicing occupational therapist (OT) in hand rehabilitation, conducted all interviews. Interviews were transcribed by the primary researcher, as well as four student OTs on the research team. Pseudonyms were assigned to transcripts, and all identifying information was removed to ensure anonymity of participants.

Data Analysis: Content codes were collectively developed continually throughout the transcription and analysis process by team members who listened to at least 3 interviews, and these codes were discussed and refined during team meetings. After a joint coding exercise with all team members, each member independently coded transcripts for content which was then re-coded by another team member. Differences in coding were discussed among the pairs to come to a consensus. A total of 78 codes were used throughout the coding process. Team members wrote reflective memos throughout this process. In a team environment, codes were then organized into categories of data, and eventually into five themes, using memos and observations compiled during transcription and coding activities to strengthen and
Findings

The following five themes emerged from the analysis of the transcribed interviews: symptom profile, re-inventing self, support & understanding, impact of self-efficacy, and altered participation.

Symptom Profile: All participants referenced the variability of symptoms they experience and how they are unique to them. Due to this the researchers discussed a "symptom profile" as all participants have a compilation of their own symptoms which others living with CRPS may or may not experience.

"It feels like someone's got my nerves in a bicycle and they are just cranking it as hard as they possibly can" - CI34

Re-inventing self: Participants frequently discussed changes in their identity as a direct result of the changes from CRPS including how they engaged in daily occupations, their relationships and their future goals. Therefore the impact of CRPS led them to recognize their new self as a person living with CRPS.

"It hasn't been addressed in this, but that goes along with the whole sense of self and the change in your personality. You know, it's like you use to be that way, and you know I'm just not anymore, and it's not because I don't want to...I can't" - CI28

Support and understanding: A highly prevalent theme among all participants was the overall lack of understanding from others about CRPS. This lack of understanding was reported to reduce social support and cause intentional social isolation among participants. Moreover, many discussed how the amount of understanding others had towards them was related to the amount of support they were given.

"When I think of supportive I think of friendship, and nurturing and understanding... a safe place to vent and...you know and just understanding" - CI28

Impact of self-efficacy: Self-efficacy was discussed by participants, and conversations typically focused around having a lack of control over CRPS. For some, this lack of control negatively impacted their self-efficacy in regards to managing their symptoms. Others demonstrated that they had adopted strong self-efficacy over other aspects of their life as a form of coping.

"I think that there's a loss of control with this CRPS." - CI19

Altered participation: All 16 participants discussed the impact CRPS has on their daily lives. Participants reported having to plan, modify or eliminate certain activities as a result of having CRPS.

"I usually don't drive especially on days that I have had pain attacks the day of" - CI34

Conclusions/Future Directions

Results from this study concluded that CRPS is an individualized experience, uniquely affecting each person impacted by CRPS. Commonalities were noted across the data, and these can be used to assist healthcare professionals, such as occupational therapists, to understand the global impact CRPS has on their client’s lives. Appreciating this is important for the development of therapeutic relationships needed to optimize treatment and management of CRPS for clients. As this study is the first of its kind, it is hoped that future research will involve expanding on these results to develop clinical tools that are relevant to clients’ lived experience of CRPS.

Acknowledgements

We would like to thank our supervisor, Tara Packham, for her support and expertise throughout this project. We would also like to thank Helen Small, PARC representative, for her insight and support.

References


Harden RN. (2010). Objectification of the diagnostic criteria for CRPS. Pain Medicine, 11(8), 1212-1215.


Obesity is a complex condition that has steadily increased in prevalence worldwide. The prevalence of obesity (BMI ≥ 30) has tripled in Canada since 1985, and the prevalence of morbid obesity (BMI ≥ 40) has increased 6-fold (Twells et al., 2013). Obesity is also a major risk factor for a number of health conditions (WHO, 2012).

As this prevalence grows, OTs will work increasingly with clients with obesity in a variety of practice settings. Obesity has been shown to impact occupational performance within and across occupations, due to personal factors (e.g. physical capacity) and environmental factors (e.g. stigma) (Forhan et al., 2010).

The limited occupational therapy literature in this area indicates that the holistic and client-centered approach of occupational therapy is a good fit to address the complex impacts of obesity (Forhan et al., 2008). The broad occupational therapy role can include health promotion, prevention, and advocacy (Haracz et al., 2013).

The literature identifies considerations that may impact optimal care for this population. Clients with obesity often need specialized equipment, which may not be available (Carlson, 2008). Persons with obesity also experience internal and external stigma and a higher rate of mental health issues (Forhan et al., 2010).

### Purpose of the Study

To explore the challenges, barriers, perceptions, and needs of community-based OTs when working with clients with morbid obesity

**SPECIFIC AIMS OF THE STUDY:**

1. Identify common occupational therapy interventions currently being performed with this population in the community and investigate therapists’ confidence in performing these interventions
2. Determine challenges and barriers to providing occupational therapy for this population
3. Explore the attitudes and perceptions of therapists about their experiences and their role

### Methods

The web-based survey was completed by OTs practicing in HNHB Local Health Integrated Network (LHIN). OTs were contacted through email via therapy managers/appropriate delegate of three community rehabilitation provider agencies in HNHB LHIN. The survey was distributed to 52 OT’es and a total of 13 responded. The survey was comprised of 32 open and closed-ended questions developed using Survey Monkey. Domains and questions were based on health care professionals’ experiences and a literature review. Descriptive statistics were used to summarize closed-ended questions. Open-ended questions provided further detail to closed-ended questions.

### Results

**Characteristics of Respondents.** Ten respondents (77.0%) had 10 or more years of work experience. Nine respondents (69.3%) worked in the community for 10 or more years. All respondents worked with at least one adult with morbid obesity in the last five years, while only one (7.7%) had formal training in working with this population.
**Current Interventions.** Common interventions were mobility/transfer training (100%, n=13), environmental modifications (92.3%, n=12), and falls prevention (84.6%, n=11). Increasing physical activity (23.1%, n=3) and modifying dietary intake (15.4%, n=2) were the least common. Weight loss was addressed by 46.2% (n=6) of OTs. Interventions with the highest confidence were energy conservation (8.85/10) and environmental modifications (8.62/10) and the two lowest were health promotion and education (6.08/10) and weight loss intervention (4.92/10).

**Current Challenges.** Common issues were availability of equipment (100%, n=13, 2), using lifts (76.9%, n=10), and space limitations (76.9%, n=10). Eight respondents (61.5%) noted social barriers when working with this population (e.g. lack of funding, limited visits, stigma). 12 respondents (92.3%) stated their clients had mental health issues at least sometimes. 12 respondents (92.3%) revealed resource constraints limited the interventions implemented.

**Attitudes and Perceptions of OTs.** Nine respondents (69.2%) disagreed that their personal beliefs and attitudes with this population negatively influenced their work, while four respondents (30.7%) were neutral. Seven respondents (53.8%) believed that addressing weight loss was a role for community-based occupational therapy.

**Discussion**

**Current Interventions.** The respondents are implementing more acute community-based interventions that directly address function in the home and the home environment with more confidence. More indirect interventions (e.g. health promotion and education, weight loss) are implemented less frequently and with less confidence, as they require more time. If not limited by resource constraints, respondents indicated they would conduct interventions, such as exploring motivation and leisure activities and education around health promotion and lifestyle changes.

**Challenges Working with this Population.** The major identified challenges were at a system-level including limited funding for equipment and services, limited availability of specialized equipment, and limited number of visits to address clients’ needs. These barriers were shown to limit primary interventions with clients, as well as additional interventions that therapists would like to perform.

**Attitudes and Perceptions of OTs.** Negative attitudes and beliefs about obesity shown in past studies with student OTs and other professionals (Vroman & Cote, 2011) were not reported in our study, perhaps due to self-report bias. Respondents did observe stigma from other staff and self-stigma from clients. The occupational therapy value in weight management has been identified in the literature (Forhan et al., 2008), but respondents were divided if this is a role for OTs. If not limited by time and funding they would better address health promotion and weight management.

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<tr>
<th>Clinical Relevance</th>
<th>Limitations</th>
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<tr>
<td>As community-based OTs identify service gaps, they can advocate for change to meet the growing needs of this population, and provide education. With more resources, OTs can engage in health promotion and education more frequently. As it was identified that respondents felt less confident performing these interventions, it is important to provide professional development to build capacity.</td>
<td>Generalizability of results to other OTs working in the HNHB LHIN and geographical regions is limited by small sample size. Questions regarding bias may be inaccurate due to self-reporting of this bias. The survey design did not allow for a comprehensive exploration of certain domains e.g. mental health. Also, therapists may not accurately recall information, leading to recall bias.</td>
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**Conclusion and Future Directions**

This study highlights limitations faced by community-based OTs in addressing the complex needs of this population. As OTs will increasingly require the skills and resources to effectively care for clients with obesity, further education is needed for students and therapists, as well as additional research. Advocacy for system-level changes is needed to decrease barriers for OTs to effectively address client needs and improve health, function, and quality of life.

**Acknowledgements**

We would like to thank our supervisors, Jennifer Lee and Vince DePaul and the faculty of the MSc OT Program at McMaster University for their support and dedication to this study.

**References**


Clinical Utility of the Makey Makey Invention Kit as a Mouse Input for Persons with Disabilities

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Abstract
A single case study using the Makey Makey Invention Kit as a mouse input in a client with Spinal Muscular Atrophy in comparison to his trackpad mouse input. Baseline data of the client’s mousing ability using his trackpad was determined at the first session using the Compass software which tested aim, drag and drop and menu selection. This study focused on the difference in time each task required between his trackpad and the Makey Makey mouse input. Following testing for baseline data, the client was asked to rate his ability to use and his satisfaction with his current trackpad, rating 9/10 and 8/10 respectively. Setup of the Makey Makey involved the creating of a prototype with 4 directional sensors on a piece of plastic approximating the size of this current trackpad. The client practiced using the Makey Makey mouse over 3 sessions with fine tuning to spacing of the conductive materials and speed settings as needed. Following 3 sessions the Compass software was used to repeat testing in order to compare task times between the trackpad and Makey Makey mouse. Overall the Makey Makey mouse was significantly slower than his trackpad except during the menu test. During the aim test, when target size was accounted for, there was no statistical difference in time when the target was of medium and long distances away. This result is not unexpected as the client is a long time user of his trackpad; there may be less of a difference over time with further practice and the addition of more participants and observations.

Introduction
Independent computer use is a necessary skill in today’s computer-based world. Both students and employees use computers for learning, socializing and completing tasks. For able-bodied people, there is a set of standard computer input devices which come with most computers. These include standard mice and keyboards and increasingly, ergonomic versions of mice and keyboards. However, these input methods are often not appropriate for people with disabilities who need to use a computer. There are a variety of adaptive computer inputs including head-pointers, voice-recognition technology, eye-gaze tracking, switch-operated mice and joysticks. Each device has its own benefits and limitations; this project was to trial a new type of input device called the Makey Makey Invention Kit (JoyLabz llc, 2014) as a light-touch mouse with clients who require light-touch due to neuromuscular weakness.

Literature Review
There is very little literature on computer input devices for either able-bodied or disabled computer users. The majority of able-bodied computer-user research has focused on musculoskeletal disorders associated with computer use. For computer users with disabilities there is even less research; it primarily focuses on new input devices under development, reviews of available devices, and a few articles on factors to consider when choosing appropriate input devices. A literature search through CINAHL for computer input devices for people with disabilities yielded 24 articles of interest including an
introduction to a facial-emg mouse, a tongue mouse, a voice-activated mouse and head-pointing devices. One article studied the hierarchy of factors to consider when choosing an appropriate computer input device for people with spinal cord injuries.

**Methods**
Following research ethics board approval, individuals with neuromuscular disorders were invited to participate in trialing a new mouse input method, the Makey Makey. Participants were current clients at the Technology Access Clinic in Hamilton, Ontario, Canada. All participants experienced weakness resulting from neuromuscular disorders and 2 consented to participation. 1 participant was unable to complete the study due to unforeseen health concerns. The participant was a regular computer user with post-secondary education. The Compass software (Koester, Simpson, Spaeth, & Lopresti, 2007), a valid and reliable software for testing mousing ability, was used as outcome measure. Informed and written consent was received, followed by baseline testing using the Compass software his usual mouse input, a trackpad. The software measured the time required for him to perform aim, drag and drop and menu selection tasks over different distances and different target sizes. He was then asked to rate his ability to use and his satisfaction with his current mouse input. The Makey Makey device was customized to his needs and he completed 3 practice sessions with the mouse prior to final Compass software testing. Results were analyzed using Excel 2010 and SAS Studio 3.1.

**Results/Discussion**
The participant completed both baseline Compass software testing with his trackpad and final Compass software testing with the Makey Makey. Only trial time was analyzed for this study using Excel 2010 and SAS Studio 3.1. Analysis showed the Makey mouse was significantly slower on all tests except the menu test. Analysis of the aim test showed that regardless of target size, there was no significant difference in time between trackpad and Makey Makey data over medium and long distances. As the participant is a long-time user of his trackpad, these results are not unexpected. This study involved only 1 participant; therefore the generalizability may be limited. Qualitatively, the participant found the need for only light-touch and high customizability to be of asset. He found that the current set up using 4 directional sensors limited his movements to within the x and y axes and did not have proportional speed control. We faced some challenges as skin conductivity is required to use the Makey Makey; dry skin resulted in a decrease in conductivity that resulted in erratic or no response of mouse movements. Lotion temporarily resolved the problem.

**Conclusions / Future Directions**
The Makey Makey mouse utilizes conductive materials to create a light-touch mouse access method. Although in this study the user’s trackpad was faster, future research would benefit by increasing the population size and number of observations, as well comparing the Makey Makey to other mouse access methods such as head-pointers, eye-gaze tracking and voice-recognition software.

**Acknowledgements**
I would like to thank my supervisors, the staff at the Technology Access Clinic and the participants for their support throughout this project.

**References**
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Cognitive Impairment in Acute Medicine: Prevalence and Implications for Occupational Therapy
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Supervisors: Jana Cochrane, OT Reg. (Ont.)., Erin Gaiger, OT Reg. (Ont.)., Eunice Lipinski, OT Reg. (Ont.)., Jennifer Siemon, OT Reg. (Ont.).
Hamilton Health Sciences

ABSTRACT: Objectives: Cognitive impairment (CI) has an impact on functional abilities, of interest to occupational therapists (OTs). This quality improvement study investigated the prevalence of CI among patients on two acute medicine units referred for OT. The study also examined whether subjective clinician judgment alone was sufficient to detect CI. Methods: After delirium was ruled out, clinicians subjectively judged if CI was present. All patients were then screened objectively with the Standardized Mini-Mental State Examination (SMMSE) and Shulman’s Clock Drawing Test (CDT). Results: The prevalence of CI as per the SMMSE was 36.5%, whereas clinicians predicted the presence of CI in 51.9% of patients. Clinician judgment accurately predicted CI 82% of the time. Conclusion: The authors concluded that solely relying upon subjective judgment is not sufficient to precisely and accurately predict CI.

INTRODUCTION & LITERATURE REVIEW
Cognitive impairment (CI) results when a cognitive decline impacts an individual’s independence and performance of activities of daily living. In acute hospitals, occupational therapists (OTs) play an important role in monitoring cognition, as based on the Canadian Model of Occupational Performance and Engagement (CMOP-E) (Townsend & Polatajko, 2007), cognition is an important component of the person and CI may therefore disrupt the ability for an individual to engage in meaningful occupations.

Older adults admitted to hospital demonstrate a higher prevalence of CI than the age-matched population not in hospital (Maxwell, 2013). In fact, Sanchez et al (2011) reported that 31.8% of individuals admitted to hospital demonstrate CI. Recent literature also reveals correlations between common diagnoses encountered in hospital and CI, including dementia, congestive heart failure, anemia, cerebrovascular accidents, depression, hypertension and atrial fibrillation. Well-documented correlations exist between CI and increased risks of mortality, length of hospital stay, functional decline, hospital re-admission and adverse events such as unintended injuries or complications related to healthcare management while in hospital. These correlations highlight the importance of detecting CI in hospital; however despite this evidence it has been documented that many hospitals do not consistently objectively screen for CI (Maxwell, 2013).

Objectives: This quality improvement study investigated whether subjective clinician judgment alone is sufficient to determine if CI is present. Secondly, the study sought to identify the prevalence of cognitive impairment (CI) among patients on two acute medicine units who had been referred for occupational therapy (OT) assessment.

METHODS
Formal ethics approval was not required for this study as it was a quality improvement activity. The assessments conducted were part of a normal OT assessment on these units. Therefore, as no data was obtained outside of the standard assessment of patients, ethics approval was not required.

All participants without delirium, on two inpatient acute medicine units in a large urban hospital who were referred to OT between January 6th and April 6th, 2014 were considered eligible. Upon receiving the referrals, OTs visited patients for an initial interview, collecting demographic data and ensuring the absence of delirium with the Confusion Assessment Method (Inouye et al, 1990). Based on this interview, OTs made a subjective judgment of whether they perceived the patient to have CI. The OT would then administer the Standardized Mini Mental State Examination (SMMSE) (Molloy et al, 1991) and the Shulman Clock Drawing Test (Shulman et al, 2000) to obtain objective information regarding the presence of CI.

