<table>
<thead>
<tr>
<th>PROJECT TITLE</th>
<th>STUDENT PRESENTERS</th>
<th>PROJECT SUPERVISORS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A program evaluation model for employment initiatives for individuals with Autism Spectrum Disorders (ASD)</td>
<td>Alexander Ball Ayushi Dhingra Ulrik Jensen Oksana Losztyn</td>
<td>Briano Di Rezze</td>
<td>3</td>
</tr>
<tr>
<td>Beyond Silence: Qualitative evaluation of healthcare workers participating in a clinical trial comparing approaches to workplace mental health education</td>
<td>Katelyn Brooks Jessica Vandenbussche</td>
<td>Sandra Moll</td>
<td>5</td>
</tr>
<tr>
<td>'Do Live Well' online: Building and evaluating a website to profile occupation-based health promotion messages</td>
<td>Khadeeja Sheikh Michelle Ward</td>
<td>Sandra Moll Lori Letts</td>
<td>7</td>
</tr>
<tr>
<td>Agenda setting tools: Development and exploration</td>
<td>Hend Al-Fayez Kayla Brown Kristin Kurppa Krista Weger</td>
<td>Susan Strong</td>
<td>9</td>
</tr>
<tr>
<td>Client needs assessment &amp; management of a waitlist for assertive community treatment</td>
<td>Chelsea Crocker Emma Russell</td>
<td>Susan Strong Susan Pettit</td>
<td>11</td>
</tr>
<tr>
<td>Development of a self-management support toolkit for OT's at a specialized mental health service</td>
<td>Alison Burrell Sandra Ellis</td>
<td>Susan Strong Susan Pettit</td>
<td>13</td>
</tr>
<tr>
<td>YWCA encore after breast cancer exercise program: A program evaluation</td>
<td>Meghann Geddis Elizabeth Kehoe</td>
<td>Anne Marie Collingwood</td>
<td>15</td>
</tr>
<tr>
<td>Let's talk design: Using evidence to consider the possibilities when it comes to innovation</td>
<td>Olivia Fischer Stacie Perlmutter</td>
<td>Brenda Vrkljan</td>
<td>17</td>
</tr>
<tr>
<td>Older Canadian drivers: Using evidence to understand their driving patterns &amp; needs</td>
<td>Jessica Bauer Cassandra Rapa</td>
<td>Brent Vrkljan</td>
<td>19</td>
</tr>
<tr>
<td>You've invested in your #Macbrain --now protect it</td>
<td>Lauren Carter Lisa Clarke Nadia Federici Amanda Smith</td>
<td>Carol DeMatteo</td>
<td>21</td>
</tr>
<tr>
<td>Motivation to engage in rehabilitation following brain injury</td>
<td>Hailey Albright Amanda Froese</td>
<td>Jocelyn Harris</td>
<td>23</td>
</tr>
<tr>
<td>The I CAN - An innovative community based assessment of executive function</td>
<td>Sarah Beaudin Lindsay Sinclair</td>
<td>Leslie Birkett Deidre Sperry</td>
<td>25</td>
</tr>
<tr>
<td>'Do Live Well' in the community: Translating a new approach to healthy aging</td>
<td>Courtney Baran Erica Tokar</td>
<td>Lori Letts Sandra Moll</td>
<td>27</td>
</tr>
<tr>
<td>Impact of aging on people living with HIV</td>
<td>Nosheen Akhtar Ramanjit Garcha</td>
<td>Patty Solomon</td>
<td>29</td>
</tr>
<tr>
<td>Music therapy for clients who have sustained a brain injury</td>
<td>Julia Corsini Kenneth Curtis</td>
<td>Season Kam Jill Oakes</td>
<td>31</td>
</tr>
<tr>
<td>PROJECT TITLE</td>
<td>STUDENT PRESENTERS</td>
<td>PROJECT SUPERVISORS</td>
<td>PAGE</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------</td>
<td>------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Stroke rehabilitation: The perceived effectiveness of a functional activities program</td>
<td>Jacquelyn Bonneville Charles Flynn</td>
<td>Susan Pettit Sarah Ferguson Barb Ansley</td>
<td>33</td>
</tr>
<tr>
<td>The experiences of injured workers who fail to return to work as expected</td>
<td>Maria Guindy Stacey Mitchell</td>
<td>Rebecca Gewurtz</td>
<td>35</td>
</tr>
<tr>
<td>University students with disabilities</td>
<td>Louisa Chan Rachel Martini</td>
<td>Rebecca Gewurtz</td>
<td>37</td>
</tr>
<tr>
<td>Child and Youth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program evaluation planning for the Partnering for Change expansion in Central West CCAC</td>
<td>Jennifer Lei Katie Wong</td>
<td>Susan Wynes Deb Stewart</td>
<td>39</td>
</tr>
<tr>
<td>Development of a fidelity measure for Partnering for Change</td>
<td>Maija McKibbon Tiffany Nichol Brittany So Emily Warren</td>
<td>Nancy Pollock Wenonah Campbell</td>
<td>41</td>
</tr>
<tr>
<td>Accessibility and equity for play: A focused needs survey</td>
<td>Monique Lizon Melissa Robinson Kerri Taylor Stephanie Zubriski</td>
<td>Tara Packham Lowana Lee William Brown</td>
<td>43</td>
</tr>
<tr>
<td>An evaluation of the adolescent program service delivery at the George Jeffery Children’s Centre</td>
<td>Crystal Schultz Sara Woodruff</td>
<td>Scott McBean Britanni Adamson Lindsay Jarvis</td>
<td>45</td>
</tr>
<tr>
<td>Professional Issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluating knowledge translation of IPE for health science students and educators using e-modules</td>
<td>Carly Maunula Caitlyn Start</td>
<td>Bonny Jung</td>
<td>47</td>
</tr>
<tr>
<td>Targeting the globe: Preparing student occupational therapists for global clinical education practice</td>
<td>Hanin Al-Helo Danielle Kandel-Lieberman Mara Kremenovic Kimberly Roorda</td>
<td>Lorie Shimmell Sue Baptiste</td>
<td>49</td>
</tr>
<tr>
<td>Integrating interprofessional collaboration through an electronic documentation system: Preparedness of rehabilitation staff</td>
<td>David Burzynski Justin Krupa</td>
<td>Margareta Vanderheyden</td>
<td>51</td>
</tr>
<tr>
<td>Investigating interventions to reduce work-related burnout in long-term care workers</td>
<td>Brittany Lee Amanda Stone</td>
<td>Sherrie Cheers Marion Penko</td>
<td>53</td>
</tr>
<tr>
<td>Collaborative practice - exploring the perspectives of therapists and support personnel</td>
<td>Robin Lui Farah Mohamad</td>
<td>Lisa Brice-Leddy Melanie Blake Debbie Park</td>
<td>55</td>
</tr>
</tbody>
</table>
Describing employment success and its key attributes in individuals with autism spectrum disorder: Perspectives of family members and employment support workers
Alexander Ball, Ayushi Dhingra, Ulrik Jensen, & Oksana Losztyn; M.Sc. OT Candidates, McMaster University
Supervisor: Briano Di Rezze, PhD, OT Reg. (Ont.), McMaster University

ABSTRACT

Objectives. The purpose of this study was to define employment success for individuals with autism spectrum disorder (ASD), and the personal and environmental components required to achieving that success. Methods. A qualitative case study design was used to frame the research questions and to collect data from two focus groups: one with employment support staff and the other with family members of individuals with ASD. Qualitative content analysis was utilized to examine transcripts for overlapping themes between groups. Results. Seven overarching themes emerged: Subjective components of success, belonging and inclusion, growth, unique skills and interests, organizational support, psychosocial environment, and building capacity. Conclusion. From the perspective of people who know individuals with ASD, these results are the basis for a ‘birds’ eye view’ of how employment success can be defined for, and can be achieved by, individuals with ASD. Identifying these attributes will allow employment programs to better evaluate their effectiveness which will allow more individuals with ASD to engage in successful employment opportunities. Future work involves further developing this conceptual model to illustrate how these elements interact and in examining the perspectives of individuals with ASD.

INTRODUCTION & BACKGROUND

Autism Society Canada (2014) reports that approximately 515,000 Canadians are living with autism spectrum disorder (ASD). In Ontario alone, there are 300,000 children and youth with ASD or another neurodevelopmental disorder (Ontario Brain Institute, 2015). Given these staggering statistics, it is important to consider the number of individuals that are reaching employment age. Individuals with ASD who are employed experience more positive health outcomes such as increased quality of life compared to those who are unemployed (Chen, Leader, Sung & Leahy, 2014; Gerhardt & Lainer, 2011). Despite these benefits, the majority of adults with ASD are unemployed or underemployed (Baldwin, Costley & Warren, 2014). Given these benefits, it is critical that more employment opportunities become available.

In order to effectively evaluate employment opportunities, it is important to first determine what employment success is for individuals with ASD. Research on employment outcomes in individuals with ASD has typically focused on factors such as working status, areas of employment, average earnings and working hours (Chen, Leader, Sung & Leahy, 2014). There is also a large focus on examining the challenges that exist within the workplace, rather than on successful factors and how employment success is defined. In order to address this gap, this study aims to: 1) identify factors related to employment success, and 2) identify key attributes at both the individual and work environment levels that support achieving this success. This information will be collected from the perspective of families and employment support workers that know various individuals with ASD.

METHODS

Design: A qualitative case study research design was used to gather information from multiple perspectives on employment success for individuals with ASD.

Data Collection: Two 120 minute focus groups were conducted, one with employment support workers, and the second with family members. Three questions were asked in each focus group:
1. How would you define success in the workplace for individuals with ASD?
2. Based on how you defined success, what characteristics do you think an individual with ASD would need to achieve this level of success?
3. What components does a workplace environment need to ensure success for an individual with ASD?

These questions were followed by discussion, clarification, and probing questions, which were framed using the Person-Environment-Occupation model (Law et al., 1996) and De Bono’s (1989) 6 hats model.

Analysis: Each focus group was facilitated by two separate pairs of students and its data was audio recorded. The same pair of students then transcribed and analyzed the data for their corresponding focus group. A joint coding process was completed for a portion of the transcript to develop a reliable method of coding between each pair of team members. Then, independent coding of the transcripts was completed by each team member. Each pair then met to compare and refine codes based on a defined consensus procedure, until consensus was reached; notes were taken to justify the refined codes. These codes were then organized into categories. Both pairs of student researchers then compared categories that emerged from both focus groups to reach a consensus on 7 resulting themes. Results were sent to participants for member checking, which is currently under review by group participants.
**Ethics and Consent:** The study received approval from the Hamilton Integrated Research Ethics Board and informed consent was provided by all participants.

**RESULTS/DISCUSSION**

**Participants:** Convenience sampling was used to recruit family members (n=3) and employment support workers (n=3), of individuals with ASD from an ASD employment agency in Hamilton. The following seven themes emerged as common within both focus groups:

**Theme 1: Emphasis on subjective (vs. objective) components of success**
Subjective components such as enjoyment, belonging, pride and growth were identified as more important indicators of successful employment, when compared to objective components, such as wage and hours, which are more typically discussed in the literature.

**Theme 2: Sense of Belonging and Inclusion**
It was highlighted that social acceptance in the workplace and feeling like a contributing member of society allow individuals with ASD to achieve a sense of belonging and inclusion at both the workplace level and societal level which is critical for, and an indicator of success.

**Theme 3: Personal Growth and Opportunities for Growth**
Growth was identified as an outcome of employment success in terms of learning and applying new skills. Employment support workers additionally emphasized that growth needs to be supported by providing teaching opportunities in the workplace.

**Theme 4: Unique Skills and Interests**
A good fit between the job and the individual’s unique skills and interests is needed to support employment success. This highlights the importance of taking an individualized approach for job matching, especially when considering the variability in abilities of individuals on the spectrum.

**Theme 5: Need for Multiple Organizational Supports**
Key organizational supports need to be considered when promoting employment success, including ensuring safety, providing accommodations when training and meeting sensory needs, and having a balance between a structured routine and flexibility.

**Theme 6: Influence of Psychosocial Environment**
Components of the psychosocial environment were discussed in terms of how they influence employment success: supervisors’ and co-workers’ respectful behaviours, supervisor feedback and recognition, having an understanding of ASD, and inclusive team and decision-making practices.

**Theme 7: Building Capacity (at employee and workplace level)**
At the employee level, capacity-building would involve instilling problem-solving skills and supporting their independence. At the workplace level, staff themselves would need support and training to balance the needs of individuals with ASD with the needs of the business.