All data were inputted into password protected files for analysis with Microsoft Excel and IBM SPSS Statistics (ver. 22).
RESULTS & DISCUSSION

The results of this study demonstrated that subjective opinion correctly predicted CI 82% of the time when compared to the defined gold standard for this study, the SMMSE. This is shown to be fair sensitivity and therefore the authors believe that it is not sufficient to solely rely upon clinician judgement when determining the presence of CI as based on these results, 18% of patients with CI would be missed. Accuracy of clinician judgement compared to the SMMSE as determined by a Receiver Operating Characteristics curve analysis was 0.737.

The prevalence of CI within the sample population was found to be 36.5% as per the SMMSE, 55.6% as per the CDT and clinician judgement predicted 51.9% of patients would have CI. Using the SMMSE as the gold standard, the prevalence is still consistently higher as compared to previous literature. One potential explanation for this is previous research focused on hospital populations in their entirety whereas the current research utilized only patients referred to OT. Since correlations exist between poor function and CI and OTs typically receive referrals for function-related issues, this may be one explanation for the higher prevalence of CI in the current study.

It was found that clinicians overestimated the presence of CI 42% of the time. One hypothesis is that clinician judgment is more sensitive to other aspects of CI. This is in line with Gordon et al (2004) who discussed that a benefit of subjective clinician judgment is the ability to notice subtle details which objective measures may have difficulty detecting.

As noted, there were discrepancies between presence of CI as defined by the SMMSE and the CDT. This may be due to comparison of age and education based norms for the SMMSE. Also, due to patient limitations such as poor vision and limited use of dominant hand, fewer patients completed the CDT, skewing the sample and potentially by chance including more individuals with CI. This was shown statistically by the positive predictive value (72% vs 59% for SMMSE).

CONCLUSION & FUTURE DIRECTIONS

Clinician judgment is not sufficient to determine the presence of CI. However, clinician judgment is able to draw upon multiple sources of information such as collateral history from the patient’s family or circle of care and observation of functional tasks. Therefore, it is imperative for OTs to take a holistic approach when assessing patients to obtain both subjective information and objective cognitive assessment results to gain a greater understanding of the impact of CI on a patient and to reduce the probability of individuals with CI being overlooked. Determining presence of CI is essential in order to prevent the risks associated with it. OTs play an important role in detecting CI on acute medicine units and are well equipped to address the implications of CI on function and occupation.

Future directions should focus on addressing mild CI as a confounding variable, including validation of the Montreal Cognitive Assessment (MoCA) for detection of mild CI on acute medicine units as this has not yet been done.

ACKNOWLEDGEMENTS

The authors would like to thank the McMaster Evidence Based Practice Course coordinators for their ongoing guidance and support throughout this project.

REFERENCES


Evaluating the intra-rater reliability of the electronic Driving Observation Schedule (eDOS): Analyzing the on-road performance of older drivers

Student: Yesha Lakhani (MSc. OT Candidate, 2014) & Supervisor: Dr. Brenda Vrkljan PhD, OT Reg. (Ont.)

Abstract: The purpose of this study is to assess the intra-rater reliability of electronic Driving Observation Schedule (eDOS); a tool that captures the actual driving behavior of older drivers. Participants drove their own vehicle to 2-3 familiar destinations within a 20-30 minute round trip from their home. These drives were video recorded. The videos of ten participants' were analyzed using the eDOS protocol for the purpose of evaluating intra-rater reliability. Statistical analyses indicated a high level of consistency between the first and second analysis of the videos. The results are promising with regard to the utility of the eDOS for capturing the naturalistic behavior of older drivers.

Introduction: With the population of older adults rapidly increasing (Turcotte, 2012), the number of older drivers continues to grow (Sivak & Schoettle, 2011). Driving is a means through which older adults maintain engagement in meaningful occupations leading to its classification as an activity central to successful aging (World Health Organization (WHO), 2002). According to Padmanaban (as cited in Koppel et al., 2013), older drivers are more vulnerable to injury when involved in a crash due to physical frailty. Typically, they have a higher prevalence of functional impairments and medical conditions (Whelan, Langford, Oxley, Koppel, Charlton, 2006) that compromise driving safety. As a result, older drivers have a higher crash risk even when driving exposure is controlled (Koppel, Bohensky, Langford, & Taranto, 2011). Given this heightened risk, there is a critical need to understand the context in which older drivers are actually operating their vehicles. The electronic Driving Observation Schedule (eDOS) was developed in response to this need. The eDOS provides a means to capture the behind-the-wheel behavior of drivers in their own vehicle, in their own environment.

Purpose: This study is one of the first steps in a multi-tiered approach to examine the psychometric properties (i.e., scoring) of the eDOS tool when using videos of older drivers. The aim of this study was to assess the intra-rater reliability of the tool.

Methods: Participants and selection criteria: This study is a sub-project of the Candrive cohort study of older drivers (http://www.candrive.ca), which has been tracking the health, driving patterns, and crash records of 928 drivers aged 70+ across 6 sites for the past 5 years. The eDOS project involves participants at 3 sites: Hamilton, Montreal and Ottawa. The inclusion criteria for the eDOS study were: age ≥ 74 years, a valid driving license, unrestricted access to a car, drives at least once a week, lives near a Candrive research site, English speaking, under the care of a family physician, consent to release driving record, and agree to an annual assessment. Exclusion criteria were: not planning to move out of a region and no contraindication to driving as per Canadian Medical Association (CMA) standards.

Procedure: In summer 2012, participants chose 2-3 destinations, which were a 20-30 minute radius from their home. Three GoPro cameras were installed in each participant’s car, and one camera in the observer’s car (i.e., a vehicle that followed participants during their drive). The participants drove their own vehicles to their chosen destination(s). For the purpose of this sub-project, 12 participants’ driving videos were randomly selected from the Ottawa site and scored using the eDOS tool by a rater (Y.L.). Two videos were used for practice and the remaining 10 were used to evaluate intra-rater reliability. The rater (Y.L.) was a student occupational therapist who underwent a 4-hour training session, which included scoring 2 videos to become familiar with the tool. Another goal of this process was to determine if the eDOS could be used by someone with limited experience in the field of driver assessment and rehabilitation.

Participants: The demographics of the drivers in 10 videos that were rated were as follows:
- 3 males (30%) and 7 females (70%)
- Mean age of = 75.5 years, SD=3.67 years, range= 70-83 years
- Average MoCA score of 26.9/30, range= 24-28
- Held a valid driver’s license for an average of 56.5 years, range=41-67 years

The eDOS tool: The eDOS is divided into 6 categories: observation of road environment, signaling, 3) speed regulation, 4) gap acceptance, road-rule compliance and vehicle/lateral positioning, which are scored during various
driving maneuvers including: intersection, lane change, merging, free driving and low speed maneuvers (Vlahodimitrakou et al., 2013).

**Video Analysis:** The rater analyzed the driving videos of the selected 10 participants on two occasions; with an interval of 2 weeks between videos. Videos were viewed on a desktop computer and eDOS scoring on a touch-screen tablet. The rater was permitted to pause and rewind videos, as needed to ensure maneuvers were rated accordingly. The rater was not permitted to fast-forward the videos, as the measure of time taken to analyze the videos was also captured. Upon completion, the data was exported from the eDOS into an Excel file output and transferred to SPSS for analysis.

**Statistical Analyses:** Intra-rater reliability was assessed using Intraclass Correlation Coefficients (ICCs) 3.1. Point estimates of ICC values: >0.75 are excellent, 0.4-0.75 modest and <0.4 poor (Fleiss, 1986).

**Results:** Average time to score each video during the first viewing was 59.2 minutes (range= 40-81) and 45.6 minutes (range=33-73) for the second viewing. The ICCs scores were as follows:

<table>
<thead>
<tr>
<th>Driving Maneuver</th>
<th>Indicator</th>
<th>N</th>
<th>ICCs (3,1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left turn</td>
<td># of left turns</td>
<td>10</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td>Observation of road environment</td>
<td></td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>Signaling error</td>
<td></td>
<td>0.95</td>
</tr>
<tr>
<td></td>
<td>Speed regulation error</td>
<td></td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>Gap acceptance error</td>
<td></td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>Lateral line positioning error</td>
<td></td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>Total line compliance error</td>
<td></td>
<td>0.97</td>
</tr>
<tr>
<td>Lane Change</td>
<td># of lane changes</td>
<td>10</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>Observation of road environment</td>
<td></td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>Signaling error</td>
<td></td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>Speed regulation error</td>
<td></td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>Gap acceptance error</td>
<td></td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td>Lateral line positioning errors</td>
<td></td>
<td>0.92</td>
</tr>
<tr>
<td>Merging</td>
<td># of lane changes</td>
<td>10</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>Observation of road environment</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Signaling error</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Speed regulation error</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Gap acceptance error</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Lateral line positioning errors</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>Critical errors</td>
<td># of critical errors</td>
<td>10</td>
<td>1.00</td>
</tr>
<tr>
<td>Total eDOS score</td>
<td></td>
<td>10</td>
<td>0.92</td>
</tr>
</tbody>
</table>

**Discussion:** Overall, the eDOS tool had moderate to excellent scores across all maneuvers and recorded errors. Although the rater was a novice in this field, the tool was user-friendly. However, the training manual could be improved. For example, further standardization/instructions for scoring certain situations, such as low vs. medium traffic. The manual does not indicate when this descriptor should be scored (i.e. upon immediate arrival to intersection vs. when driver is at or navigating the intersection). This may account for the lower ICC score obtained for observation of road environment during maneuvers such left turns.

**Future Direction & Implications:** This study was a preliminary analysis of intra-rater reliability with future studies that will examine psychometric properties of the tool including test-retest as well as looking at the differences in real-time eDOS scores compared to the video-based analysis (validity), and differences between an experienced rater watching the eDOS compared to a novice rater (inter-rater reliability). As well, future studies will examine the eDOS in the context of evaluating medically at-risk drivers and determine how protocols can improve its usability in a clinical context. By capturing the actual behavior of older drivers behind-the-wheel, the eDOS has the potential to improve clinical decision-making when it comes to making a determination of medical fitness to-drive.

**Key References:**

**Acknowledgements:** The authors would like to thank Kinga Eliasz, Dr. Alex Crizzle, Sheila Garrett, and Claire Jacek from the Hamilton AUTO21 site, Yu-Ting, Dr. Barbara Mazer, Dr. Isabelle Gélinas from the Montreal site, and the older driver participants.
How Do You Feel? Comparing Solution-Focused and Problem-Based Coaching

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Bloorview Research Institute: Heidi Scwellnus (Supervisor), Gillian King, Laura Thompson, Khondaker Mamun, Melodie Therme,

Abstract
A common dichotomy of coaching styles lies along the continuum of problem-based to solution-focused. Solution-focused approaches over problem-based approaches have been shown to increase self-reported positive emotions and decrease self-reported negative emotions (Grant, 2012). Since measurement of physiological signals has been established as a reliable way to detect changes in individuals' emotions (Khushki et al., 2011, Nhan, 2010), this data could be used to corroborate findings from self-report. In a pilot study with 6 participants, it was found that heart rate, skin temperature, and electrodermal conductivity increased more during solution-focused coaching. As well, participants spent more time speaking during answers to solution-focused versus problem-based question. Some promising trends were noticed in self-report data. With some adjustments, this project will be feasible for a larger study.

Introduction
Coaching has grown substantially in the last few decades, and evidence is growing to show the effectiveness of coaching in business and health care settings (Grant, Curtayne, & Burton, 2009, Theeboom, Beersma, & van Vianen, 2014). Coaching can be used in pediatric occupational therapy settings to improve client and family engagement in treatment by ensuring it is based on the family’s goals (personal communication, H. Scwellnus, May 8, 2014). Investigation into coaching styles can add to the "toolkit" of clinicians in various practice settings.

Literature Review
A problem-based (PB) approach to coaching has historically dominated coaching styles, and is based on the assumption that understanding the problem is integral to finding a solution (Grant & O’Connor, 2010). A more recent development has been a solution-focused (SF) approach to coaching. Its principles shift the focus of attention from the client's problems to the strengths and resources (De Shazer, 1986). There is some evidence that a solution-focused approach may provide benefits over a problem-based approach in terms of increased positive affect, decreased negative affect, and proximity to goals (Grant, 2012). The association between physiological signals and self-reported emotion states has been extensively researched and findings indicate that emotions can be differentiated within individuals based on signal patterns (Kreibig, 2010). This pilot project aimed to combine these two fields of research, in the hope of contributing to the literature on effective coaching styles through a unique approach.

Methods
Six adult participants were recruited from the Bloorview Rehabilitation Institute. Participants were randomized into two blocks of mini scripted coaching: one underwent SF then PB, the other block was in the reverse order. Sessions were 1.5-2 hours and based on Grant’s (2012) investigation using short coaching scripts. One researcher facilitated the mini scripted coaching while the other recorded the timing of the questions and responses within the software. Participants’ blood volume pulse, temperature and skin conductivity were measured through the entire session with sensors attached to four phalanges. First, the participant observed images from the Geneva affective picture database for fifteen minutes in order for their physiological signals to stabilize. Following this, they were instructed to choose a problem that rated 6-7 on a scale of 1-10 where 1 is very personal and private, and 10 is something trivial. The Positive and Negative Affect Scale (PANAS), State Hope Scale and Session Rating Scale were used pre- and post- mini scripted coaching session to measure emotions and engagement through self-report. Each mini coaching script consisted of the researcher asking the participant five standard questions derived from Grant’s study (2012). During the mini coaching script, after each question was answered, a self-report of the participant’s affect was collected using the Self-Assessment Manikin (SAM). After the first mini coaching script, another 15 minute baseline was recorded and the second type of coaching was performed. The entire session ended with the third baseline stabilization.
Results/Discussion

Analysis of the physiological data compared the baseline measures to the coaching script sessions. Heart rate increased slightly more during the SF over the PB sessions, and both coaching sessions increased the heart rate as compared to baseline. This is possibly indicative that higher engagement occurs for both coaching forms, with slightly more for SF over PB coaching. It was also found that skin temperature was higher during SF than PB (30 degrees vs. 29.2), and in fact, during PB temperature dropped below baseline. Furthermore, electrodermal activity was higher during SF as compared to PB (2.6 vs. 2.3), and both were raised over baseline. This also may indicate that engagement was higher in SF than PB coaching sessions.

The sample of 6 participants was not sufficient to carry out calculations with statistical significance. Some tentative patterns show: in aggregate SAM measures, more participants endorsed feeling excited in the SF vs PB coaching. Also, tentatively, there is more positive over negative valence on the SAM measure for SF vs PB coaching. However, there were mixed results between directional trends in all measures. Analysis of each item of the measures revealed that, when comparing SF to PB, ratings of determination increased more and ratings of nervousness decreased more. The paucity of findings most likely reflects the small sample size, however further explanations are explored below.

Discussion

The feasibility of this study was ascertained. However, it was agreed that the experiment protocol was too long and baselines may have caused added frustration. In future larger studies, the experiment would need to take place on two separate occasions. It was also found that the PB scripted coaching session questions were less open-ended and perhaps led participants to less fruitful answers than SF questions. In future, there would be a need for equally engaging questions. As student learners, we discovered additional unforeseen difficulties with time allotted to various steps of research, for example electronic equipment errors, small sample size and lengthy baseline measurements.

Conclusion

Preliminary findings from the pilot study indicated higher heart rate, finger temperature and electrodermal activity during SF as compared to PB. These findings are a unique contribution to the literature consisting of self-reported emotions during SF and PB coaching sessions. However, the constraint of sample size limits interpretation of these data. The lessons from this pilot project have demonstrated that small amendments to the protocol will create a feasible procedure for a larger study.

References

Older Driver Safety when Entering and Exiting a Vehicle

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Supervisor: Brenda Vrkljan, PhD, OT. Reg. (Ont.); Co-Supervisor: Alexander Crizzle, PhD, MPH,
Research Team: Robert Fleisig, PhD, Peng (Co-PI); Tara Kajaks, PhD Candidate; Jessica Gish, PhD

Abstract
Introduction: Prior studies have reported that older drivers are at risk of falling during vehicle ingress (entry) and egress (exit). The current research project examined the relationship between movement patterns during vehicle ingress/egress (entry/exit) and functional abilities (i.e., balance) in a sample of older drivers. Methods: Data was collected using questionnaires, administration of functional assessments and video recording of participants’ ingress and egress. Results: Participants who reported problems with balance were taller and took longer to get into the car (ingress). Higher Body Mass Index (BMI) scores correlated with less foot taps and longer one-leg stance time. Those who scored lower on the balance had longer ingress time. Discussion: Preliminary findings suggest a relationship between physical characteristics, balance confidence and ingress/egress time, but caution is warranted given the small sample size (n=11). This study is ongoing with the aim of recruiting more participants with mobility challenges (e.g., use walking aid) and balance problems.