**CONCLUSIONS/FUTURE DIRECTIONS**
This research highlights some of the fundamental elements of employment success for individuals with ASD as well as the person and environment attributes that help support achieving this success. This allows for a strong basis to start refining a definition. Having such a definition will allow employment programs and agencies to better evaluate their effectiveness and gauge success, and hopefully allow more individuals with ASD to engage in meaningful and successful employment opportunities.

This research has demonstrated that these core elements cannot be examined in isolation. Developing a conceptual model that illustrates their relationships is a critical next step in this research. The creation of such a model could help guide future researchers, employers and agencies that work with individuals with ASD regarding employment and employment success. Gaining the perspective of the people most impacted by this, individuals with ASD, is also critical.

**ACKNOWLEDGEMENTS**
We would like to thank our supervisor Briano Di Rezze, as well as Helena Viveiros and Ruxandra Pop for their guidance and support completing this research. Also, a special thanks to the support workers and family members who participated in the focus groups and shared their valued perspectives.

**SEMINAL REFERENCES**


Beyond Silence: Qualitative evaluation of healthcare workers participating in a clinical trial comparing approaches to workplace mental health education.

Authors: Katelyn Brooks & Jessica VandenBussche.

Advisor: Sandra Moll, PhD, McMaster University

Abstract

Purpose: The aim of this qualitative program evaluation was to explore and compare the perceived value of two different workplace mental health education programs conducted with healthcare employees. Methods: Employees from two different healthcare organizations [n=51] were randomly assigned to participate in either the Beyond Silence program (BSi), a peer-led 12-week contact-based education program, or Mental Health First Aid (MHFA), a standardized two-day mental health literacy training program. Semi-structured interviews were conducted with 18 program participants (9 from each program) to explore their perceptions of the program and its impact. Transcripts were analyzed using an interpretive description approach, considering experiences before, during and after the program. Findings: Many participants came to the programs with prior personal or professional experience with mental health issues, but they welcomed the opportunity for additional learning and information sharing. The primary differences between the two programs were the additional opportunities in the BSi program for hearing personal stories, and application in the context of healthcare work. Recommendations: Mental health education for healthcare workers needs to move beyond simply teaching facts about mental health and illness. Key ingredients include; creating a safe space for sharing personal and professional experiences, ensuring that the information is contextually relevant, and addressing strategies for change, not only for individuals, but for the overall organization.

Introduction

Employee stress and mental ill health is a growing problem in healthcare organizations. Unfortunately, many individual and organizational forces interfere with proactive and early intervention for workers who need support (Moll, 2014). In order to address the stigma associated with seeking help, contact-based education (CBE) is recommended, however, little is known about its effectiveness in healthcare (Couture, & Penn, 2003). CBE is a knowledge translation strategy in which individuals spend time with respected individuals who have experienced mental illness (Couture, & Penn, 2003). CBE has the potential to address mental health literacy, stigma, and workplace barriers to seeking and providing help (Moll, 2014).

The study reported in this paper is part of a larger mixed-methods randomized clinical trial (RCT) designed to compare two workplace-based mental health education programs. One program, called Beyond Silence (BSi), is a peer-led CBE approach customized to healthcare employees, consisting of six two-hour group sessions plus online discussion. The other program is Mental Health First Aid (MHFA), a standardized two-day literacy based program. Both programs are 12 hours in length and led by trained instructors. The larger, two-year RCT will evaluate the impact of the programs with 200 employees on quantitative measures of mental health literacy, stigma and behavior change. The purpose of this qualitative program evaluation was to explore and compare a subset of participant experiences in order to gain a more in-depth understanding of the key contributors to program outcomes.

Methods

This qualitative evaluation was informed by interpretive description; an inductive approach to qualitative analysis that is used to describe and explain health-related phenomenon (Thorne, Kirkham & Macdonald-Emes, 1996). Participants in the study were employees in two large healthcare organizations in a mid-sized urban centre in southern Ontario. They had been randomly assigned to either the BSi or MHFA program and completed the program in Fall 2014 or Winter of 2015. Eighteen participants from the 51 who completed the program were recruited to be interviewed about their experiences. These key informants were purposively selected to ensure diversity with respect to age, gender, role in organization, and program participation.
Semi-structured interviews were conducted to explore their experiences and ideas about the program and how it impacted them. Interview transcripts were coded using Dedoose software, and analyzed in an iterative process of identifying key forces that contributed to the experience and outcomes of program participation.

**Findings**

Study findings relate to three different aspects of the participants’ experiences in the program: 1) before the program, 2) the ‘black box’ which is the program components, and 3) the impact the program has on the participants. These experiences were embedded within the workplace context as well as a broader societal context. Many participants came to the program with personal or professional experiences with mental health issues. Key ingredients of the program included: the program structure, diversity of participants, leadership, opportunity for sharing and discussion, and a supportive learning environment. Participants in both programs were particularly positive about the opportunity for learning and discussion about mental health issues and how to support individuals who may be struggling. The program impact varied from one participant to the next, but included: increased knowledge and awareness of mental health issues, changes in personal attitudes, beliefs and behaviors in reaching out to others, and changes in workplace culture. The primary differences between programs were the additional opportunities in the BSi program for hearing personal stories about mental health issues, and application of information in the context of healthcare work.

**Discussion**

The findings illustrate the value of mental health training in in healthcare organizations, and the importance of moving beyond simply teaching facts about mental illness. Training needs to: consider the background of participants, create a safe environment for sharing, ensure that the information is contextually relevant, and support both individual and organizational change. These qualities are consistent with principles of adult learning and contact-based education (Couture & Penn, 2003). Although the study findings provide important insights into participants’ experiences, it is important to note that the sessions were conducted with a small cross-section of employee volunteers in two large healthcare organizations. Further study in other organizations is recommended to enhance transferability to other workplace contexts.

**Conclusion**

CBE approaches such as the BSi program can be a valuable addition to current workplace mental health initiatives. Occupational therapists (OT) can use the course in their own professional development. OTs can play an important role in advocating for this theoretically informed and evidence-based approach to promoting workplace mental health.

**Acknowledgements**

The authors would like to acknowledge the support of their supervisor, Sandra Moll, as well as Jan Glancy, project coordinator, the program leaders, and the study participants.

**References**


Development of an Online Portal for the ‘Do Live Well’ Framework

Student Researchers
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Khadeeja Sheikh, H.BSc, MSc. OT (Candidate)

Primary Supervisor: Sandra Moll PhD, OT Reg. (Ont.), Assistant Professor

Abstract
Occupational therapists can play a key role in health promotion; however, we need to clearly communicate how daily occupations are just as important to health and well-being as diet and exercise. The Do Live Well (DLW) framework was designed to capture key evidence-based messages about the links between occupation, health and well-being, but these messages needed to be translated from an academic framework to an accessible platform that could reach a broader audience. **Purpose.** The purpose of this project was to develop an online portal for the DLW framework using principles of integrated knowledge translation (KT). **Methods.** The project was divided into four phases: literature review, recruitment of a website developer, content development, and website evaluation with reflective journaling throughout the process. **Findings.** Key insights gained during this process include considering technical support required for website development, using best practice principles to develop a vision for the website and the process of engaging stakeholders throughout website development. **Conclusions:** Development of an online portal provides an opportunity to reach a wider audience through a creative, interactive and accessible platform. The use of this portal for health promotion prompts the general public to reflect upon their activity patterns in order to improve their overall health and well-being.

**Introduction**
The Do Live Well (DLW) framework is a new evidence-based health promotion tool based on the premise that “what you do everyday matters” to your health and well-being (Moll et al., 2014). Although an article about the framework was published, it was felt that the reach of this article was limited to an academic audience, and did not provide an opportunity for active engagement of knowledge users or ongoing development of the ideas. The purpose of our project was to translate key concepts from the DLW framework into an online portal for Occupational Therapists (OTs). The following are the key objectives of the DLW online portal project:

1. To build an online portal for sharing information and ideas about the DLW framework.
2. To develop a range of tools within the portal for communicating key concepts within the framework.
3. To engage key stakeholders in developing the content and format of the portal.
4. To gather feedback from end-users about how to improve the knowledge translation resources.

**Literature Review**
Knowledge translation (KT) is defined as the “exchange, synthesis and ethically sound application of knowledge within a complex system of interactions among researchers and users” (Canadian Institute of Health Research [CIHR], 2014). The review and integration of various KT theories has resulted in the discovery of key principles that were incorporated into development of the DLW online portal. These include: engaging end-users, tailoring messages, ensuring fairness, accessibility and transparency, supporting end-user’s understanding of content and using interactive components (Shaw, 2012).

**Methods**
The project was divided into four phases. **Phase one** consisted of literature and website review to identify guiding principles for the website design. Pubmed, Google Scholar and OVID MedLine were searched using key words: “knowledge translation” AND “theory” OR “model”, “Internet” AND “health promotion”, “websites” OR “web-based” AND “health
promotion”, “website” AND “design” AND “guidelines”. A total of 22 applicable articles that matched the keyword search were reviewed. To determine preferred websites design features, 11 health promotion websites were reviewed. These websites were evaluated based on the criteria of readability, legibility, ease of navigation, responsiveness, and consistency of layout and colour scheme.

During phase two, a request for proposal was developed and links were made with a website developer. Initial meetings with the developer involved discussing desired features of the site and the technology required to enable these features. This negotiation was an iterative process throughout the project.

During phase three, content was developed for the site; including photos, written explanations, key informant interviews, and videos. Formatting of the content was a key part of this process as well.

Phase four involved obtaining and responding to feedback from researchers on the DLW team and end-users in the occupational therapy community. Throughout the process, reflective journals were recorded to track key learning experiences.

Findings

The findings represent an analysis of our key insights gained throughout the process of developing a website for the DLW framework.

1. Consider technical support required for website development:

It is important to carefully negotiate your contract with the website developer. A mutual agreement of clear timelines and scheduled dates for communication and training must be included in the contract with the website developer.

2. Develop a vision for the website based on review of best practice principles:

Coherence, complexity, legibility and mystery are key elements of website design used to capture the attention of end-users. Each of these should be taken into consideration and applied to the website design.

Flexibility should also be considered in website development to address a range of learning styles. In order to provide flexibility for a variety of learning styles and literacy levels, consider using written text, videos with audio capability and interactive diagrams when delivering key messages.

In order to capture the interest and attention of end-users, it is important to build opportunities for interactivity in website content and design features. This will prompt end-users to continue to search and further explore the content. This can be accomplished by providing reflective tools and frequently updating news feeds and/or blog posts.

3. Engage stakeholders throughout the process:

Consultation with stakeholders is essential during each step in the process of developing a website. Stakeholders are an important resource when creating tailored messages because of their expertise in the subject matter. Consultation with end-user stakeholders provides the team with feedback on the effectiveness of content delivery and uptake of the message.

Conclusions

Website development is a journey, not an outcome. Occupational Therapists are in an opportune position to be advocates for health promotion and the DLW framework provides us with the language to do so. The use of a health promotion website will allow us to have greater outreach of these messages to the public to improve overall health and well-being.

Acknowledgements

We would like to thank Sandra Moll and Affaf Ahtisham for their guidance and support throughout this project. We would also like to thank the DLW team for their contributions.

References


Developing and Piloting a Tool for Self-Management
Hend Al-Fayez, Kayla Brown, Kristin Kurppa and Krista Weger
(MSc OT Candidates 2015, McMaster University)
Supervisor: Susan Strong, PhD
SCIS Schizophrenia Outpatient Clinic, St. Joseph’s Healthcare

ABSTRACT

OBJECTIVE: An outpatient specialized mental health program is creating spaces for clients to use and learn about self-management to live well with serious mental illnesses (SMIs) and comorbidities. The purpose was to create and pilot a joint client-clinician agenda-setting tool that can support those spaces through a shared decision-making process, while accommodating for cognitive and social impairments that may accompany SMIs.

METHOD: The team designed a four-phased project quality assurance project to create more self-management spaces in a specialized outpatient mental health clinic.

RESULTS: Five themes were developed: the tool is only as good as it’s used; clients self-directing the process; opening a communication space; facilitating collaborative care planning; and capacity building of client self-management.

DISCUSSION: Three overarching patterns emerged: trusting the process, clinicians valuing action and clients valuing being understood first; then valuing action, and making it a part of the care process.

CONCLUSIONS AND IMPLICATIONS FOR PRACTICE: The My Self-Management tool is a resource to facilitate dialogue on self-management with clients with SMIs.

INTRODUCTION & LITERATURE REVIEW

Joint agenda-setting has been used in primary care and with other populations including diabetes, chronic pain, and hypertension. Although critical to quality care, shared decision-making is not widely practiced (Coulter, 2006). Client participation in care may be impeded by time-constraints, poor access to decision-making aids, or from negotiating two sets of priorities (Torrey & Drake, 2010). These barriers can pose particular challenges in settings traditionally focused upon efficiency and clinician-directed needs. A recent study, moreover, investigating the extent and quality of agenda-setting in outpatient mental health centres (Frankel, 2013) found that elements of shared decision-making were evident in less than 20% of visits, with only 1/3 clients specifically invited to share concerns. This suggests missed opportunities for identification of new or persisting concerns and for clients to take increased ownership of illness self-management. Joint agenda-setting can foster collaboration, client participation in care, and satisfaction with the clinical interaction (Gobat, 2015). It is hoped that this project will determine how shared decision-making can be promoted within an outpatient mental health context by using a tool to create spaces for dialogue to better serve client needs and self-management.

METHODS

Student Occupational therapists (SOTs) and supervisor designed a four-phased quality assurance project to create more self-management spaces in a specialized outpatient mental health clinic.

Phase 1 Content & Engaging Clinicians: The SOTs shadowed clinicians to learn about care process. Students introduced concept of agenda-setting tools and obtained clinician feedback about two prototypes used in diabetes care.

Phase 2 Assembling the Tool: Students modified prototypes to be used in a population with SMIs; one pictorial and one written. Students collected clinician feedback and recorded it in field notes. Given feedback and project time constraints, the team focused on revising one written tool based on the Eight Tasks of Self-Management, and the Needs Identification tool already used in the clinic (Strong, 2013). The final piloted version of the tool consisted of eight Agenda-Setting cards and worksheet.

Phase 3 Piloting the Tool: Piloting the tool was an iterative process. Students collected data from observed and unobserved pilot sessions. In observed pilots, students observed clinicians using the tool with a client; followed by semi-structured individual debriefs with client and clinicians; clinicians also completed a standardized questionnaire. In unobserved pilots, data collection was limited to clinician debrief and questionnaire. Students recorded data in field notes which were circulated to each team member to record their reflections. Team held weekly meetings to discuss reflections and form suppositions about the use of tool. Students tested these suppositions by modifying how tool was used in subsequent pilots.

Phase 4 Synthesis & Tool Revision: Team compiled information across field notes and categorized them by client perspective, clinician perspective, and student observation. The team analysed data using an inductive process to identify common patterns, which resulted in five themes. Team identified variations in patterns and examined critical cases to better understand the context. Findings informed tool modification and development of a tool administration guideline.
Fifteen applications of the tool occurred. Seven different clinicians trialled the tool, and the tool was piloted with 15 different clients. Content analysis resulted in the following five themes.

**The tool is only as good as it’s used:** The tool heavily relied on the clinicians’ communication skills and rapport-building skills to successfully support self-management. Clinicians’ knowledge, values and beliefs about self-management also impacted use of the tool. Clinicians taking ownership of the tool was key to success.

**Client self-directing the process:** Most clients actively engaged with the tool. Clients identified meaningful items from the tool, including items of concern, and items of success or strengths.

**Opening a communication space:** Clients indicated that they felt understood and heard. The tool provided an opportunity to explore new topics, and challenged clinician assumptions about clients’ lives.

**Facilitating collaborative care planning:** Clinicians integrated the tool into their typical clinical process. The majority of clients indicated a positive experience; 75% of clients recommended that health providers use the tool again.

**Capacity building of client self-management:** The tool provided a first exposure to self-management for clients who typically only come to the clinic for medication interventions. The tool created opportunities for clinicians to validate client strengths and supports, and explore clients’ self-management strategies.

**RESULTS**

Three overarching patterns emerged across applications: trusting the process, clinicians valuing action and clients valuing being understood first; then valuing action, and making it a part of the care process.

**Trusting the process** refers to clinicians trusting clients to become engaged in their own care. Successful applications demonstrated an emphasis on client choice and control, client engagement in the goal-setting and planning process, and use of probing questions to explore client topics of meaning, strengths and concerns. Less successful applications were associated with clinicians who were less confident in the process and who perceived the tool as less helpful for clients.

**Clinicians valuing action and clients valuing being understood first; then action** refers to the importance of listening to client perspectives before engaging in goal-setting or action planning. Successful applications were marked by similar value sets between client/clinician, and clients feeling understood or heard by clinicians. Less successful applications were attributed to divergent expectations of the goal setting process and incongruence between action planning and client's readiness for change which led to clinician frustration and dissonance in the therapeutic relationship.

**Making it a part of the care process** refers to the clinicians’ integration of the tool into the current service delivery model. Successful applications were associated with clinicians’ incorporating tool into usual counselling approach, combining tool with other interviewing techniques, and using tool to create structure and guide discussion at different parts of care process. Less successful applications were marked by clinicians’ limited understanding of self-management and negative beliefs about self-management and its importance to clients accessing services.

**DISCUSSION**

The **My Self-Management** tool is a resource to facilitate dialogue on self-management with clients with serious mental illnesses. Tool modifications reflected clinician and client feedback. A guideline was created to provide suggestions to support clinicians’ use of tool with a spectrum of client profiles and needs. The following recommendations focus on capacity building for clinicians to support and encourage self-management concepts in their practice: advanced motivational interviewing skills, familiarity with behavioural change process, education about self-management and suggestions to enable clients’ self-management capacity building.

**CONCLUSION & FUTURE DIRECTIONS**

The My Self-Management tool is a resource to facilitate dialogue on self-management with clients with serious mental illnesses. Tool modifications reflected clinician and client feedback. A guideline was created to provide suggestions to support clinicians’ use of tool with a spectrum of client profiles and needs. The following recommendations focus on capacity building for clinicians to support and encourage self-management concepts in their practice: advanced motivational interviewing skills, familiarity with behavioural change process, education about self-management and suggestions to enable clients’ self-management capacity building.

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**REFERENCES**


ACTT Waitlist Review & Referral Guide

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Project Summary
The Hamilton Assertive Community Treatment Team (ACTT) serves individuals living in the community with severe and persistent mental illness, specifically schizophrenia, schizoaffective disorder, and other related psychotic disorders. ACT (Assertive Community Treatment) is a client-centred service delivery model based on psychosocial rehabilitation that has received empirical support for facilitating recovery and community living (Ministry of Health and Long-Term Care, 2005). A Hamilton ACTT manager identified the need to streamline the process of prioritizing clients on the waitlist based on their current “fit” with standards for ACT services (Ministry of Health and Long-Term Care, 2005). A team was formed to conduct an analysis of needs for those on the waitlist, stimulate capacity building for community supports and develop a process for waitlist management. A referral guide was created based on the waitlist screening process. This guide was revised using feedback from referring clinicians. It is hoped that the guide will facilitate waitlist management.

Introduction
ACT (Assertive Community Treatment) is a client-centred service delivery model based on psychosocial rehabilitation that has received empirical support for facilitating recovery and community living (Ministry of Health and Long-Term Care, 2005). The Hamilton ACTT (ACT Team) serves individuals with severe and persistent mental illness, specifically schizophrenia, schizoaffective disorder, and other related psychotic disorders. The Hamilton ACTT had a waitlist dating back 5 years, and no formal process in place to prioritize or follow up with waitlisted individuals. The aim of this project was to conduct an analysis of needs for those on the waitlist, and develop an efficient process for waitlist management that would stimulate capacity building for community supports.

Process
Review: The waitlist project team adopted a quality improvement approach. Supervisors interviewed three individuals prior to the project start date to inform the development of a semi-structured interview tool. This tool was iteratively revised during team meetings, and used to interview clients on the waitlist. Interviews were conducted in student-manager/supervisor pairs to assess client needs and supports. Field notes were reviewed by the team, coded into thematic categories, and managed using spreadsheets.

Waitlist Management: In February 2015, the ACTT2 Administrative Assistant reviewed the waitlist (N=64) and removed clients who did not currently meet eligibility criteria (n=9). Beginning in March 2015, student occupational therapists attempted to connect with all persons on the waitlist (n=55) and arrange interviews (n=22). The students found that a considerable portion of referrals could be closed for a variety of eligibility and practical reasons (n=23). The remaining individuals (n=10) were not seen for practical reasons. The ACTT Manager will connect with these individuals for review within 6-9 months.

Interview Reviews & Prioritization: Based on coding of interview responses we developed the following categories representative of client characteristics and living situations that did/did not match ACTT services: Rehabilitation Potential (including examples of self-management, identified goals, strengths, and engagement with others), Needs/Risks (including legal, aggression, homelessness, hospitalizations, suicide, substance use, physical health needs, psychiatric symptom management, recovery needs, system navigation needs, and social needs), and Supports (including CTO, Family, Supported Housing, Finances, Legal). Project members considered these categories, along with ACT Standards (Ministry of Health and Long-Term Care, 2005), to determine if ACTT remained the best fit for each client (Waitlist-Remained; n=13) or would be better supported by an alternative program or service (Waitlist-Removed; n=9). The program Managers decided who would be removed from the waitlist and these decisions, with rationale, were communicated to the client’s current case manager by letter. Where applicable, client situations were jointly explored with case managers and supports for needs and alternative services were identified. Please see Appendix A for details.

Creation of Referral Guide: Student occupational therapists used team’s interview review data to form categories of possible functional needs: Recovery, Symptom Management, Health, and System Navigation. The team determined that these constructs...
were inclusive of all data generated during interview reviews. Functional need categories were combined with basic ACTT eligibility criteria and translated into a referral guide in the form of a visual flow chart. A prototype was drafted and revised using feedback from potential users with regard to clarity and usability. Referral source feedback included: helpful to have specific criteria that are well defined; facilitated considering functional needs; gives impression of openness and comprehensiveness. Using the guide, it is expected that clinicians will be able to confirm a client meets ACT eligibility criteria, follow probing questions concerning functional needs, and decide whether to submit a referral. The overall message of the guide was: consider the extent to which the client’s functional needs match current supports, and whether the intensity of services ≥3 times/week is needed (Appendix B).

**Synthesis**

After determining which clients would remain on the waitlist and creating the referral guide, students analyzed (retrospectively) what percentage of clients in each group (i.e. Waitlist-Remained/Removed) identified with each client category (i.e. Rehabilitation Potential, Need/Risk, Support). The following factors were reported at similar rates between groups, so did not appear to impact appropriateness of referral: risk related to legal involvement and/or suicide, having supported housing, financial supports, or a General Physician, and having previously identified goals. Although the samples are small, the two groups were relatively similar to one another with regards to mean age, age range, and biological sex.

Differences between groups gave the team a sense of what factors might be commonly present in an appropriate ACTT referral. Participants in the Waitlist-Remained group were more likely to have a primary diagnosis of schizophrenia (69%). Not surprisingly, Waitlist-Remained participants were more likely to identify need than Waitlist-Removed participants in each Need category. They were also more likely to have a history of, or be at risk for, homelessness, and to report experience engaging in therapeutic relationships. Participants in the Waitlist-Removed group were more likely to have a primary diagnosis of schizoaffective disorder (56%). They were more likely to have their needs met in each Need category. They more frequently reported having a Community Treatment Order, family and legal supports, engaging in self-management, and demonstrating life skills such as previous work or life experiences. These trends accurately reflect the clients interviewed, and are a good fit with ACT standards.

**Discussion and Recommendations**

Based on findings, the students formulated recommendations. Primarily, it is suggested that the referral guide be put into practice, and integrated into referral procedures. Once this has been implemented, it is suggested that another review be conducted to improve the pathways of care for clients between programs within the Schizophrenia Community Integration Service (SCIS), students suggest using the guide to promote discussion regarding other programs’ eligibility criteria and scope of associated programs (e.g. whether they provide outreach services). Moving forward, other SCIS programs could use the referral guide as a template for creation of additional referral guides. Finally, it is suggested that the referral form be reviewed to better compliment the content of the referral guide.

Additionally, there was often question regarding the referred client’s primary diagnosis. It is, therefore, recommended that, when referring diagnosis is in question, diagnostic consultation be solicited from the ACTT psychiatrist. Based on needs identified by clients who remained on the waitlist, the welcome package for individuals engaging with ACT might be revised to include self-management resources (e.g. low/no-cost community recreation opportunities, community supports, and a crisis support tool).

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**References**

Recently St. Joseph’s Healthcare Hamilton has initiated the integration of self-management (SM) into specialized mental health services. Traditionally SM has not been addressed in this context (Strong, 2015b), despite having been proven to significantly reduce service utilization and unmet service needs for individuals with serious mental illnesses (Cook et al., 2013). Locally, a phenomenological study conducted with clients of six St. Joseph’s community specialized mental health care services revealed a need for increased self-management learning (Strong, 2015a). Given the fast-paced, demanding environment of a hospital setting, occupational therapists (OTs) need readily available tools to support them in promoting and developing SM skills with clients. To meet this need and facilitate the increased use of self-management, the purpose of this project was to build a toolkit of self-management resources for OTs working in a specialized mental health setting.