Introduction
Driving is the primary mode of transportation for many older adults. With an aging population (i.e. aging baby boomers), the number of Canadian older adults (aged 65+) who hold a valid driver’s license will continue to grow rapidly (Turcotte, 2012). To date, researchers have primarily focused on determining the factors which best predict older driver fitness (i.e. how to detect unsafe drivers), however, less attention has been given to addressing the interactions between a person’s physical abilities and the vehicle environment (i.e. vehicle design). Vehicle ingress (entry) and egress (exit) has been identified as an action where drivers may be at risk of injury due to falls (Dellinger, Boyd and Haileyesus, 2008). It is important to consider how safety can be influenced by the interactions of a person’s abilities and mobility patterns during ingress and egress.

Chateauroux and Wang (2010) completed research that described egress strategies (one-foot versus two-foot), however, ingress strategies were not addressed. In recent systematic review of the literature, Crizzle, Vrkljan, Kajaks, Gish and Fleisig’s (in press), highlighted the need to examine the relationship between the driver’s characteristics (i.e. age, height, weight) and functional abilities with ingress/egress patterns.

To examine this relationship, the current study uses a prospective design that includes two study components: 1) a battery of functional assessments and questionnaires; 2) video recordings using Microsoft Kinect software to examine participants’ ingress and egress in the same vehicle (i.e. Pontiac Vibe).

Hypotheses
I. Older drivers who score worse on the functional assessments of balance, including those with lower “balance confidence” will:
   A) Take longer (i.e. time) to enter/exit a vehicle
   B) Use more points of contact (hands and feet) with vehicle during ingress/egress
II. Body characteristics (i.e. Body Mass Index (BMI), height, weight) will influence ingress/egress strategies (one-foot or two-foot), points of contact, and time

Methods
Participant Recruitment: A convenience sample was recruited from the McMaster Alumni Lager Lecture Series. Interested participants were contacted by the research team and scheduled for data collection phase. Inclusion criteria encompassed older adults aged 55 with a valid driver’s license. Older adults with contraindications to driving were excluded.

Ethics and Consent: This study was approved through the Research Ethics Board at McMaster University. All participants provided written informed consent form prior to participating.

Measures: Demographic information was obtained through a questionnaire (i.e. age, gender, fall history) and participants’ height and weight were obtained by researchers to calculate body mass index (BMI). The assessment of functional abilities included the Berg Balance Scale (Berg et al, 1989), the Activity-Specific Balance Confidence (ABC) Scale (Powell & Myers, 1996), and various assessments from the CanDrive cohort study which include the, Rapid Pace Walk, One-Leg Stance Test, Rapid Foot Taps, Timed Up and Go (TUG), amongst others (Marshall et al., 2013). Video recordings of participants’ ingress and egress using Microsoft Kinect and a standardized vehicle (a 2007 Pontiac Vibe) were captured to assess driver interaction with the vehicle. From the video recordings, three variables were derived: 1) Time: total time (in seconds) required to open and close the door during ingress and egress movements; 2) Ingress / Egress Strategy: one- or two-foot strategy; 3) Points of Contact: number of contact points made by the hands and feet to maintain balance during ingress/egress (see Figure 1).

Procedure: Researchers administered the questionnaires and functional assessments; Participants entered and exited the vehicle 5 times (“Enter/exit vehicle as you normally would”); Ingress and egress variables were extracted from the videos.

Analysis: Data was analyzed using non-parametric tests due to the small sample size (n=11)
using the Statistical Package for the Social Sciences (SPSS), version 22.0. A Spearman’s Correlation, Mann-Whitney U Test and an analysis of variance between groups (ANOVA) were conducted to describe and explore the relationships between variables.

Results
Participants in this study (n=11) were aged 57-83 years (M = 72.45, SD = 8.24), six males (54.5%) and five females (45.5%). Participants’ BMI was significantly and negatively associated with the amount of time (seconds) on the one leg stance test ($r_s = -0.615, p<0.05$) and the total number of foot taps ($r_s = -0.743, p<0.05$). Additionally, ABC scores were significantly and negatively associated with time of egress (seconds) ($r_s = -0.676, p<0.05$).

Six participants reported problems with their balance and were significantly taller (height = 70.7 versus 63.0 inches; $z = -2.191, p<0.05$) and required more time for ingress (8.6±0.79 versus 6.3±2.3, $z = 2.191, p<0.05$) compared to those who did not report any problems (n=5).

No differences were found between fallers and non-fallers in the past year with respect to demographics or functional measures. Additionally, no difference emerged between points of contact (two, three and four), demographic variables, and functional assessments related to research hypothesis.

Discussion
The results of this study support the hypothesis that participants’ physical characteristics (height and BMI) and balance confidence were associated with ingress and egress movements. Participants with lower BMI had better functional ability (one-leg-stance and foot taps) compared to those with higher BMI. Taller participants reported more trouble with their balance and require more time for vehicle egress, presumably to compensate for poor perceived balance.

This study may be limited by the small sample size. No significant findings support the hypothesis that participants with lower functional ability and balance confidence use more points of contact during ingress or egress. As well, the aim is to include participants with mobility issues (e.g. walking aids). Thus, it is expected that as more participants with a wider range of functional and mobility impairments, the analysis will reveal relationships between participants’ functional ability, physical characteristics and variables of ingress and egress.

Future Directions
This study is ongoing with the aim of recruiting more older drivers with mobility problems to understand how differences in vehicle design impact entry/exit. Partnering with McMaster’s engineering program, the plan is to evaluate different designs with older drivers with a focus on improving usability and safety when interacting with their automobile.

Acknowledgements
We would like to thank the following: The participants who volunteered for this project; our supervisors Dr. Brenda Vrkljan, Dr. Alexander Crizzle and Tara Kajaks for their guidance; and the Labarge Optimal Aging Initiative, the Michael G. DeGroote Post-Doctoral Fellowship, and General Motors Canada for their funding and support.

References


Abstract
The ywcaencore program was created to address the holistic needs of breast cancer survivors who have had an associated surgery at any time in their life. **Purpose:** This presentation outlines a program evaluation of ywcaencore, using a pre-post study design to address if the programs intended outcomes are being met. **Methods:** Manual Muscle Testing (MMT) was used to assess shoulder strength, goniometry was used to assess range of motion, the Brief Pain Inventory (BPI) was used for levels of pain or discomfort and the Functional Assessment of Cancer Therapy- Breast Cancer (FACT-B) to assess participant quality of life (QoL). Participants were breast cancer survivors who were attending the Spring 2014 ywcaencore program in Hamilton, ON. Range of motion was analyzed using a two tailed paired t-test, the other three measures were analyzed using wilcoxon-rank-sign test. **Results:** Main results include significant improvements to strength in regards to shoulder flexion and abduction, a significant increase to range of motion in flexion and abduction and a significant improvement on 5 questions of the FACT-B. The BPI showed a significant decrease in the question identifying pain at its worst. **Conclusion:** The research suggests that the ywcaencore program is meeting its intended goals regarding increased strength, mobility, and range of motion, as well as some improvements to levels of discomfort and overall quality of life.

Introduction
The Ywcaencore program is an exercise program designed for breast cancer survivors who have experienced surgery at any point in their lives (ywcaencore, 2009). Participants engage in 2 hour weekly sessions, for 8 weeks, catered to breast cancer survivors who have undergone surgery. The program includes bodyweight exercises, pool exercises, relaxation techniques and information sessions.

This study intends to evaluate the ywcaencore program; to prove the effectiveness of its intended aims using the outcome measures pertaining to ROM, strength, pain and QoL.

These aims of the ywcaencore program include; to improve mobility and flexibility, to reduce any discomfort resulting from surgery, to reduce the risks of lymphoedema and manage symptoms of existing lymphoedema, help relieve stress and tension, help restore a sense of control and self esteem, provide an opportunity to share experiences with other women who understand, and provide an environment for women to laugh, relax and have fun (Collie, 2011).

Literature Review
This study was meant to build on the work of Collie’s (2011) program evaluation of the Auckland ywcaencore program. Collie found that the ywcaencore program provided breast cancer survivors with both physical and physiological gains (2011). Physical activity interventions have widespread support within the literature, which additionally states that physical activity interventions for patients with breast cancer have consistently demonstrated improved fitness, decreased fatigue, increased QoL and a possible decrease in psychological distress (Sherman et al, 2010). In addition, a 2008 study published in Medicine and Sport Science, found that QoL and functional capacity (including aerobic capacity, muscular strength, and flexibility) improved in women with breast cancer who completed 12 weeks of tai chi (which utilizes similar exercises to that of ywcaencore), while these outcomes declined in a control group that received only supportive therapy(Mustain, Palesh and Flecksteiner, 2008). In agreement with Mustian et al., the center for disease control and prevention (CDC) indicates that cancer survivors can improve their QoL, decreased fatigue, and improved fitness in 12 weeks (CDC, 2011), however the ywcaencore program only consists of 8 weeks. Furthermore, the ywcaencore pool exercises are beneficial for the study population, as research has shown that exercising in the water is not only aerobic, but also strength-training oriented due to the water resistance; moving the body through the water creates a resistance that will activate muscle groups (Fronza et al., 2013).

Methods
**Participants:** The population includes female breast cancer survivors who have experienced mastectomy, lumpectomy or breast reconstruction surgery at any time in their lives. **Tools:** The program was evaluated using goniometry to measure shoulder ROM (flexion, abduction, internal and external rotation), MMT to test shoulder strength (flexion and abduction), and...
Addressing the Revolving Door: Factors contributing to repeat mental health visits in the emergency department

Elizabeth Dubee (MSc OT Candidate 2014), Sharon Liang (MSc OT Candidate 2014), and Monica Bettazzoni (Supervisor)

ABSTRACT. **Purpose.** The purpose of this study is to provide a profile of mental health patients who are repeat users of a suburban community hospital emergency department and to identify factors that are contributing to repeat visits among these mental health patients. **Methods.** A retrospective chart review was conducted for 45 adults, ages 18-64, who had repeat ED (rED) visits to the Oakville Trafalgar Memorial Hospital from Jan 1, 2013 to Dec 31, 2013. **Results.** Typical presentations of rED visitors are: middle aged (Mean=33.5), unemployed and single, living with friends or family and have a diagnosis of depression, more than one mental health diagnosis, and a history of previous admissions. The statistically significant factors associated with lower number of rED visits were type of housing and discharge planning. Alternatively, living situation, number of inpatient admissions, discharge dispositions, length of ED and inpatient stays and who patients were brought to the ED by were significantly associated higher number of rED visits. **Conclusion.** Results from this study can be used to inform program improvements in service delivery, as well as support additional research within this population.

**INTRODUCTION**

An emphasis on hospitals to reduce the length of stays and emergency department (ED) visits as a result of health care initiatives to provide timely and accessible care to patients with mental health (MH) conditions has been evident in the last decade. However, lack of integrated care in the community, in addition to lengthy wait lists and lack of follow up post hospital discharge are leading to relapse, repeat visits to the ED and readmission to inpatient units, contributing to a “revolving door effect” (Vandyk et al., 2013; Babalola et al., 2014). Research in MH has examined patient factors linked with repeat and/or frequent use (Curran et al., 2008; Canadian Institute for Health Information (CIHI), 2009); reasons for service use among this population (Vandyk et al., 2013; CIHI, 2009); and hospital visit characteristics related to repeat ED visits (Babalola et al., 2014; Johnston & Zolese, 1999). The purpose of this study is 1) to provide a profile of MH patients who are repeat users of a suburban community hospital ED and 2) to identify factors that are contributing to repeat visits among these MH patients. By increasing understanding of this population, it is hoped that their needs may be illuminated and that hospital staff can identify quality improvement opportunities to ultimately reduce repeat visits to the ED.

**METHODS**

**Study design & setting:** Retrospective chart review at Oakville Trafalgar Memorial Hospital (OTMH).

**Participant Selection:** Medical charts of patients who accessed OTMH Emergency Department (ED) from Jan 1, 2013 to Dec 31, 2013 were obtained. In this study a “repeat ED (rED) visit” was defined as an ED visit that occurred within 30 days of a previous ED visit. The inclusion criteria included patients: 1) with MH related rED visits, 2) between the ages of 18-64, 3) with at least one MH diagnosis. Patients were excluded if: 1) were not within 18 to 64 years of age, 2) MH related visits were not within 30 days, 3) no diagnosis of a MH condition, 4) substance use disorder was the only MH diagnosis. Among a sample of 114 patients, 45 patients met the inclusion criteria.

**Data Collection & Analysis:** Data was collected on the following areas: i) Demographic and socioeconomic patient information ii) Medical history iii) Index ED visit (i.e. the first ED visit in the year of 2013 associated with a rED visit) iv) First rED visit v) Subsequent rED visits. Statistical Package for the Social Sciences (SPSS) version 22 software was used to provide descriptive statistics (means, frequencies, percentages) and to perform chi-squared tests and Pearson correlations.

**RESULTS**

Profile of patients and ED visits. The average age of the sample was 33.5 years old with equal ratio of males to females. Just under half the patients were unemployed (46.6%), most were single (55.6%), living with family or friends (62.2%), and most had
more than one MH diagnosis (71.1%). The highest percentage of MH diagnoses in patient records was for depression (62.2%). Common reasons reported by patients for ED visits were symptoms of MH conditions, (40.1%) and suicidal ideation or attempt (16.8%). More than half the time, patients were discharged directly from the ED back to the community (51.1%) and just over a quarter were admitted to an inpatient MH unit (31.7%). Patients’ lengths of stay in the ED ranged from 1-20 hours, with an average of 4.4 hours.

**Factors significantly associated with rED visits.**
The type of housing and discharge planing were significantly linked to a lower number of rED visits ($p=.024$ and $p=.020$, respectively). Patients living in shelters and supportive housing had lower rEDs. Moreover, patients referred to outpatient services or recommended to follow up with their current outpatient services on their rED discharge plan had reduced rEDs. Statistically significant factors associated with higher number of rEDs were living situation ($p=.000$), who brought patients to the ED ($p=.000$), number of inpatient admissions ($p=.024$), discharge dispositions ($p=.000$), and length of ED ($p=.002$) and inpatient stays ($p=.049$). Patients living with friends or family had higher rED visits as well as patients who were accompanied by police, family member or friend to the ED. In addition, patients who had no inpatient admissions or one admission had higher rED visits. Discharge dispositions directly back to the community or admitted to inpatient mental health units were associated with higher rEDs. Finally, shorter stays in ED or inpatient (1 to 4 hours and 1-6 days respectively) were significantly linked to higher number of rED visits.

**DISCUSSION**

In general, patient characteristics were similar to the national profile for frequent ED visits from MH patients. However, there were some discrepancies between patient characteristics compared to this profile, suggesting that there may be a need to individualize services that are tailored to the unique needs of these patients accessing services at OTMH. The fact that significantly lower rED visits was found for discharge plans that connected or encouraged patients to access or continue accessing outpatient services implies that these are protective factors to rED use. This finding has implications for service providers in that it emphasizes the need to be familiar with services and programs beyond the scope of ED services to facilitate quality patient-centered care.

**Limitations.** Conducting retrospective chart reviews is inevitably linked with rater bias as the data tends to be interpreted through two separate lenses; one by healthcare professionals and a second by the researchers. Another downfall of a retrospective chart review is that the results of the review are dependent on the availability and consistency of documentation in medical records. For example, discharge plans were not clear or not documented. Finally, few charts fully captured the story behind what occurred between ED visits, which would have been key to addressing the study objectives.

**CONCLUSION**

Overall, results from this study can be used to inform program improvements in service delivery, as well as support additional research within this population. The profile of patient characteristics of individuals who have had rED visits for MH related reasons at OTMH can be used to gain a better sense of who is accessing ED MH services that have continued unmet needs. Future studies should focus on exploring patient experiences of what happens between index and repeat visits using more rigorous study designs.

**ACKNOWLEDGMENTS**
The authors would like to extend a big thank you to our supervisor, Monica Bettazzoni, the OTMH Health Records Department staff, and McMaster Faculty, Bonny Jung and Carol Dematteo for all their support and guidance throughout this project.

**REFERENCES**
Can a visual daily activity schedule reduce responsive behaviours?

**Lead Investigators:** Marion Penko O.T. Reg (Ont), M.Ed & Sherrie Cheers, MScOT, O.T. Reg (Ont)

**Student Investigators:** Beth Wideman & Bethany Holeschek, MScOT Candidates

**Abstract**

**Objective.** To explore whether a visual daily activity schedule (VDAS) can be used to reduce the responsive behaviours in older adults with dementia attending an Adult Day Program. **Methods.** An exploratory, single case study with two participants from the Friend’s Landing Adult Day Program. Behaviour were measured prior to and during implementation of the VDAS using the Dementia Observation System. **Results & Discussion.** One participant (FFL) saw an increase in the percentage of awake or calm behaviours from the first week to the final week of the study. In comparison, participant MFL showed a decrease in these behaviours. The difference between the results for each participant might be due to participant characteristics rather than the actual effectiveness of the intervention. **Conclusion.** Overall, this study demonstrated that there might be a use for visual daily activity schedules in Adult Day Programs but that it is not clear on the actual effectiveness of the intervention.

**Introduction**

Based on Canada’s currently aging population, the increasing identification of older adults with dementia and the proposed costs and burden this will bring to the health care system it is important to conduct health related research within this population (Canadian Institute for Health Information [CIHI], 2011). One of the identified difficulties that is experienced within the population of older adults with dementia is responsive behaviours (Finkel, 2000). It is important then to also conduct research on determining appropriate ways to manage these behaviours in a health care setting. The goal of this study was to explore whether a new intervention, visual daily activity schedule, can be useful in reducing the responsive behaviours in older adults with dementia attending an Adult Day Program (ADP).

**Methodology**

An exploratory, single case study with two participants from the Friend’s Landing (FL) ADP. Ethics approval was received from the Hamilton Integrated Research Ethics Board (HiREB) and the Halton Services for Seniors Ethics Board. Written consent for each participant was obtained from their Power of Attorney (POA), due to participants’ low cognitive capacity. The intervention being investigated was a visual daily activity schedule (VDAS). A VDAS is a representation of the timeline and activities for the day that staff and participants can refer. A protocol for using the VDAS was developed and provided to the staff at FL ADP. Participants’ behaviours were measured one week prior to and during implementation of the VDAS using the Dementia Observation System (DOS) (Schindel-Martin, 1998). Data was collected prior to and during intervention and then analyzed. Specifically, a percentage of time spent engaging in each behaviour on the DOS was calculated.

**Results**

Participant FFL was 70 years old, female, and a history of being verbally responsive. Participant MFL was 83 years old, male, and a history of becoming anxious and exit seeking. Both participants spoke English, MFL also spoke Italian, and scored below ten on the Mini-Mental State Exam.

### Percentage of Each Behaviour Out of Total Behaviours for FFL from Week One to Week Four

<table>
<thead>
<tr>
<th>Week One</th>
<th>Week Two</th>
<th>Week Three</th>
<th>Week Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awake or Calm (Grey)</td>
<td>34.2</td>
<td>20.4</td>
<td>32.5</td>
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<td>Noisy or Anxious (Striped)</td>
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<tr>
<td>Verbally Responsive (Black)</td>
<td>2.6</td>
<td>-</td>
<td>2.5</td>
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<tr>
<td>Physically Responsive (Grid)</td>
<td>-</td>
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</tr>
</tbody>
</table>

**Conclusion.** Overall, this study demonstrated that there might be a use for visual daily activity schedules in Adult Day Programs but that it is not clear on the actual effectiveness of the intervention.
One participant (FFL) saw an increase, 17.1, in the percentage of awake or calm behaviours from the first week to the final week of the study. In comparison, participant MFL showed a decrease, 8.5%, in these behaviours. Therefore, the results were mixed for the effectiveness of visual daily activity schedules in Adult Day Programs for reducing responsive behaviours. **Staff Perceptions.** The staff members at the FL ADP completed a questionnaire throughout the study on their experiences using the VDAS. Staff members reported that the VDAS provided an opportunity for participants to engage in set up, and it helped them as staff to schedule the day and see it progress. It was also reported that the VDAS was difficult to implement due to the variability in the day and the interruptions in scheduling. Overall, the staff suggested that VDAS may be more beneficial in population with less cognitive impairment. **Limitations.** The small sample size reduced power and the generalizability of the results. In addition, the short duration of the study limited participant’s ability to become familiar with VDAS, and researchers ability to detect patterns versus fluctuations in participants’ behaviours. Another limitation was that cofounding variables were not properly controlled for, which may have influenced and/or biased the results. Furthermore, the use of the DOS did not provide qualitative information, such as the context, frequency or intensity of behaviours. Finally, the way in which the VDAS was implemented may have limited its effectiveness. **Areas for Future Research.** Future research should strive to utilize more rigorous methods to determine the true effectiveness of VDAS and to explore how various factors of VDAS may impact its effectiveness.

**Conclusion**

This study demonstrated that there might be a use for VDAS in an ADP, but that it is not clear on the actual effectiveness of the intervention or which populations would benefit most. Responsive behaviours can greatly impede engagement in meaningful occupations; therefore, continued research on interventions which may reduce behaviours, such as VDAS, is both relevant and important to the practice of the occupational therapy.

**References**

Canadian Institute for Health Information. (2011). *Health care in Canada, 2011: A focus on seniors and aging.* Ottawa, ON.


**Acknowledgements**

Ashley Best, Carol Fendley, and Laurie Maratovich
Study participants and family
The Friend’s Landing Adult Day Program
**Abstract:** With the objective of exploring a role for occupational therapy with migrant farm workers in Canada, this exploratory study set out to understand the issues that impact the health, safety and well-being of this community in order to evaluate their needs against the skills of occupational therapists. A review of the literature yielded 5 studies and 1 political report, all underscoring the inextricability of the social determinants of health from the discussion on migrant farm worker health, as findings from the various studies echoed one another in the factors they emphasized: job uncertainty, hazardous and unhealthy working and living conditions, social exclusion and separation from social safety networks, compromised access to health services and stress.

In Canada, health issues experienced by migrant farm workers are addressed through ERs, walk-in clinics, WSIB, family health teams, community health centres, occupational health clinics and local interest groups / committees made up of a variety of stakeholders, including health organizations. Given that occupational therapists currently figure within this healthcare landscape, they are well positioned to usurp a role in the delivery of healthcare services to the migrant farm worker community. The needs that have been identified by the health providers and agencies that work with them match the skills that occupational therapists possess as defined by the Canadian Model of Client-Centered Enablement (Townsend, & Polatajko, 2013). Occupational therapists, then, are not only well positioned within the healthcare system to deliver services but they also have the skills to do it. Moving forward, a population-based initiative, as described by Townsend and Polatajko (2013), would entail the need to now establish a relationship with migrant farm workers to gain their insights relative to the research findings presented in this study and to ascertain their needs and goals.

**Introduction:** In Canada, the Seasonal Agricultural Worker Program (SAWP) was created to meet manual labour demands not filled by Canadian citizens and permanent residents. SAWP allows citizens of Mexico and select Caribbean countries, who are chosen by their respective governments, to come to Canada for a maximum of 8 months to complete work involving animals and plants on farms, nurseries or greenhouses. Under the auspices of SAWP, employers assume round-trip transportation, housing, registration for health insurance, workplace safety insurance coverage, compliance with provincial/territorial regulations regarding pesticide use (including provision of protective equipment and training), and work permit fees for their employees. Migrant agricultural workers receive wages that are commensurate with the earnings of Canadian citizens and permanent residents holding the same position, the wage rate stipulated in a collective bargaining agreement (in unionized workplaces) or the wage rate outlined in a commodity-specific wage table. Migrant farm workers complete dangerous work that puts them at greater risk for workplace injury and illness.

**Aim:** In light of the current lack of involvement of occupational therapists in the provision of healthcare services to the migrant farm worker community, the aim of this study is to explore a potential role for occupational therapy with foreign seasonal agricultural workers. It is first necessary to understand the occupational issues faced by seasonal agricultural workers that affect their health, well-being and safety in order to determine whether the needs of these workers fall within the scope of practice of occupational therapy. To this end, the research question is: **What is known about the issues encountered by foreign seasonal agricultural workers in Canada that impact their health, well-being and safety?**

**Methods:** Given the fact that this topic has not been clearly defined yet, an exploratory study was selected. To explore existing literature, formally and informally published work (i.e. gray literature) was searched using the SPIDER tool. The search strategy entailed a database search, citation checking, pearl growing, expert opinion and a website search. In particular, the following databases were consulted: Canadian Health Research Collection, Applied Social Sciences Index and Abstracts, Canadian Research Index, PAIS International, Periodicals Archive Online, ProQuest Nursing & Allied Health Source, PsycARTICLES, PsycINFO, Social Services Abstracts, and

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1Acknowledgements: Michelle Tew, OHCOW; Jackie Barrett-Greene, NMWIG
Sociological Abstracts. The criteria to determine inclusion was as follows: quantitative, qualitative or mixed method study and a sample consisting of migrant farm workers in Canada (not the U.S.). In total, 5 studies and 1 policy report (consisting of a summary of three studies) were reviewed for this project.

**Results:** Studies on migrant farm worker health and safety have been conducted primarily in other fields, i.e. policy, sociology and medical anthropology. They have taken place in Canada (specifically, Ontario and British Columbia), Mexico and Jamaica with workers, employers, government representatives, healthcare providers, rights groups, etc. and the sample sizes have ranged from 30 to 600. The research methods have also varied: from quantitative surveys to ethnographic qualitative interviews and case studies, government documents, policy, and academic studies.

Health issues experienced by migrant farm workers include: musculoskeletal disorders, heat and pesticide-related symptoms, hearing loss, neurological, cardiovascular/respiratory symptoms, cancer, infectious and communicable diseases, gastrointestinal symptoms, sexual and reproductive conditions, and mental health. While all of the research referenced the health concerns experienced by migrant farm workers, the discourse was always subsumed by a discussion of the conditions that brought on their illness and disease.

The prevailing framework used to discuss migrant farm workers’ health and safety is the social determinants of health. Specifically, job uncertainty and work conditions, hazardous and unhealthy housing, social exclusion and missing social safety networks, inadequate access to health services and stress are the primary socioenvironmental conditions identified across the literature as impacting on the health of migrant farm workers. Given this finding, a population-based initiative would be an appropriate approach with this community.

**Conclusion and Future Directions:** Migrant farm workers receive healthcare services at ERs, walk-in clinics, family health teams, WSIB, occupational health clinics for Ontario workers and community health centres. OTs already figure among some of these teams, positioning them well to usurp a role in the delivery of healthcare services to migrant farm workers. Moreover, OTs possess the skills identified as necessary to meet the needs of migrant farm workers, as outlined in the Canadian Model of Client-Centred Enablement – i.e. to adapt, advocate, collaborate, consult, coordinate, design, educate and specialize. Next steps include developing an understanding of the migrant farm workers’ perspective by synthesizing and sharing these research findings with migrant farm workers in order to invite them to enrich the data with their narratives and to identify their respective wants and goals.

**Key References**


Purpose: To examine the knowledge translation (KT) needs of occupational therapists (OT) and physiotherapists (PT) working on acute and rehabilitation stroke units within the Central South Regional Stroke Network. Objectives: (1) To gather information from therapists regarding the facilitators and barriers to KT, and (2) To gather feedback and suggestions from therapists regarding their KT needs. Methods: A sample of convenience was used. A descriptive survey was created and distributed. Descriptive statistics were used to analyze the data. Results: The most commonly reported barriers to KT were lack of time, high workloads, and lack of support from the facility. The most commonly preferred KT were interactive clinical workshops, onsite educational visit and use of educational material. A combination of both hands on and passive elements were most helpful for KT. Conclusions: The KT needs of therapists working in this region were similar to the needs identified in the literature. The education committee in this region can consider barriers to implementing preferred KT strategies to increase application of evidence into stroke care.

Introduction

The Central South Regional Stroke Network education committee aims to build capacity and foster sustainability of healthcare professionals working in stroke in the region through evidence informed knowledge translation (KT) guided by the Knowledge-to-Action (KTA) process framework (Figure 1). Graham and colleagues (2006) describe the KTA process framework as a complex and dynamic conceptual framework that assists stakeholders to implement research knowledge into practice1. The KT literature currently indicates that healthcare professionals report many challenges in implementing research into practice3,4. For this reason, this committee recognizes there is a need to complete a formal needs assessments related to the KT needs of the therapists within this region to best inform the annual stroke best practice education plan.

Figure 1: KTA Process Framework

Literature Review

A literature review was conducted to gather current evidence on: facilitators and barriers to implementing evidence into practice and the effective KT strategies. Results of this review indicated that: Many healthcare professionals reported barriers to KT that included workload pressures, time pressures, organizational barriers, lack of access to research and lack of knowledge and confidence in own evidence-based practice skills. Despite these barriers, healthcare professionals recognized the importance of evidence-based practice and have a desire to increase their use3,4. The KT strategies reported to be most commonly used included: educational material, educational meetings (didactic or interactive), educational onsite visits, and audit

Knowledge translation: “dynamic and iterative process that includes synthesis, dissemination, exchange and ethically sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system”2.
and feedback. The literature suggests that no single KT strategy is most effective but rather a combination of multiple KT strategies is best, specifically KT strategies with both hands on and passive components.

Methods

A sample of convenience was used, which included 41 therapists who work on acute and rehabilitation stroke units within Central South. A descriptive survey was created, using themes from the literature search to develop the survey questions. The survey was piloted by 4 therapists and edited based on the feedback received. The survey was sent via email inviting participation and responses were collected for 4 weeks. The survey was analyzed using descriptive statistics.

Results/Discussion

Thirty-one therapists provided responses, therefore this was a response rate of 76%. Of the respondents, 20 were PTs and 11 were OTs, with the majority of the participants worked on a rehabilitation unit, a total of 12 participants, while an equal number of participants, a total of 6 participants, worked on either an acute unit or an integrated unit.

Key findings of this study indicated that the therapists were familiar with the stroke best practice guidelines but want ways to increase application of evidence into practice. The barriers reported by these therapists were very similar to reports in the Canadian/US, including decreased time, high workload, and limited resources/equipment. Finally, providing a combination of KT strategies based on therapists’ baseline knowledge and experience has been reported to be most beneficial in meeting the learning needs of therapists working in this region, which was also consistent with the KT literature. The specific KT strategies that therapists preferred most included interactive clinical workshops, onsite educational visit and use of educational material.

Clinical Implications/Future Directions

This study focused on the first four stages of the action cycle of the KTA process framework. Therefore, the current study findings will allow the education committee to develop strategies to address the barriers to KT identified, as well as to develop future educational activities that meet the KT needs of these therapists. The next steps in the process are monitoring knowledge use, evaluating outcomes, and sustaining knowledge use. Therefore, the education committee can work towards ensuring that the KT strategies they have selected are meeting the therapists’ needs.

It is the committee's intent to also use this study to inform a KT needs assessment at the provincial level in hopes to maximize implementation of stroke best practice in Ontario.

References


Acknowledgments: We would like to thank the Central South Stroke Network for supporting this study thank as well as Rebecca Fleck and Patricia Miller for their time and assistance.
Abstract

Purpose: This study explored perceived stress, burnout and job satisfaction of frontline workers (FLWs) in long-term care (LTC). This study also explored the need for a mindfulness-based intervention to reduce stress and burnout as well as increase job satisfaction in the LTC setting. Methods: A cross-sectional design to target FLWs in LTC was utilized. The researchers measured perceived stress, burnout and job satisfaction using standardized questionnaires. 10 LTC homes within the Mississauga-Halton Local Health Integration Network (LHIN) and City of Burlington participated with a total of 215 surveys. Data analysis included a combination of descriptive statistics, t-tests and multiple regression to assess baseline perceived stress, burnout and job satisfaction levels. Results: Participants reported significantly more perceived stress, personal burnout, and work-related burnout than established norms. FLWs reported significantly higher levels of personal burnout (p=0.044) and client-related burnout (p=0.021) than workers with limited resident contact. Conclusion: FLWs reported high levels of perceived stress, personal burnout and client-related burnout. Future directions include implementing a mindfulness based intervention for FLWs in LTC.

Introduction

The aging Canadian population will lead to an increasing number of LTC residents. LTC homes are currently faced with managing waitlists and providing quality care to residents with increasingly complex needs. With the current focus on person-centered care, FLWs are at risk for stress, burnout, and job dissatisfaction. FLWs include nurses (RN/RPN), personal support workers (PSW) and recreation therapy staff. It is integral to resident and provider care to ensure that stress and burnout management strategies are utilized by FLWs.

In the last decade, research has explored the role of mindfulness interventions as a cost-effective coping strategy to decrease stress and burnout in RNs/RPNs and PSWs. Mindfulness programs include Mindfulness Based Stress Reduction (MBSR), an 8-week structured approach to teaching mindfulness strategies, and brief-MBSR (b-MBSR), a less structured 4-week program. These two programs have equal efficacy.

This study explored perceived stress, burnout and job satisfaction of FLWs in LTC in the City of Burlington and the Mississauga-Halton LHIN. In addition, this study explored the feasibility of using mindfulness strategies to reduce stress and increase job satisfaction in the LTC setting. The investigators hypothesized that FLWs in LTC have higher levels of perceived stress and burnout as well as lower levels of job satisfaction due to work demands. Understanding baseline stress, burnout and job satisfaction informs future mindfulness training strategies.

Methods

This study used a cross-sectional design to target FLWs in LTC. The authors contacted the Directors of Care (DoCs) of LTGs in the Mississauga-Halton LHIN and the City of Burlington by circulating a flyer detailing the purpose of the project. Interested DoCs scheduled 3-6 hour time slots for student-clinician pairs to set up tables with survey packages and refreshments. As workers passed by, the student or clinician would ask if they were interested in participating in the study. Completed surveys were collected by the student-clinician pair and assigned alphanumeric codes. The Hamilton Integrated Research Ethics Board approved this research project.

The researchers used the following measures in the survey package: Perceived Stress Scale (PSS), Generic Job Satisfaction Scale (JSS) and Copenhagen Burnout Inventory (CBI). The CBI has 3 burnout sub-dimensions: personal, work-related and client-related. The PSS and CBI have comparative norms. Measures were selected if they were valid, used in LTC and used simple language to capture the concepts of stress, job satisfaction and burnout as FLWs have varying levels of education.