The format and contents of the toolkit were organized around an evidence-based framework of 8 essential tasks of self-management developed by Susan Strong (2013). These tasks are: gaining knowledge, finding meds and services that work with me, trusting self and managing thoughts, dealing with stigma, developing a support network, performing daily living activities, finding meaningful occupation that fits, co-managing conditions (Strong, 2013).

Recently St. Joseph’s Healthcare Hamilton has initiated the integration of self-management (SM) into specialized mental health services. Traditionally SM has not been addressed in this context (Strong, 2015b), despite having been proven to significantly reduce service utilization and unmet service needs for individuals with serious mental illnesses (Cook et al., 2013). Locally, a phenomenological study conducted with clients of six St. Joseph’s community specialized mental health care services revealed a need for increased self-management learning (Strong, 2015a). Given the fast-paced, demanding environment of a hospital setting, occupational therapists (OTs) need readily available tools to support them in promoting and developing SM skills with clients. To meet this need and facilitate the increased use of self-management, the purpose of this project was to build a toolkit of self-management resources for OTs working in a specialized mental health setting.

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Key Considerations
- Useful and comprehensive content
- Intuitive, easy to use format
- User friendly maintenance and updating process

Methods
An iterative process was taken using the “Plan, Do, Study, Act Model” (PDSA) (Langley et al., 2009), to ensure the toolkit was meeting the needs of the OTs working within the setting. This process included: conducting a review of SM literature, a grey literature search, trialing a toolkit prototype, holding ongoing meetings with OTs working at the site, and developing and distributing a practical evaluation of the toolkit.

Literature Review
Our review was intended to supplement an extensive literature review of SM programs conducted by the project supervisor, Susan Strong, in 2009 (Strong, 2013). The databases Medline, PsychINFO, CINAHL, EMBASE and Cochrane were searched using combinations of the following key terms: self-management or self-care, psychosis or psychotic disorders, schizophrenia, bipolar disorder. Results were limited to adult populations, the English language, and publications from 2009 to 2015. This search ultimately served two purposes – to confirm and modify the existing framework and emphases of the toolkit contents and to produce leads to new tools and resources. Formal literature did not often provide useable tools, when possible authors and developers were contacted to gain access to specific tools, protocols and relevant materials.
Grey Literature Search
A grey literature search of major health organizations and government institutions via Google triggered a “snowball” effect whereby new electronic resources were continually uncovered.

Meetings with OTs
Student researchers met monthly with OT staff of the Schizophrenia & Community Integration Service (SCIS) to receive feedback regarding content and format of the toolkit. OTs were provided with physical samples of toolkit materials and were asked to assess if met identified needs and were categorized appropriately. Verbal feedback was recorded and considered, and the toolkit was updated accordingly.

Trialing a Toolkit Prototype
Individual training sessions were held with the OTs midway through the process to demonstrate operation of the toolkit. The purpose of this training was to increase OT competence with toolkit navigation and to increase exposure to the toolkit to foster enthusiasm and interest.

Practical Evaluation of the Toolkit
OTs were given five tasks to complete using toolkit and asked to rate statements about the experience and plan future use.

Final Product
The final product includes an electronic toolkit index, organized by the 8 task framework (Strong, 2013). The 8 tasks (domains) are subdivided by “topic headings” that describe more specific tasks that fall within a given domain. Clicking on a specific topic heading offers direct access to a list of resources that can assist with accomplishing the task indicated by that heading. From here, the user can access any resource by clicking on the resource name. Also included in the toolkit is an administrative folder that contains a reference index, information for updating contents and repairing formatting, and recommendations for future additions.

Practical Evaluation
Three of five OTs completed the practical evaluation. All evaluators were able to complete all five tasks provided with satisfactory results. OT evaluators agreed that the toolkit was easy to navigate, intuitively organized, and that they would use this toolkit in practice. Examples of toolkit use described included planning for groups and 1:1 sessions with clients.

Future Directions
Service managers of other disciplines within the SCIS, such as nursing and social work, have voiced interest in gaining access to the toolkit. In order to support widespread distribution a new structural format of the toolkit may need to be considered. Future expansion may involve distributing the toolkit to other settings, including Mood Disorders Unit, ACT Teams and the new Youth Wellness Centre. Once establish the next iteration of the PDSA process would involve conducting a quality assurance evaluation.

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References
Abstract

Introduction: YWCA Encore is a comprehensive, group-based exercise program designed to offer physical and psychological benefits to women who have undergone breast cancer surgery. Purpose: This program has qualitative data to support its effectiveness, but quantitative data is needed to ensure it is meeting its objectives, such as to increase shoulder mobility and strength, and to reduce pain and discomfort. Methods: A before-after study design was used to assess (1) shoulder range of motion (ROM) using goniometry; (2) shoulder strength using manual muscle testing (MMT); (3) pain using the Brief Pain Inventory (BPI); and (4) quality of life (QOL) using the Functional Assessment of Cancer Therapy-Breast (FACT-B). Results: Significant improvements were found for shoulder flexion and abduction ROM and strength, as well as for physical and emotional well-being on the FACT-B. No significant results were found for pain. Limitations: Due to the small sample size, study design, and potential mediating factors, the results can only suggest these improvements. Conclusion/Future Direction: Authors suggest that this study be continued by future OT students. Recommendations have been made to Encore supervisors to include goal-setting throughout sessions, increase length of program or create an additional follow-up program, and invite an occupational therapists as guest speakers.

Introduction

Breast cancer is the most common form of cancer among women, and survival rates have increased due to better detection and treatment (Loh & Musa, 2015). However, life after breast cancer treatments can be challenging due to short- and long-term side effects of treatment, such as reduced shoulder strength and mobility, fatigue, pain, and depression (Sherman, Heard, & Cavanagh, 2010). YWCA Encore is a comprehensive, group-based exercise program designed to offer physical and psychological benefits to women who have undergone breast cancer surgery. It includes gentle floor- and water-based exercises, education, and social support in a fun, relaxed atmosphere. This program has an abundance of qualitative data to support its effectiveness, but more quantitative data is needed to ensure it is meeting its objectives, such as to increase shoulder mobility and strength, and to reduce pain and discomfort.

Literature Review

Three studies have evaluated the YWCA Encore program. Firstly, in a randomized control trial by Sherman et al. (2010), it was found that self-reported functional ability and energy levels were significantly higher after attending Encore. There were also significant improvements in the participant’s QOL and greater satisfaction with social support. Furthermore, Collie (2011) found that after attending Encore, women reported: improved fitness, mobility and strength; increased knowledge of cancer, lymphedema and support services; increased exercise; improvement in perceived ability to carry out tasks; and, enjoyment of the social support. Lastly, Trahair & Szoreny (2014) found that women reported an increase in self-esteem and improvement in QOL after Encore.

Methods

Participants

This sample included women from the YWCA Encore Spring 2015 session. Participants include women who have been diagnosed with breast cancer and have undergone a mastectomy, lumpectomy, or breast reconstruction surgery at any point in their lives (YWCA Australia, 2009).

Study Design and Materials

A before-after study design was used to assess (1) shoulder ROM using goniometry; (2) shoulder strength using MMT; (3) QOL using the Functional Assessment of Cancer Therapy-Breast (FACT-B); (4) pain using the Brief Pain Inventory (BPI). ROM and strength were measured for abduction, flexion, extension, and internal and external rotation.

Statistical Analysis

Data was analyzed using the Statistical Package for the Social Sciences (SPSS). A paired t-test was used to evaluate ROM measurements. A Wilcoxon signed-rank test was performed for strength, FACT-B, and BPI.
Three participants were involved in the study, one of whom did not participate in the self-report measures. This data was combined with the ten participants from the 2014 student EBP Encore study to allow for a more precise estimate of the effects of the program.

Shoulder ROM & Strength: For the 2015 data, there were significant improvements in abduction ROM ($p=0.27$), but no significant findings for strength. Combined data showed significant improvements in both shoulder abduction ROM and strength ($p=0.001; p=0.005$ respectively) and flexion ROM and strength ($p=0.003; p=0.006$, respectively).

QOL: The 2015 data did not demonstrate any significant changes on the FACT-B scores. However, the combined data showed significant improvements in the physical and emotional well-being domains ($p=0.011; p=0.044$, respectively).

Pain: There were no significant changes for BPI scores in either data sets. The total BPI scores remained relatively constant from baseline to the final measurement for both.

Limitations
This study’s small sample size and the before-after study design limit the generalizability of the results. This was partly addressed by collating the two data sets, however the data collection methods differed. For instance, the present study collected data in the first two weeks of Encore sessions and obtained three measurements for each ROM movement, while the 2014 study did not. Secondly, MMT is not the most reliable method to measure muscle strength, yet was the most convenient method that did not pose a financial cost. Furthermore, there are demographic variables that were not accounted for that may have served as mediating factors, such as level of social support, length of time since diagnosis, and the amount of exercise participants engaged in outside of the program. Finally, because of the eight-week duration of this study, it is unknown whether effects are long-lasting.

Conclusion
This study revealed significant results of the Encore program, including improvement in shoulder mobility and strength, and physical and emotional well-being. Although quantitative data can provide more rigorous support for the program, this only serves to supplement the descriptions provided by participants in surveys and evaluations. These powerful descriptions provided by participants indicate that by attending this program, life after breast cancer can signify more than just surviving.
Let’s Talk Design: Using Evidence to Facilitate Safe Vehicle Ingress & Egress for Older Drivers

Students: Stacie Perlmutter & Olivia Fischer – MSc. OT 2015 Candidates
Supervisor: Brenda Vrkljan, PhD, OT. Reg. (Ont.) Associate Professor, Occupational Therapy

Abstract

Prior research indicates older drivers are at risk of falling during vehicle ingress (entry) and egress (exit). The purpose of the present study was to examine the relationship between movement strategies and mobility issues in older drivers when transferring to/from a vehicle. The aim was to develop designs based on evidence from our study. Methods: Videos of 32 participants (aged 57-87 years: M=72.0, SD=6.86) entering and exiting the same vehicle were reviewed. Each driver was coded according to: 1) ingress/egress movement strategy, 2) hand placement. Data was also analyzed according to mobility impairment. Results: The arm-rest of the door and a one-foot strategy were used most frequently in both groups, but was not statistically significant. Discussion: Level of mobility did not impact vehicle entry/egress movement strategy. Participants used the car door for stability, which can increase fall risk. A two-foot ingress/egress strategy is recommended. Working with colleagues at the Ontario College of Art and Design (OCAD), the research team developed two designs to facilitate safe transfer to/from a car: 1) a door stabilizer and 2) a visual ‘use two feet’ reminder.

Introduction

Driving is an important occupation, particularly for older adults who rely on their vehicle to facilitate community mobility and maintain their independence. Unfortunately, research shows that 37,000 seniors in the U.S. are injured annually when entering (ingress) and exiting (egress) a vehicle, with over 40% of injuries caused by falls (Dellinger et al. 2008). By 2021, it is estimated that 1 in 5 drivers will be aged 65+. Hence, innovations in vehicle designs that address the changing abilities and safety of older drivers are needed (Vrkljan et al., 2010). Few studies have captured their actual interactions with an automobile, including ingress/egress. Menceur et al. identified 5 ingress and 3 egress strategies that are the most commonly used. From their systematic review, Crizzle et al. (2014) found certain vehicle designs could increase the risk of falls. Use of a two foot strategy (Fig.1) as opposed to one-foot (Fig. 2), is more stable due to a widened base of support (Crizzle et al. 2014). Although hand contact can improve ease of ingress/egress, no studies have formally tracked hand location in conjunction with foot placement (Fig. 2). This type of information can provide evidence to determine vehicle designs that prevent falls. The present study aimed to trial an evidence-based, design process whereby movement patterns and hand contacts of older drivers during vehicle ingress/egress were analyzed. Data from the current study was then used to then inform designs concepts specific to the automobile cockpit.

Hypothesis

During ingress and egress, participants who have mobility impairments are more likely to:

a. use the door or steering wheel as a base of support &

b. be more likely to use a two foot strategy rather than a one foot strategy, due to safety

Methods

Participant Recruitment: A secondary analysis from a previous study on the ingress and egress of older drivers (n=32) (Shacklady & Coffin, 2014) Inclusion criteria: valid driver’s’ license; aged 55+.