Results

The final sample included 215 participants across 10 LTC homes. Participant age ranged from 20-64 years (mean=41.64 years, SD=9.29). Of the 204 participants that provided their job title, 52% were PSWs, 23% were RNs/RPNs, 10% were Administrative Staff, 10% were "Other" Staff (i.e. housekeeping, dietary aides), 5% were Recreation Staff. This sample slightly under-represents PSWs when compared to provincial norms.

The average scores on the PSS, and the CBI Personal Burnout, CBI Work-Related Burnout and the CBI Client-Related sub-dimensions of the participants were compared to established norms in the literature. Participants had significantly higher perceived stress (p<0.05), personal...
burnout (p<0.0001) and work-related burnout (p<0.0001) than the norms. 195 participants completed the JSS. Of these participants, 35 reported “Very Low” job satisfaction, 34 reported “Low” job satisfaction, 72 reported “Average” job satisfaction, 21 reported “High” job satisfaction and 33 reported “Very High” job satisfaction. FLWs reported significantly higher levels of personal burnout (p=0.044) and client-related burnout (p=0.021) than workers with limited resident contact.

A multiple regression model was utilized with the job title of PSW and the City of Burlington as reference categories. Scores on the PSS, CBI and JSS were used as outcomes. The predict variables included age, size of LTC home (large versus small), job title, and location of LTC home (Burlington versus Mississauga–Halton LHIN). The results suggest that when all variables are considered constant, PSWs did not experience significantly higher levels of perceived stress, personal burnout, work-related burnout or client-related burnout compared to other participants. In addition, PSWs did not experience significantly lower levels of job satisfaction than participants with other job titles.

Discussion

The participants in this study reported higher levels of perceived stress when compared to age-matched norms. However, this result should be taken with caution because only 56% of the sample reported their age. Moreover, the participants in this study had higher levels of personal and work-related burnout than their Danish counterparts working in the health service sector. In order to address this issue, evidence-based stress reduction programs are warranted within this population to reduce the chance of secondary issues that result from chronic stress.

The participants in our study did not have high levels of client-related burnout when compared to their Danish counterparts. This may reflect the compassion that health service workers have for their clients. FLWs in this sample reported more personal and client-related burnout than workers with limited resident contact. This may reflect the demand of resident contact and the exhausting nature of providing care to residents on a regular basis. When keeping all variables constant, PSWs did not experience more perceived stress, personal burnout, work-related burnout or client-related burnout, or lower levels of job satisfaction compared to participants with other job titles. In other words, being a PSW does not reliably predict increased perceived stress or burnout, or lower job satisfaction.

Conclusion

Looking to the future, including a qualitative component to this project by facilitating focus groups of interested FLWs will complement the quantitative results found within this study. Moreover, completing a pre-post study to determine the efficacy of a mindfulness-based program would help establish the efficacy of this approach in LTC. Lastly, incorporating ongoing opportunities to receive mindfulness “tune-ups” to help FLWs maintain competence could also be included.1

Key Recommendations

The feasibility of mindfulness-based approaches is important to consider when implementing a new program in this setting. First, determining the needs of FLWs is imperative to ensure that the program addresses their concerns. Practical considerations are also important to ensure that the program is accessible to staff i.e. offering classes multiple times a week to capture as many FLWs as possible, providing handouts, books and CDs that include formal and informal activities that can be completed at home. Moreover, moving towards organizational change that encourages the use of a mindfulness-based approach to cope with stress is also integral to sustaining change.1

Acknowledgment

We would like to thank Bonny Jung, Carol DeMatteo and Sandra Moll for their ongoing support during this project. Moreover, we would also like to thank Savinna Frederiksen for helping the team access mindfulness resources. Sohail Mulla provided ongoing statistical and methodological support throughout this process and we would like to thank him. Lastly, we appreciated the DoCs and staff in the participating homes who allowed us to capture their thoughts related to stress, burnout and job satisfaction.

References

Recipe for success: Identifying the Core Ingredients of P4C
Nicola Hodson, Lindsay Castle, Stephanie LeBlanc & Vanessa Poulton, M.Sc.OT 2014 Candidates, McMaster University, Project Supervisor: Nancy Pollock, M.Sc. OT (Reg) Ont.

ABSTRACT: Purpose. Initiating the process of fidelity measure development through the identification of the core attributes unique to P4C in accordance with the results of an expert consensus process. Methods. Nine experts participated in the Delphi process. Three rounds of surveys were completed to reach the a priori minimum level of consensus, 77.8%, for the final core attributes list. Results. The final list of attributes generated through the Delphi process consisted of 13 unique attributes. Conclusion. The development of this initial list of core attributes unique to P4C is an instrumental first step to the future development of a fidelity measure.

INTRODUCTION: In Ontario’s current model of school health service delivery, students are referred individually, assigned to lengthy waitlists, and removed from classroom settings for brief assessment and intervention (Deloitte & Touche, 2010; Missiuna et al., 2012). Interventions are short-term, impairment-focused and remedial in nature. In response to the challenges associated with this model, the occupational therapy literature highlights a growing movement toward collaborative models of school-based health care interventions, aimed at building capacity within schools and families (Hutton, 2008; Missiuna et al., 2012; Sayers, 2008). Partnering for Change (P4C) represents a paradigm shift from the existing school health model toward an innovative and collaborative school-based intervention model more congruent with the current evidence.

PURPOSE: P4C is a project funded by the Ontario Ministry of Health and Long-Term Care, involving three Community Care Access Centers (CCAC), four school boards, and two service provider agencies. In total, approximately 15 occupational therapists, 40 schools, and 400 research participants (i.e., children and families) are a part of the project. Measurement of intervention fidelity (the degree to which an intervention is implemented as it is intended) can ensure accurate assessment and comparison of interventions across therapists and settings (Di Rezze et al., 2013). The purpose of this research project was to begin the process of fidelity measure development through the initial identification of the core attributes unique to P4C in accordance with the results from an expert consensus process.

METHODS: The Delphi Process (Jones & Hunter, 1995), a survey method which facilitates expert consensus, was identified to be the most appropriate consensus method for the project’s timeframe and resources. The Delphi process included 3 rounds of web-based surveys in which participants rated attributes on either a 3-point Likert scale (for rounds 1 and 2) or a dichotomous scale (round 3). It was determined a priori that a minimum agreement of 7 of 9 respondents (77.8%) was needed to reach consensus on any core attribute. Participants were asked to complete each within one week. The initial list of core attributes for the first round was developed through a literature review of the P4C model and consultation with the project supervisor. Nine individuals recognized as experts in P4C consented to participate.

RESULTS: The authors analyzed the results and generated new surveys after each round. The participants suggested amendments, suggested new attributes, and provided general comments. All comments were taken into consideration by the student research team when developing each survey. The Delphi process generated a final list of 13 core attributes unique to P4C. See Table 1 for a summary of the status of attributes after each round.

Table 1. Frequency counts of attributes after each round of the Delphi process

<table>
<thead>
<tr>
<th>Round</th>
<th>Attributes rated</th>
<th>Attributes kept (100% consensus)</th>
<th>Attributes eliminated (consensus)</th>
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<tr>
<td>1</td>
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</table>
**AMENDMENTS:** After collaboration with the P4C research team, amendments were made to the initial list of core attributes generated through the Delphi process. The final list currently consists of 17 core attributes unique to P4C. Further refinement of the list and wording of attributes to be determined by the P4C team.

**DISCUSSION:** Completion of the Delphi process rendered a working list of core attributes unique to P4C, which established the first step in developing a usable fidelity measure. To enhance the efficacy of a fidelity measure for the P4C model, consideration of an easily incorporated tool into the therapist’s and school staff’s regular routines is essential. Furthermore, the measure must be comprehensive in capturing the essence of P4C practice. Incorporation of flexibility is an important component of intervention fidelity measurement as the availability of resources, environmental factors and interpersonal elements impact successful implementation (Harn, Parisi, & Stoolmiller, 2012). Ensuring a clear understanding of the goals of P4C, as well as the expected collaboration between therapist and educators, sets the stage for acceptance, support and successful implementation of the model. As such, it is recommended that the core attributes list developed within this project be used as an educational tool for school staff, parents and therapists. Further refinement of wording and organization of the initial attribute list will be addressed by the P4C team. Additionally, determining the method of implementation for the future fidelity measure is required. It is recommended that the implementation method include the use of current evaluation tools, such as the therapist logs, to monitor core attributes adjunctively with therapist self-report evaluations and potential teacher questionnaires.

**LIMITATIONS:** Possible limitations of this project include: the small sample of experts completing the Delphi Process, negating one of the main advantages of this consensus method; limited resources and timeframe, making the use of a potentially superior consensus method (NGT) not feasible; the use of a 3-point Likert scale, leading to possible bias in the decision making process between survey rounds due to the ambiguity created from the ‘possibly include’ category; and limited reliability in the consensus process as it cannot be known whether similar decisions between the survey rounds would have been made by others given the same information and participant comments.

**FUTURE DIRECTIONS:** Future actions include the identification of the observable behaviours to “explode” each core attribute. These observable behaviours may be subsequently combined to form a checklist helpful in determining the presence, frequency and quality of implementation of attributes. Future evidence based projects in combination with student placements would be instrumental in “exploding” core attributes into lists of observable therapist behaviours. Recommendations for future research include the exploration of the active ingredients of the P4C model to determine which are affecting successful change for the students receiving these interventions.

**ACKNOWLEDGEMENTS:** The student research team wishes to extend our appreciation to the supervisor of this project, Nancy Pollock, as well as to the P4C research team, Briano Di Rezze, and the expert clinicians who participated in the Delphi Process. This project would not have been completed without your collaboration, expertise, advice and timely responses to the surveys.

**REFERENCES:**


Measuring Progress: Goal Attainment by Participants during Moving On…Teen Independence Program

Meaghan Bell, MSc. OT Candidate & Emily Shermeto, MSc. OT Candidate, Supervisor Andrea Morrison, OT Reg. (Ont.)

Abstract: The Moving On: Teen Independence Program (MOTIP) was developed to assist adolescents with physical and neurodevelopmental disabilities in reaching their goals related to independent living and community participation. During this residential immersive life skills program, participants reported increased satisfaction and performance on their individual goals.

Literature Review

Adolescents with disabilities demonstrate a greater need for support in regards to developing independent living skills in the process of transitioning to adulthood (Rehm, 2012). Successful transition to adulthood should be defined by the adolescents’ own perspectives of what defines independence, as opposed to societal norms and traditional criteria (Henniger & Taylor, 2014). One way to accomplish this is through transitional programs that allow adolescents to outline their own specific goals when it comes to transitioning. Being youth-centered in an independent living skills program means that the adolescents themselves are responsible for establishing goals for how they feel they can successfully transition (Doren, Yan & Tu, 2013). This will be different for each adolescent. These goals then become the basis for developing transitional programs.

Introduction

At the Children’s Developmental Rehabilitation Program (CDRP), a nine day program called MOTIP has been developed to support adolescents with a disability in their transition to adulthood. In this immersive life skills program, adolescents first establish individual goals using the Canadian Occupational Performance Measure (COPM) (Law et al., 2005). This tool is used to evaluate the adolescents’ perceived ratings of importance, performance and satisfaction of their goals. Participants attend instructional and experiential sessions on topics related to independent living. The program includes an overnight stay at a local college residence where participants learn how to direct their own care. The program concludes with the COPM being re-administered to determine if any changes have occurred in the status of their goals.

The overall purpose of this study is to evaluate the participants’ perceptions of personal goal attainment during MOTIP. This will be achieved by analyzing the pre and post-program ratings of satisfaction and performance on each goal set using the COPM.

Methods

Participants: Adolescents between the ages of 14 and 19 years old (M = 16.4) who were referred to the program by their primary physician. In total, 40 participants were included (22 male, 18 female) with diagnoses including Cerebral Palsy, Spina Bifida, Progressive Spastic Paresis, chromosomal abnormalities, Developmental Coordination Disorder, Muscular Dystrophy, mild cognitive impairment and head injury.

Procedure: A retrospective chart review was completed of the Meditech database and client and staff files at CDRP. The age of the participants at the time of service, their diagnoses, Gross Motor Function Classification System (GMFCS) levels and COPM ratings were extracted.

The goals set using the COPM were coded and organized using six categories: leisure and recreation, personal care, household management, community mobility, productivity and self-improvement and socialization. The frequency distribution of the goals was examined to determine the most common goals.
set by participants. The mean change in COPM ratings from pre to post-program was calculated overall and by goal category. Paired sample t-tests were used to examine the changes in COPM ratings from pre to post-program. The differences in pre and post-program COPM ratings were also compared between goal categories to determine whether MOTIP better addressed goals within specific categories.

Results and Discussion

A total of 202 goals were organized into six main categories: leisure and recreation (16.3%), personal care (3%), household management (40.1%), community mobility (15.3%), productivity (20.3%) and self-improvement and socialization (5%).

The mean change in COPM ratings from pre to post-program was >2 for performance (M = 4.06) and satisfaction (M = 4.10) indicating clinical significance (Law et al., 2005). A statistically significant difference was found for performance (p < .01) and satisfaction (p < .01) between the pre and post-program COPM ratings. Statistical and clinical significance was found in the changes in performance (p < .01, M > 2) and satisfaction (p < .01, M > 2) for the categories of recreation and leisure, personal care, household management, community mobility, and productivity.

These findings indicate that the instructional sessions and experiential learning included in MOTIP supported the adolescents’ goal attainment in these areas. By remaining youth-centered and allowing the adolescents to set their own goals, MOTIP was able to support participants in developing the independent living skills they viewed as most important.

Comparatively, there was no statistically significant change in perceptions of performance (p = 0.062) or satisfaction (p = 0.272) of self-improvement and socialization goals. A clinically significant difference was found for the change in satisfaction (M > 2), however there was no clinically significant change in perceptions of performance (M = 1.50). These findings suggest that MOTIP does not support goal attainment within the areas of self-improvement and socialization as strongly as it supports attainment in other categories.

Conclusions and Implications for Practice

The findings of this study suggests that MOTIP appears to be an effective approach for enabling and empowering adolescents while assisting them in attaining their personal goals. Transitional programs that remain youth-centered have the ability to support adolescents with disabilities in the attainment of independent living skills for the transition to adulthood. In the future, additional immersive life skills programs should be developed and implemented that support adolescents in their transition to adulthood.

Acknowledgments

We would like to acknowledge the MOTIP staff and participants, as well as: Karen Margallo OT Reg. (Ont.), Julia Lockhart OT Reg. (Ont.), Sarah Winter OT Reg. (Ont.) & Laura Snyder OT Reg. (Ont.).

References


Effectiveness of a Circle of Support Guidebook for Families of Youth with Disabilities

Karin Kranenburg & Rammjot Saini, MSc (OT) Candidates, McMaster University
Supervisors: Matt Freeman & Deb Stewart, School of Rehabilitation Science
Jan-Burke Gaffney, Hamilton Family Network

Abstract

Purpose: The purpose of the study was to gather feedback and suggestions for revision about using a Guidebook for Building Circles of Support from parents of youth with developmental disabilities. Methods: A qualitative description approach was used. Semi-structured interviews were conducted with 6 parents. Interviews were transcribed, coded, and analysed using content analysis. Results: Content analysis highlighted four main themes 1. The helpful and effective aspects of the Guidebook and any suggestions for improvement; 2. The impact of reading the Guidebook; 3. Influential factors for taking action steps toward creating a Circle; and 4. Understanding and description of a Circle after reading through the Guidebook. Student researchers also compiled the advice participants shared for other parents starting their own Circles. Conclusion: The Guidebook is viewed as a comprehensible tool that assists parents in understanding and establishing their own Circle. Many factors were identified which influence a family’s readiness to shift responsibility of care and to ensure adequate support for their youth. Minor changes regarding content and layout were suggested to make it even more user friendly.

Introduction & Literature Review

The Hamilton Family Network’s (HFN) guidebook for Building Circles of Support is intended to be a manual to help parents understand what a Circle of Support is, and independently develop their own Circle around their child with developmental disabilities. Limited literature exists surrounding the term “Circles of Support.” Literature primarily include descriptions of person-centred planning (PCP) as an intervention facilitated by or involving trained healthcare professionals. Despite the focus on trained facilitators, descriptions of PCP were congruent with that of the Guidebook. Some of the descriptions in the literature emphasize having the focus person at the centre of planning and implementation to ensure the focus person’s needs and desires remained at the forefront of all group activity (Trainor, 2007; Moulster et al., 2006; Taylor & Taylor, 2013). PCP was also described as a collaborative partnership between family, professionals and community members (Blue-Banning et al., 2000), recognizing the participation of the community at large as a significant factor. The populations represented in the literature differ from the target population of the HFN, thereby the results from the studies are not necessarily transferable. Overall, the articles included in the literature review were single studies and low-level evidence. This study sought to gather feedback and suggestions from families of youth with disabilities about the HFN’s Guidebook for building Circles of Support based on their perceptions and then use this information to make recommendations for revisions to the Guidebook.

Methods

Ethics approval was granted by the Hamilton Integrated Research Ethics Board. Participants were recruited from HFN through convenience sampling, and six individuals provided consent to participate in the study. All six participants were mothers of youth with developmental disabilities residing in Hamilton, Ontario. A qualitative description approach (Sandelowski, 2000) was used for data collection. Student researchers conducted a semi-structured interview with each participant. These were conducted in the family’s home, and all interviews were completed within a two-month period. All interviews, with the exception of one, were recorded. The recordings were transcribed into text documents which were triangulated with research notes from the interviews to ensure accurate context. Open and axial coding (Pope, Ziebland & Mays, 2006) were used to analyze the transcripts and four major themes were uncovered. Student researchers also compiled advice participants shared for other parents starting their own Circles.

Results

The four main themes highlighted through content analysis include the following:

<table>
<thead>
<tr>
<th>Theme</th>
<th>Quotes and Examples</th>
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| 1. Helpful and effective aspects of the Guidebook and suggestions for improvement | Helpful:  
- Written in a clear, straightforward format  
- Information for content and facilitation of first few meetings  
Suggestions for improvement:  
- Include more examples of personal stories of success - especially from those who have already established their own circle of support |
2. Impact of reading the Guidebook

“Oh, I see myself using every part of it. I’ve already made a list of people who I want to involve. I’ve already chosen the sample letter I want to modify ... I have my first meeting, my first two meetings, pretty well planned out as a result of the book. That’s a quantum leap from where I was a year ago.” - Olivia

3. Influential factors for taking action steps toward creating a Circle

“I think the criteria would be the age of the parent, the age of the family structures. Where the individual affected sits on the hierarchy of cousins and what not.” - Kim

4. Description of a Circle

“It is to bring a wide range of individuals around the focus person to befriend, support and brainstorm so that that person is fully integrated into the community with a good weekly activity plan, and good social supports and fun activities. So the focus person and the parents feel supported and there’s a reference group, that they’re not alone.” - Wendy

Advice for encouraging other parents to start their own Circles of Support

“Get the Guidebook and start” (Lucy)
Connect with other people, especially those who have already started their own Circles (Jessica, Kim)
“...it’s doable – it’s vital for you as a part and your young adult” (Olivia)

Discussion & Conclusion

This study contributes to the understanding of what families are looking for to help them establish their own Circle of Support. The results of this study indicate that there is a desire and eagerness for this kind of resource to assist families due to the limited information and lack of simple yet thorough practical instruction for how to establish a Circle; thus exemplifying the need for a self-directed resource such as the HFN Guidebook. Though the personal, environmental and occupational factors which influence readiness of families vary between families, the need to shift responsibility of care, while ensuring that focus persons will be well cared for, is a driving force in the desire to establish a Circle. This Guidebook contributes to the existing literature by providing families with the directive yet easy to comprehend guide that they are looking for to establish their own Circles.

Future Research

Creating and evaluating a workshop as a supplement to the Guidebook for establishing Circles of Support may be an area for future exploration by the Hamilton Family Network. Workshops may serve as an alternate format to disseminate information to individuals with different learning styles and literacy levels for whom a written document is not ideal. Future research on Circles of Support without professional involvement, and on future editions of the Guidebook may also be beneficial.

Acknowledgements

The authors would like to thank Matt Freeman, Deb Stewart, and Jan Burke-Gaffney (project supervisors) for their ongoing guidance and support as well as the study participants from the Hamilton Family Network for their insight and suggestions.

Seminal References

School Council: A Return-to-School Program
Navnit Kang and Caitlin Dunseith, MScOT Candidates (2014), McMaster University
Supervisors: Gianna Knibbs, OT Reg. (Ont.) and Lisa Blenkhorn, OT Reg. (Ont.), McMaster Children’s Hospital

Abstract

Background: The hospital-to-school transition may be difficult for children and youth following psychiatric hospitalization. The Student Council Return-to-School Program was created to address concerns regarding school re-entry for students in the 3G Child and Youth Mental Health unit at McMaster Children’s Hospital.

Methods: The program was developed using theory, evidence, current practice, and student perspectives.

Results: Information from all stages of the development process was used to create the program, which consists of screening to determine students’ readiness for return-to-school, group sessions to address return-to-school issues, individual follow-up with team members as needed, and discharge. Four group sessions were developed to address the key concerns of students with respect to school re-entry.

Conclusions: The Student Council Return-to-School Program will be implemented at McMaster Children’s Hospital to address issues regarding school re-entry. In the future, it will be important to consider evaluation to ensure that the program is achieving the anticipated short-term and long-term objectives.

Introduction

Return-to-school following psychiatric hospitalization may be very stressful for children and youth. While the main goal of hospitalization is crisis stabilization, it is vital for healthcare professionals to address students’ concerns regarding school. Return-to-school group sessions are currently in place in the 3G Child and Youth Mental Health unit at McMaster Children’s Hospital. There are two mandatory one-hour sessions per week for the Blue cohort, which consists of patients with mood disorders, anxiety disorders, and/or personality disorders. Sessions explore the student role and address issues such as what to say to peers upon returning to school. However, the occupational therapists on the unit were interested in creating a return-to-school program based on both theory and evidence. In response to this need, a program was created based on evidence and current clinical practices to help students prepare for school re-entry.

Literature Review

The review was guided by the following question: What literature exists for return-to-school following psychiatric hospitalization? Relevant databases were searched and reference checking was completed. Three studies were retrieved which focused on the experiences and perspectives of mental health professionals working with children and youth in an acute mental health setting (Clemens et al., 2010; Clemens et al., 2011; Simon & Savina, 2007). Based on the results of the studies, the following topics should be addressed in sessions to assist children and adolescents transition from hospital to school: strategies for catching up on school work and negotiating completion of missed work with teachers; general strategies for academic success; negotiating a date for return to school; explaining absence to peers; sources of support; dealing with emotions and anxiety management; dealing with stigma; dealing with the side effects of medication; parental involvement and expectations; and general coping skills. More literature is required to examine return-to-school from the perspective of students and the effectiveness of return-to-school interventions.

Methods

The Student Council Return-to-School Program was developed using theory, evidence, current practice, and student perspectives. Three theories were selected as the foundation for the return-to-school program: the Model of Human Occupation (Kielhofner, 1992), the Person-Environment-Occupation Model (Law, Cooper, Strong, Stewart, Rigby, & Letts, 1996), and the Transtheoretical Model (Prochaska, DiClemente, & Norcross, 1992). The literature review described above was conducted to examine existing studies regarding return-to-school following psychiatric hospitalization. Finally, information was gathered regarding current return-to-school practices for children and youth in acute mental health units at McMaster Children’s Hospital and other hospitals in Ontario and Québec. The current return-to-school group at McMaster Children’s Hospital was observed and students were asked to share their perspective regarding the sessions.
Results and Discussion

Information from all stages of the development process was used to create the program, which consists of screening to determine students’ readiness for return-to-school, group sessions to address return-to-school issues, individual follow-up with team members as needed, and discharge. Four group sessions were developed to address the key concerns of students with respect to school re-entry, and one session was created for caregivers. While it would be ideal for sessions to build on each other, it is not feasible as there is continuous intake on the unit and the average patient stay is seven days. The student group sessions address the following topics: strengths, supports, and school accommodations; management of feelings and emotions at school; stigma, self-stigma, and what to say to others upon returning to school; and motivation, peer pressure, bullying, and dealing with authority. Videos and activities were incorporated into the group session to maintain student interest. The caregiver session addresses the complexity of the student role, stigma, school accommodations, community resources, and other options for obtaining a diploma. A handout package was created for both students and caregivers. In addition, a Return-to-School Readiness Questionnaire was developed to determine the students’ stage of change with respect to returning to school.

The long-term objective of the program is to improve students’ return-to-school experience following admission to a psychiatric inpatient unit. Short-term objectives include the following: to increase students’ awareness of the occupation of being a student and the complexity of the role; to increase students’ ability to generalize skills learned in other group to return-to-school issues; to increase students’ awareness regarding school supports and how to access these supports; and to increase students’ confidence regarding return-to-school.

Conclusions and Future Directions

Students may face many challenges when returning to school following psychiatric hospitalization. The Student Council Return-to-School Program will be implemented in the 3G Child and Youth Mental Health unit at McMaster Children’s Hospital to address issues regarding school re-entry. In the future, it will be important to consider evaluation to ensure that the program is achieving the anticipated short-term and long-term objectives.

Acknowledgements

The authors would like to acknowledge the following professionals for contributing their knowledge and expertise to this project: Sarah Stassen and Zebulon Demaiter from McMaster Children’s Hospital; Melissa Chambers from the Hospital for Sick Children; Jill from the Children’s Hospital of Western Ontario; Kim Prud’Homme and Valerie Gendron from the Children’s Hospital of Eastern Ontario; and Melanie Bazin from Montreal Children’s Hospital.

References


ABSTRACT

Introduction: Purpose of this evidence based project: (i) review SSS literature and its effects on RS, (ii) develop a proposed plan for the implementation of a sensory room and/or sensory cart in support of the McMaster Children’s Hospital 3G CYMHP goal to reduce the use of RS. Methods: evidence based project was completed in four phases: understand McMaster Children’s Hospital 3G CYMHP policies/procedures, literature review, benchmarking, and program proposal. Literature Review: The literature suggests SSS are promising in reducing the use of RS in pediatric mental health settings. Benchmarking: All clinical experts supported and recognized the importance of the implementation of SSS as proactive and preventative measures in crisis de-escalation and the use of RS. Program Proposal: provides recommendations for practice considerations, staff education, client education, policy and procedures and future program evaluation. Discussion: SSS is an alternative proactive measure used in conjunction with other therapies. Although the evidence and benchmarking regarding SSS as a RS reduction tool is promising, it is of low quality and inherently biased; all of which may impact the overall efficacy of the program proposal. Conclusion: Although evidence supporting the use of SSS is promising, it is strongly recommended the following evaluations occur: effectiveness of the program proposed, client/caregiver satisfaction, and staff satisfaction. Moreover, research should include rigorous studies that are methodologically sound.

INTRODUCTION

Over the past decade, there has been increasing recognition and concern regarding the use of restraints and/or seclusions (RS) in inpatient mental health settings (LeBel et al., 2004). Evidence suggests that RS used with the pediatric population negatively impacts a child’s development and health (Day, 2002). Reducing the use of RS has become an international initiative in which alternative approaches such as sensory modulation, a restraint and reduction tool, has been proposed (Te Pou o te Whakaaro Nui, 2011). The CYMHP at McMaster Children’s Hospital is a 22 bed, three cohort inpatient program for pediatric clients ages 0 to 18 with various mental health diagnoses. The purpose of this evidence based project was twofold: (i) to complete a review of the literature that explores sensory supportive strategies (SSS) for crisis de-escalation, milieu management and their effects on the rates of RS (ii) to develop a proposed plan for the implementation of a sensory room and/or sensory cart aimed at supporting the organizations goal to reduce the use of RS in McMaster Children’s Hospital CYMHP.

METHODS

This evidence based project was completed in four phases:

Phase 1: Gain an understanding of the three cohorts and their respective diagnoses, and the least restraint policy of McMaster Children’s Hospital 3G CYMHP.

Phase 2: A review of the literature was conducted to have a solid foundational knowledge of SSS used within pediatric inpatient mental health settings.

Phase 3: To understand what SSS are currently being used in pediatric mental health settings, benchmarking occurred in which healthcare professionals working in pediatric mental health settings were contacted to explore what, if any, SSS and/or programs are currently being used in their practice.

Phase 4: As per the primary goal of McMaster Children’s Hospital 3G CYMHP, a SSS program proposal was created in which a policy manual and procedural protocol was created to systematically outline how SSS should be introduced and implemented.

LITERATURE REVIEW

A literature review was conducted to search for the highest level of evidence using a variety of databases and search terms. Based on the inclusion and exclusion criteria, a total of ten articles were selected for critical appraisal. Findings from the literature suggest that SSS such as a sensory room and/or sensory cart have demonstrated promising results showing the reduction in RS use (Azeem et al., 2011; Barton et al., 2008; Champagne, 2003; Cummings et al., 2010; Lindley & McDaniel, 2005; Sivak, 2012; Warner et al., 2013). However, conflicting evidence in several studies reported no significant difference in RS reduction following the implementation of SSS (Martin & Suane, 2012; Novak et al., 2012). Of the studies demonstrating positive trends, the population studied consisted of youth under the age of 18; whereas studies reporting conflicting evidence regarding RS use included pediatric and adult populations with ages ranging up to 60. Although the evidence reported in the literature is promising, strong levels of evidence supporting the use of a sensory room and/or cart for pediatric inpatient mental health populations is limited. Many of the studies critically appraised presented with methodological limitations thereby questioning the overall effectiveness of SSS in reducing the use of RS with the pediatric population in an inpatient mental health setting.
BENCHMARKING

Benchmarking was completed with McMaster Children’s Hospital CYMHP student nurse, clinical leader, and evidence based project supervisors to determine the need and feasibility of implementing a sensory supportive strategy program (SSSP). Moreover, Occupational Therapists working at The Children’s Hospital of Eastern Ontario (CHEO) Inpatient Mental Health Program (IMHP) were contacted as CHEO’s IMHP currently implements SSS in the form of a sensory room and a sensory cart. All clinical experts supported and recognized the importance of the implementation of SSS as proactive and preventative measures in crisis de-escalation and the use of RS.

PROPOSAL

The program proposal outlines a systematic method for McMaster Children’s Hospital CYMHP to implement SSS, through the use of a sensory room and/or sensory cart, skillfully and safely. This will facilitate the de-escalation of patient behavior(s) while simultaneously increasing client self-management to support CYMHP least restraint/seclusion philosophy. The program provides recommendations surrounding practice considerations, staff education, client education, policy and procedures as well as suggestions for future program evaluation.

DISCUSSION

Implications for Practice: As RS use is considered a last resort, SSS are an alternative and proactive measure that can be used by a multidisciplinary team in pediatric mental health practice settings. It is also important to note that SSS are not used in isolation of other therapies but rather in conjunction with them to increase and/or improve their effectiveness. OTs are in an ideal position to take on a leadership role in alternative approaches, such as SSS and implement and/or advocate their use in mental health practice settings as their clinical training and expertise allows for a unique perspective.

Limitations: Although the evidence reported in the literature review is promising, it is anecdotal in nature and strong levels of evidence supporting sensory modulation approaches for pediatric inpatient mental health populations are limited. While benchmarking reports demonstrate clinical utility of SSS, these findings are inherently bias as only certain healthcare professionals were sought out. It is important to note that these limitations may impact the overall efficacy of the program proposed.

CONCLUSION

The literature that is available reports positive outcomes for SSS used in pediatric inpatient mental health settings. Benchmarking completed with various healthcare professionals complimented the literature and indicates that SSS are clinically useful in this practice setting. As per the primary goal of McMaster Children’s Hospital 3G CYMHP, a program proposal in which the introduction and implementation of SSS in the form of a sensory room and/or sensory cart was created. Although evidence reported from the literature and benchmarking is promising, future research should include rigorous studies, including larger sample sizes, psychometrically sound outcome measures, rater blinding, randomization of participants, and control groups. Moreover, studies controlling for confounding variables is key to determine the overall effectiveness of SSS. Lastly, it is strongly recommended that the following evaluations occur: effectiveness of the program proposed, client/caregiver satisfaction on the use of SSS as a tool to self regulate, as well as staff satisfaction on their knowledge and comfort level implementing SSS.

ACKNOWLEDGEMENTS

We extend our appreciation and gratitude to: our evidence based project supervisors, Gianna Knibbs and Lisa Blenkorn, those who participated in the project benchmarking: Karen Albert (nursing student), Kyle Graham (Clinical Leader), and Kim Prudhomme (Occupational Therapist) and her colleagues from CHEO, and Neera Bhatngar (McMaster University Library Liaison).

REFERENCES

The Role of Occupational Therapy in First Nations Child and Family Health
Rebecca Morin & Pauline Ratelle, MSc OT Candidates 2014, McMaster University
Supervisor: Sue Baptiste, McMaster University

Abstract

Purpose: To highlight the role of occupational therapy (OT) in First Nations child and family health programs. Methods: A literature review of current partnership between occupational therapists and First Nations child and family health programs was completed and an interview with an occupational therapist was completed. Results: Methods for program implementation with First Nations communities and three parallels between OT and program implementation were uncovered. A new service delivery model entitled the Circle of Courage® is discussed with implications for the Six Nations community and a child and family health program. Conclusion: OT can be a strong resource during program implementation within First Nations communities and the Circle of Courage® shares many similarities to OT mandates and beliefs.

Introduction

The health and well-being of First Nations people in Canada is disparaging when compared to the non-Aboriginal population of Canada. First Nations people experience high levels of poverty and mental and physical disabilities and are still met with oppression and racism in the healthcare system (Health Council of Canada, 2012). Through discussion with elders and other First Nations people, it has been said children are the key to their culture’s survival. To compliment that statement, the First Nations birth rate is nearly double the non-Aboriginal Canadian population. Furthermore, 21% of First Nations families have four or more children under the age of six, as opposed to the 8% for non-Aboriginal families (Statistics Canada, 2006). Programs are required in order to provide these families with the support they require. Occupational therapists are well-suited to implement programs and their strengths-based approaches are effective in supporting First Nations people.