Ethics and Consent: McMaster ethics approval for the study was obtained. Participants provided informed consent. Measures: Demographics included age, gender. Physical screening measures included: the Berg balance scale, Timed up and go and One leg stance time. Video Recordings of participants’ ingress and egress from the same vehicle (Pontiac Vibe) were captured using Microsoft Kinect. Two variables were tracked: 1) Ingress/Egress Strategy: one vs. two-foot strategy 2) Hand contact points: steering wheel, areas on the door, and the driver’s seat. Procedure: Researchers co-analyzed each video. A usability checklist was created to systematically code movement strategies. This checklist was trialed with 3 participants and results cross-validated (100% observer agreement). The remaining 29 drivers were coded. Analysis: Participants were divided into two groups: individuals with vs. without mobility impairments. Participants were classified as having a mobility impairment if they had one of the following: 1) used a mobility aid; 2) history of falls in past year; or 3) self reported issues with balance. Descriptive and comparative analyses (Fisher’s exact test, t-tests) were conducted. Level of significance was established at $p < 0.05$. 

Figure 1

Figure 2
Participants (n=32), were aged 57-87 years (M=72 years, SD=6.86); 13 males (40%) and 19 females (60%). Participants in the mobility-impaired group (n=21, 66%) had a mean age of 71 (SD=7.5), with 8 males (38%) and 13 females (62%), while the non-impaired group (n=11, 34%) had a mean age of 73.5 (SD=5.716), with 5 males (45%) and 6 females (55%).

Movement Styles: During ingress, participants with mobility impairments were more likely to use a one-foot strategy (76% one foot vs. 24% two feet), as compared to participants without mobility impairment who always (100%) used a one foot strategy. There was no statistical significant difference in ingress between groups. During egress, 48% participants with mobility impairments used a one foot strategy and a two-foot strategy 52% of the time, whereas those without mobility impairments were more likely to use a one foot strategy (73% one-foot vs. 27% two feet), but this results was not statistically significant. Hand Contacts: The three most common areas used for support during ingress/egress were: 1) the armrest on the door (75% ingress, \( p = 0.27 \); 63% egress, \( p = 0.70 \)), 2) the steering wheel (53% ingress, \( p = 0.46 \); 59% egress, \( p = 1.0 \)), and 3) back of the seat (25% ingress, \( p = 0.425 \); 25% egress, \( p = 0.70 \)). Participants in the mobility-impaired group used various areas of the door (armrest, window sill, door frame) (81% ingress; 74% egress), and participants without mobility impairments also used the vehicle door (100% ingress; 64% egress).

Discussion
Results of this study indicated that participants use a variety of movement strategies to enter and exit a vehicle. While we expected a difference between groups, findings suggest that those with and without mobility impairments are using similar movement strategies. For those individuals with mobility impairments, there are concerns that they are not using movements that reduce their fall risk (e.g., using a one strategy as opposed to two foot). This result suggests the need to provide interventions that reduce risk of injury and falls. Through collaboration with the Ontario College of Art and Design (OCAD), our research team met with a student designer and professor to discuss how to translate our findings to actual concepts. Over a series of 9 meetings over an 8 week timeframe, the student OT research team worked with a student from OCAD to refine concepts. The final set of design sketches included: 1) A door stabilizer (Figure 3) and 2) a ‘reminder’ sticker to use two feet during ingress/egress (Figure 4). Study limitations: Caution is warranted with regard to generalizability of the findings due to small number of participants, which may have impacted statistical significance. Other factors, such as differences in height and weight of the participants, as well as the type of vehicle that was selected, must also be considered when interpreting the results. Although video is a reliable means to capture movement strategies, there were no zoom function or camera views from inside the vehicle. Future Study: Next steps in the project include developing prototypes and field-testing of the proposed designs. For example, getting feedback on these early concepts from older drivers is key to understanding if they would actually use the devices. Findings from our study support the need for changes in design that improve the safety of older drivers when transferring to/from an automobile.

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References


Improving Driving Behaviours in Older Adults: Developing a Guidebook for evaluating on-road performance

Students: Cassandra Rapa (MSc. OT Candidate, 2015) and Jessica Bauer (MSc. OT Candidate, 2015)
Supervisors: Sheila Garrett, OT Reg. (Ont.) and Dr. Brenda Vrkljan PhD, OT Reg. (Ont.)

Abstract: The purpose of this project was to develop a step-by-step guidebook for Occupational Therapists to evaluate the on-road performance of older drivers using video footage captured from a research tool called the electronic Driver Observation Schedule (eDOS). The eDOS was initially developed to track actual driving performance of participants involved in the Candrive older driver cohort study. The Candrive study has been tracking the health and driving patterns of older adults aged 70+ for the past five years. Using the best available evidence, the guidebook developed in the current project includes: 1) background knowledge to understand and interpret eDOS results 2) a method to analyze behind-the-wheel performance, and 3) examples of strategies that can be employed to deliver feedback to the driver. This guidebook is part of a series of knowledge translation strategies that ultimately aim to keep older drivers safe behind the wheel for as long as possible.

Introduction: Driving plays an important role in promoting well-being and quality of life in older adults. Having access to a private automobile has been identified as a critical link to participation in community-based activities and maintaining social relationships (Turcotte, 2012). Safe driving requires the interplay of cognitive, visual, and motor abilities. Changes in health status can influence safety behind-the-wheel regardless of age. However, older drivers are at a greater risk of developing age-related health changes that can affect their driving performance (CAOT, 2009).

The Candrive study (Canadian Driving Research Initiative for Vehicular Safety in the Elderly), funded by the Canadian Institutes of Health Research (CIHR), is 5-year prospective cohort study that has tracked the health and driving patterns of over 1000 adults aged 70 and older across Canada, Australia, and New Zealand. This study was developed to examine age, health, and other factors that can influence collision risk. (http://www.candrive.ca). As part of this project, a camera-study was added to three Candrive data collection sites (Montreal, Ottawa, & Hamilton). Within the camera study, the electronic Driver Observation Schedule (eDOS) was used as a tool to capture the actual driving behaviours of older adults as they drove their own vehicles along familiar routes (Koppel et al., 2013). Candrive participants involved in the camera portion of the study identified that they would like feedback on their performance. While such feedback is not possible due to the design of the Candrive cohort given it could influence outcomes of the study, the research team initiated discussion of how the eDOS tool could be translated for use by Occupational Therapists and others to improve behind-the-wheel performance of older drivers.

Purpose: The aim of this project was to develop a step-by-step guide that utilizes on-road video footage of drivers that is captured using High Definition cameras set-up in their own car. Along with the camera footage, behind-the-wheel behaviour is tracked using the eDOS. This unique combination of information can be used by Occupational Therapists and others to provide feedback to the driver on their performance. The phases involved in developing this guidebook have been summarized.

Fig. 1. The set-up of in-car HD camera system that captures actual behaviour behind the wheel. This image shows camera views within the participant’s vehicle that provide a 180 degree view outside and inside the vehicle.
Development of the Guidebook:

Phase I: Literature Review -- Models of Feedback and Effectiveness: The first step in the project was to review current evidence on the most effective means to provide feedback. Our literature search indicated the Pendleton model provides a structured approach to initiate a conversation between the feedback provider and the individual in question (Cantillon & Sargeant, 2008). The model promotes the development of insight by encouraging self-evaluation within the discussion between the instructor and learner (Cantillon & Sargeant, 2008).

In addition to the Pendleton Model, the Model of Actionable Feedback (Larson et al., 2013) outlines four key constructs of effective feedback: 1) timeliness, 2) individualized, 3) non-punitive, and 4) customizable. Guiding principles from these models formed the framework employed in the current guidebook.

With recent advances in video capture technology, such information provides a means to personalize feedback (Feng & Donmez, 2013). Current evidence indicates that when video footage of on-road performance is combined with driver education, it is more effective than standard driver education alone (Porter & Melnyk, 2004). Such feedback can elicit both immediate and long-term positive changes in driving behaviours (Feng & Donmez, 2013).

Phase II: Understanding the eDOS tool. Once this literature review was completed, the eDOS research tool was dissected in order to understand the process by which participants are evaluated and scored using their in-vehicle video footage. This process provided insight on how to best use the eDOS data to provide meaningful feedback. Assistance was required from researchers at the McGill (Montreal) site to understand how eDOS results could be translated in an understandable format. A limitation of the tool that was noted was it fails to capture certain in-vehicle behaviours, such as hand positioning on steering wheel, signal initiation, and operation of secondary controls (e.g., windshield wipers). However, the in-vehicle video footage enables these components to be evaluated and tracked. The guidebook provides users with the ability to interpret such observations within the feedback discussion.

Phase III: User Feedback & Clinical Application: A draft of this guidebook was reviewed by a stakeholder with experience using the eDOS tool and who has OT-training. The stakeholder identified that the guidebook provided a comprehensive overview of how the eDOS can be used for this purpose, as she stated: “this guidebook would be very useful, I could see this being used in a clinical setting” (L. Chan, personal communication, June 11, 2015).

Conclusion & Next Steps: Determining strategies that promote driving safety in older adulthood are needed. Such strategies must be based on the best available evidence. This guidebook aims to address this need. The step-by-step process combines video footage of drivers in their own vehicle and driving environment with personalized feedback. Recent research suggests this type of process is most effective with influencing behind the wheel behaviour. Further evaluation of the guidebook and use of the eDOS for this purpose is required to determine its effectiveness with improving the safety of older drivers in Canada and beyond.

References:

Acknowledgements: Thank you to the Candrive-AUTO21 project participants; Kinga Eliasz and Louisa Chan (Hamilton Candrive site); Yu-Ting Chen (Montreal site). This project is funded by CIHR and AUTO21-NCE.
You’ve invested in your #Macbrain—now protect it
MScOT Candidates: Lauren Carter, Lisa Clarke, Nadia Federici & Amanda Smith
Under the supervision of Carol DeMatteo, Associate Professor (McMaster University)

ABSTRACT. Introduction: McMaster University students are not wearing helmets while cycling on campus, increasing their risk for injury. Purpose: To measure current students’ perceptions and behaviours related to helmet use and implement knowledge translation (KT) strategies around campus to promote positive health behaviour change. Design: A KT study using a cross-sectional survey at two time points. Results: Helmet use recorded through observation ranged from 11-34%. Central tendencies on a Likert scale were calculated for perceptions regarding the effectiveness and importance of wearing a helmet, resulting in a mode of strongly agree for both beliefs. The mode for perceptions of distance impacting the risk of an accident was disagree. It was also found that age, program of study, and previous experience with brain injury influenced behaviours and perceptions regarding helmet use. Conclusion: KT studies require time, resources, and perseverance. University-aged students remain at-risk for head injury due to lack of helmet use. Future KT strategies should focus on students aged 17-29.

For university students, bicycling can be an efficient and enjoyable method of transportation. However, these activities may increase risk of unintentional injury (McPherson et al., 2009).

There is currently no legislation in Ontario requiring adults to wear a helmet while cycling. As a result, many cyclists continue to ride without helmets and are at greater risk for head and brain injury (McPherson et al., 2009). In Canada, “one cyclist dies…each week, and cycling fatalities account for more than 2% of traffic fatalities, a leading cause of death in young adults” (Persaud et al., p.1, 2012). In addition, head injuries represent 20-40% of cycling injuries within Canadian emergency departments (Hagel & Yanchar, 2013).

It has been found that up to 88% of injuries can be prevented by wearing a properly fitted helmet for people riding bicycles (Insurance Bureau of Canada, 2013). Similarly, in a study conducted in 2001, investigators found helmets reduce head injury by 60%, brain injury by 58%, facial injuries by 47%, and fatal injuries by 73% for all riders of all ages (Attewell, Glase & McFadden, 2001). Minor brain injuries can result in headaches, confusion, difficulty with concentration, memory, and emotional regulation. More severe brain injuries can result in significant physical disability and loss of independence with daily activities (Ontario Brain Injury Association, 2014).

There has been substantial research completed with brain injury and helmet use in children, but fewer studies evaluating helmet use in adults, specifically university-aged adults (Coron, McLoughlin, and Dorman, 1996). It was informally observed that a minority of McMaster University students are wearing helmets on campus. This suggests a large population of students is at a significant risk of acquiring a brain injury or other harmful trauma (Hamilton Health Sciences, 2013). The current behaviour of McMaster University students suggests a lack of appreciation of the benefits of helmet use. This justifies the immediate need to intervene with this population.

Knowledge translation (KT) has been suggested as an effective method to change health behaviours (Canadian Institute of Health Research, 2009). KT is the synthesis, dissemination, exchange, and application of knowledge (CIHR, 2009). The Knowledge to Action Framework (Graham et al., 2006) is a method to guide KT, and was used to guide the development, process, and analysis of the current study. The cycle utilizes local context and culture to adapt research evidence to better communicate knowledge to a target audience (Graham et al., 2006).