Literature Review

Many programs have been implemented across Canada with the goal of improving health in First Nations communities. A review of results of the implementation of those programs uncovered many facilitators and barriers to program implementation. Implementation Facilitators.

1) For health and education programs to be successful and sustainable in First Nations communities, self-determination in decisions and community investment are essential in the process.
2) Using a strengths-based approach will ensure program and practice decisions are community- and culturally-appropriate (Gerlach, 2007).
3) The cultural integrity and beliefs of a community with respect to child development must be acknowledged, respected, and upheld to ensure culturally-appropriate practice.

Implementation Barriers.

1) The programs cannot be transplanted from one community to another; each community is different so implemented may differ between communities.
2) The precarious nature of resources, both financial and human, is a challenge to the initiation and sustainability of programs.
3) The long-standing impacts of oppression and colonialism mean interventions require a gradual and holistic approach, and they can be reinforced by an external program that aims to alter a community (8th Fire, 2012).
4) A lack of culturally-specific materials such as assessment and education tools can impact the acceptance and success of health-related programming, both for staff and participants.
5) Typical Western approach uses the medical model to understand health issues, focusing on the deficits within individuals. Taking this approach, may be met with resistance as First Nations communities prefer to focus on the strengths.
By keeping these facilitators and barriers in mind, the success of program implementation will be heightened. Many of the facilitators discussed above coincide with previously held beliefs of occupational therapists. From this information, it is thought occupational therapists will be a useful resource in program implementation in First Nations communities.

**Discussion**

The above findings were discussed in the context of a local OT program within the Six Nations health services. Through discussion with an occupational therapist working and living in Six Nations, it was discovered that many of the implementations facilitators discussed above were considered during the development of new programs. The most important facilitators identified by the occupational therapist were the need for community inclusion in their development as well as accentuating the strengths of the community. The occupational therapist recognized the need for a culturally- and community-appropriate approach in introducing OT in the areas of mental health, long-term care, and children’s therapy services. The Circle of Courage® (Brendtro, Brokenleg & Van Bockern, 2005) is currently being integrated into the practice model within the Six Nations mental health services as a way to perceive and promote health holistically in this resilient community. This approach fits well with the core beliefs of OT, as it encompasses the values of belonging, independence, mastery, and generosity as essential for child and youth well-being. The occupational therapist has begun to gather evidence of the success of this approach and it is expected there will be results at the end of the Six Nations summer cycle, which will contribute to the need for evidence-based practices. Additionally, there is a potential role here for collaboration with McMaster University to support this desire for evidence-based practice within Six Nations. The successes of this OT program will offer valuable learning for occupational therapists and First Nations communities across Canada.

**Conclusion**

Program implementation within First Nations communities can be sensitive when the programs are headed by external stakeholders. If a program is developed in partnership with the community members, the program will target and support their interests and will ultimately be sustainable. This document offers a new service provision model to be considered for OT practice, as well as health professions as a whole. The Circle of Courage® is a strengths-based, inclusive approach that accepts all people, as opposed to focusing on what should be “fixed” within the person. In the future, it is hoped more programs will be developed with its beliefs and mandates in mind.

**Future Directions**

In the future, the occupational therapist working in Six Nations hopes to transition all health and educational service into a Circle of Courage® approach to service. Once data is available on the success of the Circle of Courage® in their mental health service, their therapist will move to implementing it in the child and family health sectors. Through a partnership with OT students at McMaster, it is hoped the findings will be published and new programs will be developed to effectively service the families of Six Nations as well as other First Nations communities in Canada.

**Key References**


Abstract

The purpose of this project was to improve evaluation of the Social Skill Groups (SSG) at George Jeffrey Children Center. This was done through: 1) creating three group specific Program Logic Models and an outcome evaluation; 2) revising the Clinician Tracking Tool (CTT), a clinician written tool which measures implementation and description of social skills, and 3) performing a literature review to identify a complimentary outcome measure to be used in conjunction with other measures of the SSG. Using focus groups numerous strengths and limitations of the CTT were identified and changes were made accordingly. These include increasing comment spacing, adjusting the scale and modifying the layout. As well, the GAS and COPM were identified as a strong duo to compliment the other forms of evaluation of the SSG.

Introduction

George Jeffrey Children’s Center (GJCC), a pediatric rehabilitation center located in Thunder Bay, runs three social skill groups (SSG) throughout the year: Social Skill Group 1 (SSG1), Social Skill Group 2 (SSG2) and Social Skill Group 3 (SSG3). Each group is held for one hour per week for 8-10 weeks. Occupational therapists, speech language pathologists, therapy assistants and communication disorder assistants lead the SSGs. Currently, social skill abilities of SSG participants are measured using the Social Skill Rating System (SSRS) and the Clinician Tracking Tool (CTT). The CTT is a tool created to provide a medium for clinicians to document and rate their observations of child performance. The CTT measures the ability to implement and describe specific social skills relevant to the weekly session.

Purpose

The project was divided into three chapters. Chapter One aimed to examine the SSGs through a Program Logic Model (PLM) and provide a future evaluation to assist in determining their efficacy. Chapter Two focuses on creating a better fit between the CTT, the SSG and the clinicians at GJCC. Chapter Three focuses on determining a clinician focused evaluation tool that would compliment other measures currently being used (i.e. SSRS and CTT).

Methods

Chapter 1

The Program Evaluation Workbook for Occupational Therapists (Letts et al., 1999) was utilized as a guide to create three PLMs and a program evaluation.

Chapter 2

Two focus group sessions were held to gather information from clinicians in which seven individuals (OTs, SLPS, TAs, CDAs) took part. Each session was 30-45 minutes and took place over lunch hour. The first focus group session focused on gaining strengths and limitations of the current CTT and the second session was focused on critiquing two new templates of the proposed CTT. All sessions were video taped, notes were taken and participants filled out a questionnaire to further document their perspectives of the CTT.

Chapter 3

The EBP project at GJCC from 2013 highlighted three measures to be further explore in order to gain insight into their efficacy when being administered in a social skill group setting. Thus, a literature review was performed examining the Canadian Occupational Performance Measure (COPM) (Law et al., 1994), Child Occupational Self Assessment (COSA) (Kramer, Heckmann, Bell-Walker, 2012) and Goal Attainment Scaling (GAS) (Kiresuk & Sherman, 1968). The three research questions aiming to be answered were: in children with identified social skill deficits taking part in a social skill group, is the COSA (Question 1), GAS, (Question 2), COPM (Question 3) an effective tool for measuring and identifying change.

Searches were conducted in a variety of databases and used a combination of terms related to the different measures and social skills groups. A total of 146,885 hits were found across all three measures. The first set of manual exclusions were applied aiming to gain a broad scope of information, leaving a total of 364 articles. Duplicates were removed and further exclusion criteria were applied, leaving a total of 14 articles. Articles were excluded that: 1) did not examine/use the COSA, COPM or GAS; 2) did not focus on social skills or utilize the measurement tool in a group setting; 3) were not available from McMaster Library; 4) were not available in English and 5) contained mostly background information or focused on psychometric properties. As psychometrics and pediatric utilization of all three tools was established through background research, it was not necessary to be included as exclusion criteria.

Results and Discussion

Chapter 1

Three models were created depicting the various aspects of the groups (i.e. Skill Group, Practice Work, Parent Sessions, Teacher Involvement) with the long-term goal of improving social skills in children who have identified social skill deficits in Thunder Bay, Ontario. The outcome evaluation aimed to determine the efficacy of each SSG through the use of the SSRS, a child, parent and teacher questionnaire and the complimentary outcome tools identified in Chapter 3.

Chapter 2

The first focus group brought forth five main limitations and four main strengths of the CTT. These can be seen in Table 1. Two templates of the revised CTT were created and presented to the panel of clinicians during the second focus group.
Both templates consisted of the same changes but differed in layout. The changes made included: 1) reformating the tool to contain one week per page; 2) using a Short Version of each week to track change; 3) increasing comment space; 4) using a 1-5 scale in replacement of the 0-2 scale and 5) adding a legend and visual analog to assist with scoring. Challenges with wording of skills and the skills themselves are addressed in Future Recommendations. During the second focus group a template was chosen to be used in future SSG. The revised version of the CTT will allow for greater ease, precision and efficiency when assessing participants of the SSGs. The process of gaining information from GJCC clinicians had numerous limitations. These include: 1) lack of analysis of themes; 2) short focus group sessions and 3) supervisors received focus group agendas pre-group and took part in the group thus increasing the risk of bias. Measures were taken to ensure trustworthiness of data such as data triangulation (video recording, note taking) and member checking.

**Chapter 3**

**COSA.** The COSA was found to be a poor fit with the SSG at GJCC as no research could be found examining its use with social skills or groups. The COSA has a strong emphasis of activities of daily living and could not be found for examination thus it is unknown as to how applicable it is to social skills and the SSGs at GJCC.

**GAS.** GAS demonstrated to be able to assist with the creation of relevant goals and detect goal changes in pediatrics and social skills, and groups, and in a social skill group skills group. The GAS was deemed a good fit for the SSGs.

### Table 1. Strength and limitations of CTT.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive skill breakdown</td>
<td>Lack of comment space</td>
</tr>
<tr>
<td>Numerical scale</td>
<td>Confusing layout</td>
</tr>
<tr>
<td>Time efficient</td>
<td>Scale lacks depth</td>
</tr>
<tr>
<td>Able to track progress</td>
<td>Skills may not reflect SSG curriculum</td>
</tr>
<tr>
<td>Wording of skills may not reflect SSG curriculum</td>
<td></td>
</tr>
</tbody>
</table>

**Key References**


**COPM.** The COPM was found to be able to create relevant goals and detect goal changes in group settings in adults with mental illness, and acquired brain injury. The COPM was deemed a good fit for the SSGs at GJCC but further research is needed into its pediatric utility.

**COPM & GAS.** The combined use of the GAS and COPM brought forth a strong dynamic goal setting and evaluation process. Together the tools were complimentary in their purposes as the GAS aided in measuring goal progression and the COPM assisted in identifying occupational issues.

**Recommendation.** The evidence provides reason to recommend the use the COPM and GAS for clinicians to assess change in social skill goals of participant’s of the SSGs. Due to time constraints, clinicians at GJCC (S. McBean, personal communication, June 16 2014) are unsure if it would be feasible to administer both tools to group participant and caregivers. If this ideal is not viable, it is recommended to use a modified COPM and GAS to allow for the use of both tools with children, in a group setting and to ensure goals are relevant to social skills. Despite the results, there were a number of limitations that must be considered when interpreting results. These include: 1) lack of comparison groups in studies; 2) questionable generalizability and 3) risk of self report bias.

**Conclusion**

The three chapters of this study aim to improve evaluation of the SSGs at GJCC and pave the way for improvements in the future evaluation and program efficacy. The recommendations suggested should be implemented and reexamined after their use to determine their efficacy.

**Future Recommendations**

1. Implement the Program Evaluation in Fall 2014 to determine the outcome of engaging in the Social Skill Groups at GJCC.
2. Perform a qualitative evaluation and long-term evaluation of the Social Skill Program at GJCC.

**Chapter 2**

1. Trial revised CTT with SSG1, SSG2 and SSG3 and meet with focus group participants to further critique CTT.
2. A the Social Skill Groups occur, modify tasks and wording of tasks to ensure they are reflective of curriculum.

**Chapter 3**

1. Implement the suggested measurement tools in conjunction with the various application suggestions.
2. Further research into the validity between the GAS, COPM and SSRS.

**Acknowledgments**

I would like to thank Scott McBean and Vishalla Singh for their support, guidance and efforts throughout this project, as well for the opportunity to be a part of the Social Skill Groups at GJCC. I would also like to thank the members of the focus group who contributed to the current version of the CTT and the staff members at GJCC who were supportive and enthusiastic of my endeavors. For further information please contact the author.
The purpose of this study was to explore the levels of understanding and application of competency-based education (CBE) in occupational therapy programs around the world. The survey was distributed to a sample of 645 respondents using the World Federation of Occupational Therapists (WFOT) distribution process. A total of 63 respondents completed the survey; 60 responses were included in the final analysis. The results indicated that programs are in transition from a traditional model of education to a competency-based model of education. However, there were a number of barriers identified that are impacting the implementation of this approach.

### Introduction

Competency-based education (CBE) is defined as “an educational approach based on a predetermined set of knowledge, skills, and abilities that a student is expected to accomplish” (Florida Department of Education, 2013). CBE prepares learners for professional practice by focusing on their ability to apply knowledge and skills in an environment that simulates practice (Gruppen, Mangrulkar, & Kolars, 2012). Although there is some evidence supporting the implementation of CBE, further research is necessary to understand how competencies can be used to frame academic and clinical learning. Therefore, the following research question was developed: “How do World Federation of Occupational Therapists (WFOT) approved occupational therapy educational programs understand, implement and evaluate competency-based education (CBE)?”

### Literature Review

CBE aims to provide students with the ability to integrate their learning. This is achieved through the development of critical thinking, which encourages students to move beyond memorization to analysis. Students who are able to think critically are better prepared for practice (Picard, 2009). This also holds true for students who have received interprofessional education, as most clinical settings typically require interaction between disciplines. However, this interaction may be hindered by the fact that each profession tends to practice in their own set of competencies (Holmes & Scaffa, 2008). Although there is some evidence to support the use of CBE, the literature also illustrates some of the challenges associated with the implementation of this approach. Some of the barriers include: (1) incorporating CBE into an established curriculum, (2) lack of universality regarding CBE among different countries, and (3) it is a resource-intensive approach, as it requires evaluation of a student’s ability to perform a skill.

### Methodology

#### Study Design

- An online, self-administered pilot survey was created and mounted on Survey Monkey. The pilot survey was distributed to 11 respondents from Ontario, Canada.
- Feedback was incorporated and a final survey was mounted on Survey Monkey.
- The survey consisted of 17 questions that included: demographics, utilization, implementation, and evaluation of CBE, country specific essential competencies, and the benefits and barriers of CBE.

#### Respondents

- The survey was distributed to a sample of 645 respondents from WFOT approved programs.
- 63 respondents completed the survey.
- 3 responses were not included within data analysis, as their programs were not WFOT approved.

#### Data Analysis

- Data analysis was accomplished with the use of descriptive statistics.
- The primary measure to report research findings was frequency distributions using Microsoft Excel.
- For qualitative data, content analysis was utilized.

### Results

Currently, there are 72 countries that have WFOT approved occupational therapy programs. The survey captured data from 24 countries. The most common type of credentialing is a Bachelor/Baccalaureate program averaging between three (41.67%) and four (31.67%) years. Admission ranges for programs varied, with the majority of programs identifying admissions of 50-75 students.

Regarding the implementation and evaluation of CBE, the majority of respondents indicated the following:
Implementation

• Educational framework (e.g., teaching)
• Course work
• Evaluation approaches (e.g., assignments)
• Clinical practica

Evaluation

• Student feedback
• Feedback from stakeholders
• Students that successfully graduate
• Follow-up exit surveys

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>It enforces evidence-based practice</td>
<td>76.67%</td>
</tr>
<tr>
<td>It reinforces the importance of inter-professional education</td>
<td>43.33%</td>
</tr>
<tr>
<td>Other</td>
<td>33.33%</td>
</tr>
</tbody>
</table>

Two themes emerged related to students, stakeholders, and employers. For students, CBE provides context to the integration of theoretical and practical skills in relation to practice. For stakeholders and employers, CBE provides a better understanding of graduates’ competencies.

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>It can be resource intensive</td>
<td>50%</td>
</tr>
<tr>
<td>There is a lack of understanding by faculty and students regarding CBE</td>
<td>40%</td>
</tr>
<tr>
<td>Some competencies such as communication and professionalism may be specific to the individual and their culture</td>
<td>48.33%</td>
</tr>
<tr>
<td>Other</td>
<td>38.33%</td>
</tr>
</tbody>
</table>

Themes that emerged regarding barriers to CBE included: (1) the structure of a country’s economy may influence the uptake of CBE, (2) CBE requires inter-professional collaboration, which is not always possible (3) CBE is perceived by some as outcome-focused versus process-oriented (i.e., achieving competencies versus building life-long learning skills), and (4) evaluation of CBE can be complex.

Discussion

Although some occupational therapy programs are in transition to a competency-based model of education, there is a need for a global understanding of how to utilize, implement, and evaluate CBE internationally. CBE can be a foundation in which to build a common language among occupational therapy programs around the world.

Some of the study limitations were:

• Language
• Low response rate
• Methodological rigor: (1) question formation, (2) limited time for follow-up, and (3) a simultaneous WFOT survey being distributed at the same time.

Future Directions and Conclusions

Future Research

There should be a focus on finding a collective language/terms used in CBE programs, types of resources required for CBE, effective processes/strategies used by programs in their transition to CBE, contextual factors (i.e., culture and economy) that impact successful implementation of CBE, and a follow-up discussion with the WFOT regarding their position and role in supporting implementation of CBE internationally.

Conclusions

This survey identified that there are some major barriers to implementing CBE. However, CBE aligns with evidence-based practice and can be considered a guiding framework for creating a learner-centered paradigm to achieving competencies for occupational therapy practice.

Acknowledgements

We would like to thank the following for their support: WFOT, specifically Ritchard Ledgerd, McMaster Institute for Innovation and Excellence in teaching and Learning who provided funding for this project, international respondents who completed this survey, and our supervisors for their guidance during this project.

References


STUDENT VOICES: STRIVING FOR INCLUSIVE EDUCATION
Jessica Rosales & Stephanie Lyon, MSc OT Candidates
Project Supervisor: Dr. Elizabeth Marquis, Assistant Professor, McMaster University
Arts & Science Program, School of the Arts, & McMaster Institute for Innovation & Excellence in Teaching & Learning

ABSTRACT
McMaster University is host to a diverse population. Purpose: This phenomenological study aimed to explore and understand undergraduate students’ experiences of classroom inclusion and exclusion and develop resources for educators based on these findings. Methods: Thirteen students from McMaster University were recruited and participated either in one-on-one interviews or focus groups. Results: Barriers and facilitators to inclusion exist at several levels: the university system, classroom, and individual level. Implications for Practice: From this study, educational resources for professors and teaching assistants will be created that recognize the application of Universal Design in Education models (Rae, Ok, & Bryant, 2014) and the in-depth exploration of diverse perspectives and identities to facilitate inclusion in teaching and learning.

INTRODUCTION
McMaster University is host to a diverse range of undergraduate students and is seeking to fulfill a mandate of equitable education for students with disabilities, as outlined in the Accessibility for Ontarians with Disabilities Act [AODA] (2005). It is paramount to inclusive education, however, to also address other complex identities in addition to various visible or invisible disabilities. A holistic awareness and recognition of student diversity is important for the development of inclusive teaching and learning environments. The present study aims to provide insight on how to create inclusive educational environments by exploring: (1) How McMaster students experience inclusion and/or exclusion in university classrooms? (2) From a student perspective, how can teaching and learning at McMaster become more inclusive?

LITERATURE REVIEW
One proposed system for creating inclusive environments in teaching and learning draws upon principles of universal design. Universal design educational models aim to address increasing diversity in higher education by proactively designing classroom environments which are accessible to the greatest number of students possible and reduce the number of individual accommodations required (Rao, Ok & Bryant, 2014). Work by Cook, Rumrill & Tankersley (2009) found that university educators had low levels of understanding of accommodations for students with disabilities and the application of the principles of universal design. Similarly, Allison, Murray & Gerdes (2011) found a considerable discrepancy between positive and negative attitudes of college faculty towards inclusive universal design principles and their self-reported actions. Specific to the McMaster context, recent work by Marquis et al., (2012) examined the diverse perspectives of students, staff, educators and administrators regarding teaching and learning accessibility following the implementation of the AODA. Results were in agreement that a knowledge gap existed, but highlighted other barriers to inclusion including: pedagogical choices, attitudes, and institutional practices (Marquis et al., 2012).

METHODS
The present pilot study used a phenomenological qualitative design. Ethics approval was granted through the McMaster Research Ethics Board. Participants were recruited from various faculties. The sample was comprised of 13 McMaster undergraduate students who participated in either a one-on-one interview or a focus group, which were audio-recorded. Audio-recordings were transcribed by student research assistants: two in full-length and eight were transcribed in part to capture pertinent dialogue for the research question. Memo logs were used to keep an audit trail during the open coding phase, which used topical, analytical, and in-vivo codes (Richards, 2005). Coding-trees were then formed manually by sorting through codes to create categories. In a final data reduction phase, some categories and sub-categories were collapsed.

RESULTS/DISCUSSION
The following 7 categories were generated:
Definitions of Inclusion and Exclusion
Common definitions of inclusion surrounded feelings of safety, belonging and comfort. Student anecdotes displayed how inclusive classrooms were ones that fostered a greater respect for individual personhood. Contrastingly, participants defined exclusion as the absence of the aforementioned characteristics, suggesting the 2 concepts are opposing constructs.
Pedagogical Features

The educator’s role in fostering inclusion was commonly viewed as an acknowledgment of diversity through pedagogical choices. This included teaching methods, communication strategies, evaluative methods, course content and required materials. Strategies that fostered student engagement included invitations into discussions, acknowledging students by name and recognizing preferred pronouns. Educator’s efforts to implement inclusive practices were noticed by students.

Class Culture

Classroom demographics were also a point for exclusion or inclusion. Participants often expressed feeling like the only ones in their identity group, and as such, would refrain from participation due to lack of ally-ship, and to avoid contention.

University Structure

University structure posed a barrier to student inclusion when professors demonstrated lack of knowledge on how to implement accommodations for students with disabilities. Tensions also arose for students seeking accommodation for reasons other than disability. Participants commonly expressed that large classroom posed a barrier for engagement.

Attitudes

Many positive and negative views around student diversity were factors in participant’s responses. The negative views were over generalizations about the prevalence or appearance of invisible disability groups. Not only was this a barrier to inclusion, but also to student engagement in class discussions.

Emotional Responses

Participants expressed a range of emotions in response to inclusive and exclusive classroom experiences including feeling safe in the presence of common ground and fear in voicing opinions when students felt alone.

Training

Participants commonly viewed the option for inclusivity training of educators as having limitations and time constraints - due to the complexity of various identities. Training would have to be updated yearly, as well as span a great number of days.

CONCLUSIONS/FUTURE DIRECTIONS

In teaching and learning literature and in the study, there are various perceived facilitators and barriers to inclusion that stem a systems level (university structure and inclusivity training), classroom level (pedagogical approaches and class culture) and individual level (attitudes). Change towards inclusive learning and teaching can be implemented on these levels. Results of this study also align well with principles of the universal design education models (Rao, Ok, & Bryant, 2014) with the acknowledgement that some complex identities will still need to be accounted for. Within the McMaster context, it is without saying that although inclusivity policies and practices are under development, there is much to be done to accommodate and welcome a growing diverse student body. The results of this study will help in the development of educational resources for professors and teaching assistants, so that they will be knowledgeable on how to create inclusive classrooms.

REFERENCES


ACKNOWLEDGEMENTS

The authors would like to acknowledge Dr. Beth Marquis, the research team and all the participants for their support and contributions to this project.
Targeting the Globe

Developing a Profile and Strategies for Preparing Occupational Therapy Students for International Placements

Purpose of this study: to gain a thorough understanding of current practices employed by occupational therapy educational programs around the globally to prepare student occupational therapists (SOTs) for international fieldwork placements, which will in turn, inform international best practice strategies and curricula.

Project Overview:
This study was designed by investigators at McMaster University in collaboration with the World Federation of Occupational Therapists (WFOT).

The WFOT was formed in 1952 to act as the official international organization for occupational therapy; the Constitution developed for the federation in 1952 included the goals to promote and facilitate international cooperation, international exchange of individuals and information as well as uphold and advance ethics, practices and standards (WFOT, 2011). Over the past decade, more than ever, healthcare professional programs have been designing curricula to include the prospect of students furthering their practice competencies through various opportunities, such as international fieldwork placements. However, there is limited available data around this subject even though this

Literature Search
Scholars agree that from an international placement experience, students gain an increase in:

- cultural sensitivity
- understanding of global issues
- knowledge of multiple healthcare systems
- cultural immersion
- development of international research experience
- personal and professional growth
- self-reflection
- self-confidence
- ability to problem solve
- fostering an open mind

The literature included little information on details of preparation of SOTs (student preparation was completely absent from some programs) as well as specific barriers students faced that impeded their participation. Most importantly, no common curriculum was used and no best practices exist in this area.

Objectives of data dissemination:
1) Increase awareness of the unique opportunity of an international fieldwork placement
2) Decrease the workload associated with the process of setting up and following through with an international placement
3) Increase output of SOTs travelling internationally for their fieldwork placements
4) Prepare the SOTs as best as possible, using best practice guidelines, for their international experience
5) Maximize the experience for all stakeholders
Methods:
The literature review described above informed investigators on content to include in survey questions created on Survey Monkey for dissemination to participants. Participants were identified through an amalgamation of all OT contacts within WFOT databases. An invitation to participate in the survey was emailed out to 645 people; 90 surveys were completed but 23 were disqualified, thus 67 were analyzed. Quantitative data were exported by percentiles using Survey Monkey and qualitative data were coded in Nvivo for themes.

Results:
Survey data informed investigators that most participants in the survey were educators (n=57) that had not been on an international placement themselves (n=51) but are directly involved in placing students from their school in international placements (n=59). Data was collected from 5 continents, Europe (n=27), North America (n=22), Australia (n=10), Asia (n=7), and South America (n=2). Additionally, 61% of the schools indicated that they send 5-10% of their students internationally each year. Thirty participants left contact information to be contacted for a Skype interview – five participants were identified for Skype interviews through purposive sampling. These five represented five continents and various program types. Interviews included open-ended questions involving reciprocal dialogue for 30-60 minutes. The interviews were then transcribed by a third party transcriptionist. Data from interviews were coded in Nvivo and analyzed for themes. Three themes emerged in survey and interview data:

1) Invaluable experience of international placements
2) Barriers keep participation low
3) Creating partnerships for sustainable, mutual, collaborative learning

Recommendations based on study:
1) Create mutually beneficial and sustainable international partnerships
2) Collaborate with services within your home institution
3) Invite past students to provide information to current students

References

"I just think they come back better human beings. More altruistic. They're high on something when they return from these practs."
- Skype interviewee

*Invaluable experience of international placements*
Addressing the Gap of Suicide in Occupational Therapy Practice
By: Ryan Collins and Heather Vrbanac, M.Sc. OT. Candidates 2014, McMaster University
Project Supervisor: Kim Hewitt, OT Reg. (Ont).

Abstract

**Background.** Occupational therapists (OTs) interface with intimate details of clients’ lives and are therefore in a position to receive messages of suicide when a client experiences suicidality. **Purpose.** This study answers the question: how ready, willing, and able are Canadian OTs to address suicide-related issues in practice? **Methods.** A mixed methods approach comprising an electronic survey and semi-structured interviews is used to address the purpose of this study. **Findings.** Survey results demonstrate a significant difference between willingness and preparedness across practice settings compared to a mental health practice setting. There is statistically significant support for the role of OT in all aspects of addressing suicide. Analysis of interview transcripts led to the identification of six common themes. **Implications.** Findings from this study can be used to promote and support a change in the Canadian occupational therapy climate surrounding the management of suicide-related issues in practice.

Introduction

Suicide is a preventable cause of death. Of Canadians, 14.7% have had thoughts of suicide in their lifetime (CASP, n.d.). Thoughts of suicide can significantly interfere with everyday living, and OTs are often privy to intimate details of client’s everyday living. In Canada, suicide is receiving increasing attention; however in occupational therapy, there is no position statement, nor are there standards describing the role of occupational therapy with clients experiencing suicidality. This study will explore Canadian OTs’ perceived role managing suicide-related issues in practice, as well as Canadian OTs’ willingness, preparedness, and skills addressing issues of suicide in practice.

Methods

**Design:** A mixed methods approach was applied to this study, including electronic surveys and semi-structured independent interviews.

**Participant Selection:** All registered CAOT members, 5614 people, received an email invitation to participate in the survey. Interview participants were selected based the criteria: province of practice, setting of practice, and self-reported preparedness to intervene with clients thinking of suicide. These criteria were used to establish a diverse range of interview participants.

**Data Collection:** Quantitative data was collected using a web-based survey consisting of 22 questions. Questions were both closed- and open-ended, in addition to questions to gather demographic characteristics. Survey questions aimed to gather information about willingness, preparedness, and skills managing suicide-related issues in practice, as well as information about perceptions of the role of occupational therapy in addressing suicide-related issues in practice. A semi-structured interview consisting of 12 questions was used to elaborate on survey questions and to explore the breadth of participants’ perspectives and experiences pertaining to suicide-related issues in occupational therapy practice.

**Data Analysis:** Survey data was analyzed using SPSS 21. Data met assumptions for Kruskal-Wallis Wallis analysis and post-hoc analysis, and qualitative content analysis are applied to the collected data. Survey results demonstrated a significant difference between willingness and preparedness across practice settings compared to a mental health practice setting. There was a statistically significant support for the role of OT in all aspects of addressing suicide. Analysis of interview transcripts led to the identification of six common themes. Findings from this study can be used to promote and support a change in the Canadian occupational therapy climate surrounding the management of suicide-related issues in practice.

Literature Review

There is limited literature surrounding the role of occupational therapy addressing suicide-related issues in practice. In 2003, Tryssenaar initiated the discussion around managing suicide in occupational therapy practice by specifying that OTs’ need to be prepared to respond and engage clients appropriately when issues of suicide arise. There are a number of guiding documents that can be applied to the issue of suicide in occupational therapy practice. The Canadian Association of Occupational Therapists (CAOT) position statement on “Occupational Therapy and Client Safety” calls on OTs to manage safety risks (2011). As well, the Association of Canadian Occupational Therapy Regulatory Organizations (ACOTRO) mandates safe, ethical, and effective service delivery (2011). Tryssenaar’s article compliments these guiding resources, and others, that report the first task of an OT when faced with a client thinking about suicide is ensuring he/she will remain safe (2003). The current state of literature well positions OTs to be leaders towards building suicide safer practices and communities.
Results

Demographic Information: The electronic survey had a 10.4% response rate, with 586 respondents. Of the respondents, 19.5% were practicing for 0-2 years. Half of respondents practice in either a mental health setting (26%) or a general physical health setting (24%), with the remaining in a mix of other settings. The majority worked in an urban setting (79.9%) and on a team (75.4%), with the highest volume of respondents from Ontario (35.8%). Out of 140 survey respondents interested in participating in the semi-structured interviews, 10 interviewees were purposefully selected.

Survey Results: Data analysis demonstrated significant differences in the following areas:

The Occupational Therapy role managing suicide:
Frequency of addressing suicide in practice was significantly higher for OTs in a Mental Health setting compared to all other settings (p<.001 for all comparisons against mental health), no other comparisons between groups was significant. Responses supported the role of OTs in addressing suicide through prevention, intervention, postvention and did not significantly differ across all demographic characteristics. Willingness to Intervene: Willingness of addressing suicide in practice was significantly higher for OTs in a Mental Health setting compared to all other settings (p<.001 for all comparisons against mental health) no other comparisons between groups was significant. Willingness to address suicide was not significantly different compared to team/alone/other, urban/rural/remote, province of practice, or years of practice. Preparedness to Intervene: Preparedness to address suicide in practice was significantly higher for OTs in a Mental Health setting compared to all other settings (p<.001 for all comparisons against mental health) no other comparisons between groups was significant. Preparedness to address suicide was not significantly different compared to team/alone/other, urban/rural/remote, province of practice, or years of practice.

Qualitative Interview Findings: Six themes emerged surrounding the role of OTs addressing suicide-related issues in practice, and related to willingness, preparedness, and skills managing client suicidality. 1) Awareness. There is a call for increased awareness of issues of suicide at the societal level, at the health care professionals level, and at the individual level – which will support an OTs role surrounding issues of suicide. 2) Ethics in practice. “It’s a bit of an ethical obligation that if someone is contemplating suicide that you provide the services needed to help.” 3) Increasing engagement in life. Core occupational therapy skills and values, such as engagement in meaningful occupation and taking a holistic view of the person, lend themselves to addressing issues of suicide in practice. 4) Experiential learning. The most valuable contribution to increased willingness and preparedness is experience and exposure, opportunities for inter-professional collaboration, and learning from experienced colleagues. 5) Professional development. “[Suicide] can be a scary situation to deal with, especially if you don’t have the training…[we need to be] building more awareness in the profession…either through continuing education or even maybe in the curriculum.” 6) Diversity of skills. For example, from dialectical behaviour therapy training: “If [clients are] going to build a life worth living, which I think is completely the business of OTs…what skills are they going to need, what attitudes are they going to need, and what are some of the core beliefs that need to be brought out into the open.”

Discussion

Quantitative and qualitative results support an agreement that there is a role for occupational therapy in managing suicide in practice. Canadian OTs need to be prepared to encounter suicide in their career, and OTs need to be prepared to manage the responsibility to support clients experiencing suicidality. Qualitative themes reflect a professional obligation to maintain client safety and assume professional development actions to attain or maintain competence through a combination of experiential learning and education/training opportunities. Results consistently identify a gap between reported willingness and preparedness to intervene with clients thinking of suicide. Results call for individual OTs and the occupational therapy profession to take action towards filling the gap in preparedness and skills, and meeting the demand for competence in maintaining client safety.

Conclusion

The occupational therapy profession is ready for a shift to action to address issues of suicide in practice, and findings from this study should be used to support this movement for occupational therapy to be leaders towards building suicide safe practices and communities.

References

Tryssenaar, J. (2003). Suicide: What occupational therapists need to consider regarding the risk of suicide among their clients.