The objective of the current study is to measure students’ perceptions and behaviours related to helmet use and to implement KT strategies around campus to promote positive health behaviour change. The investigators hypothesize there may be a shift in perceptions towards acceptance of helmet use amongst McMaster University students.

Methods

Sample

McMaster University students were targeted for all KT activities. A convenience sample of the student body (population 30,000) was targeted to complete online surveys. Inclusion criteria: individuals affiliated with McMaster University. All procedures were approved by the Hamilton Integrated Research Ethics Board.

Procedures

Observational counts (pre- and post- KT activities) were completed at two locations on campus. Pre- and post-KT activities surveys were distributed
via email to gather information on perceptions and helmet use behaviours. The online surveys were distributed to student emails through administrative staff of all programs.

The KT strategy was multi-faceted using 4 different methods: i) social media, ii) posters/stickers around campus, iii) an on-campus KT event at the student center, and iv) surveys. Social media was accessed via a Facebook and Twitter account (@luvyourMACbrain). This account as well as posters and stickers distributed around campus provided educational materials to followers.

In addition, a one-day interactive, educational booth was implemented for McMaster University students to learn about head injuries and proper helmet fitting. This booth was intended to facilitate discussions around personal experiences and the importance of helmet use. Descriptive data was gathered at this time about individual personal experiences with brain injury and bicycle-related accidents. Finally, investigators connected with the McMaster Daily News, a campus-wide newspaper, to share information about the current study.

Analyses

All statistics were performed using SPSS v.21 (IBM, 2012). Frequency counts were calculated to analyze participant characteristics. Central tendencies regarding perceptions about helmet use were also determined. Additionally, chi-squared tests were completed to determine differences in proportions with respect to population characteristics and helmet wear.

Results / Discussion

Helmet use recorded through observation increased from 11-34%. This variation in helmet use may be explained by the higher prevalence of undergraduate students on campus during the pre-KT activities count. This is consistent with the positive trend of increased helmet use with increasing age found in survey responses. Participants’ age was also found to influence various perceptions regarding helmet use, with a greater proportion of younger age groups not believing helmets are important. These results suggest KT strategies should focus on younger age groups (i.e. individuals aged 17-29) to promote a change in helmet-wearing behaviours.

Program of study was also found to influence helmet use. Business and Engineering students had the lowest proportion of reported helmet use behaviours. These programs were also found to have the highest proportion of negative views towards helmets. This suggests one’s behaviours are related to their perceptions. A possible explanation for this phenomenon could be the lack of formal education about health or injury-related issues in these academic programs compared to other programs of study.

Furthermore, individuals who had previous experience (either: personal, family or friend) with brain injury as a result of a bicycle-related accident demonstrated more positive perceptions regarding helmet use compared to those without experience. This may be a factor to consider with future KT strategies.

A surprising result was that regardless of participant characteristics, there was a lack of appreciation of the benefits of helmet use when riding short distances. However, the relationship between the likelihood of accidents and riding distance is not proven and represents a gap in current evidence.

Perceptions regarding helmet effectiveness were found to be extremely positive throughout the entire population of study. This suggests this topic is not a necessary component of future KT strategies with this population. However, investigators did identify numerous reasons participants did not wear helmets. The most common response was that participants did not want to carry a helmet around with them. This issue could be avoided if secure, inexpensive storage was provided for students on campus.

Conclusion

Overall, it was found that the Knowledge to Action process takes time, resources, and perseverance to implement successfully. University-aged students remain at-risk for head injury due to lack of helmet use. The number of respondents to the online survey demonstrated an interest in the information this study presented. Collectively, these findings suggest university students not only need to but are also willing to participate in the conversation to protect their brains.

Acknowledgements

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References


Motivation to Participate in Rehabilitation Following a Brain Injury
Amanda Froese & Hailey Albright

Purpose: to explore client perspectives of motivation focusing on facilitators and barriers for motivation to participate in rehabilitation in an ABI population.

What is Motivation?
Motivation is a complex and multifaceted concept. As a result, there exists a vast array of definitions within the literature, all of which attempt to provide a sense of familiarity and simplicity to a multidimensional term. Mclean & Pound (2000a) conceptualize motivation in three main ways: as a purely internal quality of the client or a personality trait; as a product of social factors; and as a combination of social and personal factors (Mclean & Pound, 2000a). Such a definition highlights the existence of both internal and external factors. Both types of factors influence an individual’s motivation in a positive or negative way, and are therefore equally important in understanding what motivates an individual to engage or participate in the world in which they are emerged.

Motivation & Rehabilitation
Motivation has been identified as a precursor to engagement. As a result, increased motivation can lead to increased engagement in rehabilitation and lead to better clinical outcomes (Mclean & Pound, 2000a; Maclean & Pound, 2000b). Therefore, having a better understanding of the factors that affect motivation can allow rehabilitation professionals to increase client engagement in rehabilitation (Mclean & Pound, 2000a). Currently, there is a gap in the literature regarding motivation to engage in rehabilitation following a brain injury.

Results
Following data analysis, three themes emerged:

Motivation is both internal and external to the individual
In this theme, participants identified internal factors such as setting goals or pain as affecting their motivation to participate. External factors included family, community and being treated differently by others as having an impact on their motivation.

Having choice and control in rehabilitation is related to increased engagement/motivation
One theme that emerged was participants enjoyed choosing the types of activities they would engage in and when they would do it. They expressed enjoyment in having control over their rehabilitation process. Similarly, participants talked about having a lack of control or strict rules as something they would change about rehabilitation. These rules limited the choices they were able to make about their own rehabilitation process.

Characteristics of rehabilitation make it motivating
Participants identified that a variety of activities that aligned with their interests including opportunities to be productive and socialize with others were key components to participating in rehabilitation. When asked what they would change, participants discussed how they desired for staff to be friendly and to receive patient education surrounding brain injuries and prognosis.

Discussion
This project provides insight into the factors that motivate an individual to engage in therapy or community programs. Due to the fact that motivation is a complex and abstract concept, it is difficult to know if the concept of motivation was uncovered directly, or if themes relate more to the concept of engagement. In the literature, these two concepts are highly related, with it being difficult to fully understand if motivation is always present as a precursor to engagement (Danzl et al., 2012; Maclean & Pound, 2000a). This research has highlighted the relationship between aspects of motivation, and how all of these components have the potential to impact engagement in therapy (Figure 1).
**Discussion continued...**

As is shown in Figure 1, internal and external factors of motivation, choice and control, and the therapy setting all have positive (blue) or negative factors (grey). Each of these components interacts affecting overall motivation of a client to participate in rehabilitation. In order to lead to optimal engagement, rehabilitation professionals should work to decrease the impact of negative factors and work towards the facilitation of positive factors. One limitation of this model is that it does not take into account the implications of the brain injury and its neurological impact on motivation and engagement.

**Limitations**

A key limitation of the study is length of time since injury as many participants were unable to remember initial rehabilitation. Furthermore, acute and outpatient rehabilitation today may vary significantly from the programs participants experienced at the time of their injury. As a result, the themes uncovered relate more closely to the motivation to engage in community programs for individuals with an ABI, as opposed to inpatient or outpatient rehabilitation. Lastly, participants volunteered to participate and were currently attending community programs, therefore more positive motivating factors may have been discovered due to this bias in the sample.

**Clinical Implications**

Clinicians working in the community, as well as inpatient and outpatient settings are encouraged to consider the complexity of factors that influence motivation. It is important to recognize motivation does not lie exclusively within the client living with an ABI, as has been previously shown with other populations in the research (Mclean & Pound, 2000b). External factors, including the types of activities conducted, staff characteristics, and rules of the organization also impact the level of engagement in therapy. More importantly, each aspect of a person’s internal motivation, their therapy environment and their personal environment interact to impact their level of motivation and ultimately their engagement in rehabilitation. As clinicians, we have to be aware of how our actions and the programs we create can impact overall motivation of a client, engagement in the rehabilitation process, and thereby their treatment outcomes.

**Future Directions**

As a part of a larger project, the overall aim is to gather the perspectives of participants including inpatient and outpatient settings to compare across timing of treatment and between client and clinician perspectives. This will also decrease the likelihood that participants are unable to remember their treatment. Overall, there is a gap in the literature that explores the concept of motivation for individuals with ABI. It is our hope that this project is an initial step in filling that gap and that the model and data uncovered from this research project can lead to an enhancement in the provision of rehabilitation services for this population.

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**Seminal References**


The Development of Executive Function and Self-Regulation in Children and Adolescents: A Scoping Review of Current Literature

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ABSTRACT

**Purpose:** The overall aim of this review is to understand the typical development of executive function (EF) throughout childhood and adolescence. **Methods:** A rigorous and comprehensive literature search was conducted using Arksey and O’Malley’s scoping review framework (2005). **Results:** Findings from the literature revealed several factors influencing the development of EF among children and adolescents, including maturation of the brain and neural connections, parenting practices, play, peers, media, and socioeconomic status. Additionally, there are notable developmental milestones associated with the development of EF. **Conclusion:** The development of EF is significantly influenced by genetic and environmental factors. An advanced understanding of the development of EF can allow occupational therapists to determine typical vs. atypical EF in children, which can lead to earlier identification of EF issues. Having this knowledge is essential to inform the creation of I-CAN tasks for children and adolescents.

INTRODUCTION

Executive function (EF) is an umbrella term for the regulatory and control processes of the brain, which work together to regulate cognitive, behavioral, emotional, and social functions. Traditionally, EF has been conceptualized as a single construct responsible for controlling higher-level cognitive functions. EF has also been understood to be made up of inter-related components, which have a functional influence on one another. The unity-but-diversity view is a combination of the two ways of conceptualizing EF, and views EF as separable components with a common underlying mechanism. Similar to EF, self-regulation (SR) works to monitor and control cognitive, emotional, and behavioural processes, in order to attain goals and adjust to cognitive and social demands. The development of EF and SR is recognized as a slow, gradual, continuous process. While some cognitive abilities develop early on, EF and SR do not reach their functional peak until early adulthood.

EF is difficult to assess due to its many inter-related components. The Innovative Community Based Assessment of Executive Function (I-CAN) is an observation-type assessment tool that has been developed to assess and understand a client’s ability to engage in activities in natural contexts that require the use of multiple executive processes.

The purpose of this scoping review is to understand the typical development of EF and SR throughout childhood and adolescence, which can inform the assessment of EF among pediatric populations when using a tool such as the I-CAN.

METHODS

A rigorous and comprehensive literature search of the development of EF and SR among children and adolescents was conducted. For the purpose of this review, only scholarly research articles were explored. The primary research question is as follows: “What is the typical process of the development of executive function and self-regulation among children and adolescents?” Databases accessed include EMBASE, MEDLINE, ERIC, PsycINFO, and CINAHL. Studies were initially selected by scanning titles, followed by abstract screening, a review of full articles, and hand searching of reference lists. This process yielded a total of 62 articles. Articles were included if they were peer reviewed, written in English, published to the current date, and focused on children and adolescents aged 0-25. Articles focusing on adults or on non-typically developed populations were excluded. Additionally, articles based on measurement and assessment of EF, interventions to improve EF, and the influence of EF on other skills (e.g., writing, math, language/verbal skills) were excluded. Finally, articles that focused on general cognitive function as opposed to EF were not included.

RESULTS AND DISCUSSION

The development of EF and SR during childhood and adolescence parallels the maturation of the brain. Specifically, the prefrontal cortex (PFC) is considered to be the coordinator of EF, and is the last brain region to mature. During development the PFC refines its neural connections through synaptic pruning, resulting in more effective use of EF.

Additionally, brain activation patterns change over the course of development, and transition from global activation to focal activation, indicating increasing efficiency in EF.

As seen in the literature, the way a parent raises their child is the strongest environmental
factor influencing the development of EF and SR. Positive parenting behaviours such as warmth, consistency, and responsiveness, tend to create environments conducive to the child’s comfort, thereby promoting internalization of morals and SR. Moreover, three facets of parenting that have been found to strongly influence the development of EF by acting as external regulators, include maternal sensitivity, scaffolding, and mind-mindedness.

Additional environmental influences on the development of EF and SR include play, peers, the media, and socioeconomic status. For example, children who spend more time watching TV tend to have poorer EF. Finally, many characteristics of an individual such as their gender, temperament, communication style, fantasy orientation, theory of mind, mobility, and exercise can impact the developmental trajectory of EF and SR.

The developmental milestones of EF and SR are as follows:

- **Infancy**
  - Increased ability to modulate emotions through enhanced voluntary control over attention
- **Toddlerhood**
  - Enhanced ability to monitor behaviour at caregiver request (e.g. delayed gratification)
- **Preschool Age (3-4)**
  - Can remember and follow instructions and use strategies to regulate emotions
- **Early Childhood (5-7):**
  - Transition to school increases ability to plan and engage in activities with multiple steps
- **Middle Childhood (8-12):**
  - Planning and organizing skills develops rapidly. Most self regulatory skills are fully developed by 8 or 9
- **Adolescence and Early Adulthood**
  - Learn how to use EF more strategically, enhancing the ability to monitor behaviour in a goal-directed manner

**LIMITATIONS**

There are several limitations of the current literature on the development of EF throughout childhood and adolescence. The majority of research has been focused on EF in atypical populations or typical development at preschool age. This restricted scope of research limits current understanding of how EF typically develops throughout school-age and adolescence. Additionally, it is difficult to determine the developmental trajectory of EF, as the ecological validity of current measures may not be accurately depicting EF development.

**FUTURE DIRECTION**

An advanced understanding of the development of EF in children and adolescents has implications for occupational therapy practice. Specifically, it can allow OTs to determine typical vs. atypical EF in children, which can lead to earlier identification of EF issues. Furthermore, knowledge of typical EF development is essential for creating I-CAN tasks for pediatric populations. The use of the I-CAN in pediatric populations can allow for more accurate assessment of real-world EF difficulties, and can allow for more direct compensation and remediation strategies to facilitate occupational engagement.

**ACKNOWLEDGEMENTS**

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**KEY REFERENCES**

Purpose: to translate the key components of the Do-Live-Well framework into a workshop series for healthy older adults living in the community. Methods: an integrated knowledge translation process was undertaken, with input from various stakeholders and resources. These individuals regularly provided feedback to develop an accessible final product. Results: the final product consists of a leaders’ manual and participant workbook. The workshop includes four content-focused sessions, which align with the Do-Live-Well framework, as well as a fifth session to celebrate the group experience. An Occupational Therapist (OT) and older adult will deliver this information. Discussion: key considerations that guided the workshop development process included flexibility and language. These features ensured an accessible final product that allows for positive health and wellness outcomes for group members.

Traditionally, health promotion campaigns have emphasized the importance of physical activity, diet and smoking cessation. However, these strategies fail to acknowledge other factors that impact health and wellness. This gap demonstrates a unique possibility for the occupational therapy profession to expand the public’s awareness of these factors; the occupational therapy role can include knowledge translation regarding the importance of lifestyle and occupational engagement, as well as population-level interventions (Moll, Gewurtz, Krupa, & Law, 2013).

The “Do-Live-Well” framework (Moll et al., 2014) was created to expand occupational therapy’s role in health promotion. This framework emphasizes the link between occupations, health and wellness represented through four key components: dimensions of experience, activity patterns, health and wellness outcomes, and personal and social forces. Overall, the framework highlights that “What you do every day matters” for your health and wellness (Moll et al., 2014, p. 4).

The Do-Live-Well framework is particularly relevant to individuals during periods of transition, in which dimensions of experience and/or activity patterns may become disrupted (Moll et al., 2014). As a result, these changes may impact one’s health and wellness. Furthermore, these transitions are common in later life including retirement, moving out of one’s home, or loss of a spouse. Therefore, it is essential to ensure the Do-Live-Well message is accessible to this population; the purpose of this project is to translate the key components of the framework into a workshop series for healthy older adults living in the community.

Methods
An integrated knowledge translation process was undertaken to create this workshop series. Initially, literature was sought out to inform the workshop development. These resources included information about principles of older adult learning, as well as other workshops of a similar nature. This literature was triangulated with clinical expertise and client preferences, through consultation with a working group. This group consisted of a variety of professionals working in this area, as well as older adults living in the community. Feedback was regularly sought out from these individuals, as well as from the project supervisor. Through this process, the workshop underwent a series of revisions to meet the project’s overall purpose.

Results
The final product consists of a leaders’ manual for conducting the workshop and a participant workbook for the group members. The workshop series consists of four content-focused sessions, which align with each of the components of the Do-Live-Well framework. Additionally, the final session encourages group members to celebrate what was learned and experienced within the group (see Table 1 for workshop themes). An OT and older adult volunteer will deliver the content through various formats including leader presentations, large and small group discussions, and interactive activities.

The workshop also highlights the importance of how available community
resources can support or hinder occupational engagement. Through providing a list of resources, the workshop encourages group members to maintain healthy behaviours learned through their participation.

The workshop incorporates take home activities, including the development of a SMART goal. These activities are intended to solidify key learning from the sessions, validate the importance of the occupations in which the group members already participate, and allow them to accomplish meaningful goals.

**DISCUSSION**

A number of factors were considered through the development of an accessible workshop series for older adults, including flexibility and language. Instilling inherent flexibility within the workshop was indicated as an important consideration among the working group. This feature ensures that the learning needs of the individuals in the group are better met. Furthermore, the workshop shifts away from a traditional didactic model, by acknowledging the expertise of each individual group member.

Flexibility is demonstrated through several strategies including unscripted dialogue that allows for flow of the natural conversation. Furthermore, various opportunities for choice are available for the leaders and group members to determine how the session activities will be completed. This feature of the workshop is consistent with the Do-Live-Well framework, as well as a less prescriptive approach to health promotion; as a result, group members are able to benefit, through participating in activities that are most meaningful to them.

Language is an important consideration to ensure effective knowledge translation. Appropriate terminology is appreciated among OTs, since “occupation” is typically associated with employment. Conversely, the term “activity” may imply physical exercise (Moll et al., 2013). Furthermore, certain aspects of the Do-Live-Well framework are academic in nature, which may impede understanding among the group members.

Following discussion with the working group, the term occupation was selected to demonstrate the diversity of individual experiences. Group members’ misconceptions about occupation are explored through a group discussion within the workshop, and their understanding is expanded to include leisure and self-care. Consistent with the concept of flexibility, the leaders have the option to use the word activity, if progress in the workshop becomes impeded through using the word occupation.

**FUTURE DIRECTIONS**

It is important to pilot test the workshop content and format, in order to incorporate feedback to improve future revisions. Session and overall workshop evaluation forms have been developed to determine strengths and areas for improvement, as perceived by the group members and leaders. Initial pilot testing will occur in at least three sites in the fall of 2015. At least one of the pilot sites will be in a rural area. Additionally, French translation may occur in the future to assist with implementation at a national level. This process will be facilitated through consultation with an advisory group.

**CONCLUSION**

An integrated knowledge translation process guided the development of a workshop series that is consistent with the Do-Live-Well framework. It is hoped that this workshop will support the health and wellness of older adults living in the community.

**ACKNOWLEDGEMENTS**

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**REFERENCES**


The Experience of Aging for Women with HIV
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Abstract

Background: Women who are growing older with human immunodeficiency virus (HIV) likely face a unique set of challenges related to aging, gender and having HIV. Purpose: To understand the experiences of aging from the perspective of women living with HIV from a rehabilitative and disability lens. Method: This study uses a phenomenological approach and is a cross-sectional study which explores the experiences of women. Interviews were conducted and transcripts were analysed and thematically coded. Results: Data analysis resulted in seven themes: varying levels of acceptance, battling disclosure, declining functionality, living with negative emotions, practising healthy lifestyles, seeking social supports and maximizing support from community services. Implications: Insights from this study include a need for female support groups, education to individuals with HIV and their families, enhanced social services and other support services to aid in the self-management of psychological, cognitive and physical challenges (HIV-specific or otherwise) that result from HIV and aging. Occupational therapy can play a role in providing knowledge, resources and supports to this population in order to better meet the needs of these individuals.

Introduction

Advances in combination antiretroviral therapy (cART) have resulted in people living with HIV/AIDS for 30 to 50 years after infection. The consequences for those aging with HIV include the long term impact of living with the virus and the adverse effects medications, coupled with the natural processes of decline and deterioration associated with aging. Health consequences associated with comorbidities can be confounded by the aging process. Furthermore, adults aging with HIV are impacted by social determinants of health and the double stigma of ageism and living with HIV. These factors have an additive and synergistic effect on increasing the risk for numerous common co-morbidities.

The present paper addresses the topic of aging with HIV through a lens of disability (health challenges of aging with HIV) and rehabilitation (strategies, supports and interventions that address and mitigate disability and promote healthy successful aging with HIV). Additionally, an occupational therapy (OT) lens is taken to ensure that function and occupation in daily activities is considered. These perspectives will not only provide a better understanding of the health challenges experienced by older adults with HIV, but also identify interventions, practical strategies, policies and supports to promote healthy aging among older adults with HIV.

Current knowledge focuses on the physical ramifications of the disease, which tells us little about how HIV is related to the abilities of older adults living with HIV to participate and carry on with their preferred activities and roles in society. The disability experienced by adults with HIV is episodic in nature, and characterized by periods of wellness and illness. However, the experiences of those aging with HIV is not well understood. The overall goal of this study is to understand the experiences of aging from the perspective of women living with HIV through a disability and rehabilitation lens. Implications to OT practice will be considered.

Methods

A cross-sectional study design was employed. Women aged 50+ living with HIV for ≥ 8 years were recruited and interviewed. These women were a part of a larger group of 25 men and women who are being interviewed for a larger study. Study participants were recruited from AIDS Service Organizations in Southern Ontario. For the qualitative analyses, interviews were audio-recorded, transcribed and quality checked by the interviewer. The transcripts were entered into NVIVO to manage and organize the data. The following steps were taken to develop the coding framework: Two authors (NA and RG) each independently read the first four transcripts and, using an open-coding technique, attached descriptive codes to segments of text. Team members discussed, combined and organized the codes to produce a coding framework, which was piloted through the open coding of three transcripts by both coders. Coding schemes were compared and inconsistencies reconciled. Once a satisfactory level of inter-coder stability was reached, remaining transcripts were coded independently by each coder and entered into NVIVO. This study was approved by the Research Ethics Board, Faculty of Health Sciences, McMaster University, Hamilton, Ontario.

Results

Seven key themes emerged from the data analysis from interviews with ten women:

1. **Varying Levels of Acceptance:** Some women described getting older with HIV as simply an aspect of who they are, while others felt that they were defined by the disease. Some women described age providing them with wisdom, and the opportunity to focus on their own interests.

2. **Battling disclosure:** Women’s experiences showed that non-disclosure with family members tended to make their lives more challenging. At the same time, those who disclosed also experienced strains within the family. Stigma also played a role in the women’s dismissal of romantic relationships.

3. **Declining Functionality:** Participants discussed both the cognitive and physical declines they are experiencing. In particular, these women are dealing with decreased memory and attention. All women report the episodic effects of HIV on their energy levels.
4. **Living with Negative Emotions:** Participants described that they currently experience a variety of emotions attributed to living with HIV. These include sadness and emotional isolation. Participants also discussed their anxieties related to their future health, financial state, and housing situations.

5. **Practicing Healthy Lifestyles:** There are commonalities across the participants in terms of the mental, environmental and physical lifestyle choices that are used to cope with life challenges. This includes maintaining a positive attitude, having a sense of purpose and maintaining health habits.

6. **Seeking Social Supports:** Support and encouragement from family members was highly valued by participants. Additionally, family provided participants with a sense of connectedness.

7. **Maximizing Support from Community Services:** Most women sought out connections with a wide variety of community supports; others were not able to do this despite having the desire to do so.

## Discussion

Our findings reinforced the findings of individual’s experiences in the literature, and also brought some new findings to light. The women in our study shared the established view that this stage of their life gave them time to focus more on their own needs; an additional finding in our study is that beyond needs, women described it is the opportune time to pursue their own ambitions and interests. This appears to be a new finding within the HIV literature. Additionally women in our study reported finding a sense of purpose through maintaining their jobs and completing volunteer work. Healthcare practitioners can use these findings to help clients form goals, as well as participate in the community.

Multiple co-morbidities are an additional hurdle that is unique to women aging with HIV. Participants in our study exhibited additional conditions including arthritis, cancer, hepatitis, human papillomavirus, heart conditions, high blood pressure, neurocognitive impairment and major depressive disorder. These additional conditions limits physical functioning and interferes with carrying out daily tasks which causes stress and a decreased sense of control. This experience may be different from that of males, who are less likely to have some of these co-morbidities, such as arthritis. Chronic disease self-management strategies could help these women to manage their day-to-day activities. Access to services, which need not be HIV-specific, will provide much needed education and techniques to maximize their routines and open these women to novel social supports with others who have shared experiences. Furthermore, women experience decreased memory and concentration as they age. Thus education should be supplemented with written material so that women are able to refer to it at a later time.

Despite all of these challenges, these women were able to acquire newfound wisdom and acceptance with age. This is consistent with previous findings of literature. Such knowledge and understanding could be disseminated to a peer support group, where long term survivors of HIV provide guidance to individuals who have received their diagnosis more recently. This can help facilitate the sharing of advice, information and resources, increase the social network of these women and provide a sense of purpose to the long term survivors which can encourage further activity and engagement. Family plays a large role in these women’s lives; however disclosure was seen to lead to as strain in relationships and left participants feeling isolated. Therefore it is of importance that families are provided education on the HIV diagnosis and the physical, psychological and social impacts that the condition can have on their loved one. Future research could involve HIV education for families during family meetings or in group format to see if such knowledge dissemination would lead to an increase in understanding and social connectedness of these women.

## Conclusion and Implications for OT

Overall, this study highlighted the experiences for women aging with HIV. This study elucidates a number of implications for OT practice. The provision of take-home resources to clients would ensure that suggested strategies related to cognitive and physical decline are reinforced. This can prove to be useful given the difficulties with focus, concentration and energy levels. OT practice could also play a key role in connecting clients to appropriate resources, whether they are specific to cognitive and physical coping strategies, or supports related to finances, employment, housing and transportation. Connecting this population to female support groups would also provide a sense of belonging, which is lacking in this minority group. As seen through this study, occupation provides individuals with a sense of purpose; OTs are well-equipped to enable participation in meaningful activities to ensure that these women take full advantage of their current situations.

## References


Music therapy for clients who have sustained a brain injury: A scoping review
Julia Corsini & Kenneth Curtis, MSc. OT Candidates (2015), McMaster University
Supervisors: Season Kam, OT Reg. (Ont.) & Jill Oakes, OT Reg. (Ont.)

Abstract

Purpose: This scoping review aims to explore the current state of knowledge regarding music therapy and brain injury literature to determine the role music can play within occupational therapy (OT) practice. Methods: The framework developed by Arksey and O’Malley (2005) was utilized and focused on the use of music therapy for remediating cognitive dysfunction for clients with a brain injury. Additionally, an algorithm was developed to systematically search through grey literature for any potentially useful quality resources. Results: Findings from the literature demonstrated a number of gaps. However, some promising research was found for elements of music therapy to have a positive influence on cognitive impairments post brain injury. The areas most supported by evidence include improved mood, executive function, self-efficacy, and aspects of social interaction, with attention, memory, and language impairments requiring further research. Conclusion: Given the inconsistency in findings and lack of large-scale trials, OTs should remain cautious when employing music therapy in cognitive rehabilitative practice. To strengthen the evidence related to music therapy, future research requires large-scale randomized controlled trials (RCTs) in order to better understand how music therapy can affect cognitive performance after a brain injury.

Introduction & Literature Review

In Canada, brain injury affects 165,000 individuals per year (Northern Brain Injury Association, 2013). Depending on which regions of the brain have been damaged, brain injuries can affect a variety of functions, including cognition, which can have a significant impact on an individual’s ability to engage in meaningful occupations (Reed, 2003). Recent advancements in brain-imaging equipment have led to a growing body of research around the ability of music therapy to engage several cognitive processes (Hedge, 2014). Within the field of OT, music, as a therapeutic tool, has the potential to incorporate all of the components of occupational performance – cognitive, motor, sensory, social, and emotional (MacRae, 1990). Therefore, in order to explore the role music can play within OT practice, this scoping review will examine music therapy and brain injury literature to determine what the benefits of music therapy are for remediating cognitive dysfunction (including attention, memory, emotional dysregulation, executive function, language impairments, and social skills) experienced by clients with brain injuries.

Methods

The authors of this study used the Arksey and O'Malley (2005) framework for conducting a scoping review. Various databases including Cochrane Library, CINHAL, OTseeker, and EMBASE, MEDLINE and PsycINFO via OVID, were searched to explore summaries and individual trials on the topic area, as no practice guidelines currently exist. The following inclusion criteria were selected: articles with target populations of adults (aged 18 and older) with an acquired brain injury (ABI), and at least one outcome variable within the domain of cognitive dysfunction. The following exclusion criteria were selected: articles with target pediatric populations and co-intervention of music therapy with another therapeutic module. An algorithm was developed to systematically search through grey literature for any potentially useful quality resources. A total of 11 applicable articles were selected for the review.

Results and Discussion

Neurologic music therapy (NMT), a subdiscipline of music therapy, uses music to stimulate physiologically complex cognitive, affective, and sensorimotor processes, which are generalizable and transferable to nonmusical brain and behaviour function (Hegde, 2014). Although NMT is not the only form of music therapy within the literature, the findings from this review suggest that it is the predominant mode used for remediating cognitive dysfunction following an ABI.

Emotional Dysregulation: The strongest evidence was associated with improvements in emotional regulation. Two single studies (pre/post test quasi experimental design, and an observational study) supported the ability of music therapy to improve clients’ mood, reduce agitation, and lessen the impact of depression and anxiety (Guétin, Soua, Voiriot, Picot, & Hérisson, 2008; Thaut et al., 2009). Aside from published clinical trials, certified music therapists discussed their experiences with clients, with many reporting benefits in the domain of wellbeing and independence (Soshensky, 2008).

Executive Function: In the same study by Thaut et al., (2009), the results produced a large effect size and demonstrated measurable improvements in executive function and self-efficacy ratings related to executive...
function. The improvement in self-efficacy demonstrated the potential for music therapy to effectively increase an individual’s confidence in overcoming executive dysfunction.

**Social Skills:** Two crossover trials supported the ability of music therapy to improve clients’ level of self-disclosure, in addition to encouraging and promoting social interaction and cooperative behaviour (Hald, 2012; Nayak, Wheeler, Shiflett, & Agostinelli, 2000). Furthermore, family members of the clients reported a significant improvement in social interaction within the music therapy group (Nayak et al., 2000).

**Memory:** Evidence is limited with regards to the effects of music therapy on memory. Four single studies (pre/post test quasi experimental design, single case study, case series, and a crossover trial), demonstrated a lack of statistical significance, with no substantial improvements in memory (Baird & Samson, 2014; Baker, 2001; Gurr & Foxhall, 2014; Thaut et al., 2009). However, two of the studies demonstrated the participants’ ability to understand and process music more easily, when compared to other sensory material (e.g. pictorial information and verbal prompts; Baird & Samson, 2014; Baker, 2001).

**Attention:** Attention circuits on both sides of the brain react to music, potentially explaining its value in grabbing the attention of clients with attentional impairments (Thaut & McIntosh, 2010). In the same study by Thaut et al. (2009), NMT was used to address deficits in attention. In spite of the well-grounded theory supporting why music therapy may assist in regulating attention, the study demonstrated no improvement following treatment.

**Language Impairments:** There were no clinical trials that addressed music therapy for improving language skills. As music elicits activity in the Broca’s area, which is responsible for many sequencing and timing processes, it is hypothesized that music therapy could be valuable in addressing language impairments, such as speech execution difficulties (Thaut & McIntosh, 2010). However, direct effects of music therapy on language impairments remain unclear.

**Conclusion and Future Directions**

There is some promising evidence for elements of music therapy to have a positive influence on common cognitive impairments post brain injury, which frequently have a negative effect on occupational performance. Some of the benefits most supported by evidence include improved mood, executive function, self-efficacy, and aspects of social interaction. The areas requiring further research include music therapy’s impact on attention, memory, and language impairments. Within OT practice, simple components of NMT (such as a music component to a memory program) may be added on top of existing cognitive remediation strategies as a vector to improve task engagement and motivation. However, given the inconsistency in findings and lack of large-scale trials, OTs should remain cautious when employing aspects of music therapy in practice. To strengthen the evidence related to music therapy, future research requires large-scale RCTs in order to better understand how music therapy can affect cognitive performance after a brain injury. As gaps in the research are addressed, music therapy may become a more consistent component of cognitive rehabilitation for brain injuries, due to its holistic benefits, cost efficiency, and powerful ability to induce a positive emotional state.

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**References**


Putting ‘occupation’ back in Occupational Therapy: The perceived effectiveness of a functional activities program in stroke rehabilitation.
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Supervisor: Susan Pettit, OT Reg. (Ont.)

Abstract

Objective. This quality assurance report combines client and staff feedback on the perceived effectiveness of a functional activities program (FAP) for persons with stroke in managing their Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs), as well as a literature review of evidence in functional intervention for stroke rehabilitation. Methods. Semi-structured interviews were conducted with 9 clients and 5 staff members. A qualitative thematic analysis was completed. Results. The clients perceived the FAP was strong in meeting its objectives in “social interaction”, “problem solving”, “real-world’ activities”, and “confidence”. There were mixed perceptions of the FAP as upper-extremity therapy by clients, and clients expressed wanting more choice in activity selection, a better match between challenge and current functioning, and also the potential for homework components outside of therapy time. Conclusion. Clients and staff perceive the FAP at St. Peter’s Hospital to be addressing functional physical, social, psycho-emotional, and cognitive-perceptual rehabilitation to improve client confidence and skills in I/ADLs upon discharge home.

Introduction

The role of inpatient stroke rehabilitation occupational therapists (OT) can be twofold: To intervene focusing on pre-functional skills (such as strength and range of motion) in order to encourage a clients’ physical recovery in order to be able to complete daily life tasks, or to facilitate skill building via practicing functional, occupation-based tasks. Literature reports that functional intervention is more dynamic in terms of the bodily systems it engages when compared to pre-functional tasks, and therefore may better prepare clients with stroke to achieve realistic goals in their daily lives post-discharge (Mathiowetz, 2011). Quality evidence supports functional activity in positively affecting I/ADL performance, skill transfer, and physical and cognitive-perceptual component improvement (McEwen et al., 2014; Nilsen, et al., 2015; Pollock et al., 2014; Gillen et al., 2015). Research also reports that functional activity may positively affect client psycho-emotional systems, which is a critical yet often overlooked necessity in stroke rehabilitation (Korpershoek, van der Bijl, & Hafsteindottir, 2011). While pre-functional and functional training are both essential in stroke rehabilitation, functional activity rehabilitates more complex systems and may ultimately lead to successful resumption of meaningful occupations when stroke clients return home post-discharge.

Setting and Purpose: St. Peter’s Hospital in Hamilton, ON offers 60-day rehabilitation, with some beds designated for stroke. Occupation-based activities implemented in the FAP are various actual I/ADL activities and may include water pouring, flye scanning, and preparing a meal. This quality assurance report was designed to assess the perceived effectiveness of the FAP from participants and staff. The four objectives of the FAP include to: 1) Promote Bilateral Upper Extremity Use, 2) Normalize Client Experience, 3) Develop Cognition and Perceptual Skills, 4) Provide Education.

Methods

Participants in the FAP were provided one week of a range of motion (ROM) exercise group, interviewed regarding their experience in this group, and then returned to the FAP and were interviewed about their experience in the FAP. Clients were invited to be interviewed if they had participated in at least 2 full sessions of either group. The authors collaborated to develop semi-structured interview questions that would target client perceptions of the FAP objectives, and the survey was ‘translated’ into an aphasia-friendly version. Interviews were conducted privately with the participant and both authors (one as an interviewer, one taking notes). The authors meticulously discussed interviews and emerged themes in order to ensure that participant statements were accurately represented, to the point of data saturation. A total of 17 interviews were conducted.

Results

The data analysis of staff interviews alone revealed three major themes regarding the FAP: 1) Improved awareness by clients of personal strengths and limitations and improved willingness to try new tasks. 2) The FAP is extremely useful in discharge planning and communicating with family members of clients. 3) The FAP requires sufficient planning time and resources. The data analysis of participant and staff interviews combined revealed five major themes regarding the FAP’s perceived effectiveness to address outcomes:

1) Social Interaction. The most common recurrent theme from interviews was that clients strongly enjoy the social interaction of the groups. The staff perceived the conversations within the FAP to be more meaningful than during the exercise group.

“It’s extremely enjoyable. The fact is, I’m not sitting in my room, doing nothing, when I could be at the FAP experiencing new skills or helping improve on skills… it’s a really good element.” (Participant 5)
2) Problem Solving. Clients expressed that the FAP encourages realistic problem solving, and is more challenging cognitively than the ROM Exercise group.

“I was reading the pill bottle [in FAP], how many times per day I’m to take these pills and where to put them in the proper slots. It’s very useful. Especially for someone who never took pills [pre-stroke]… it’s very new for me. It’s good practice.” (Participant 5)

3) ‘Real-world’ Activities. Some clients expressed that the activities in the FAP are meaningful to them in that they reflect what life will be like at discharge home. The participants did not express that the exercise group was relevant to ADLs. When asked if the ROM Exercise group made Client 4 feel more confident in managing I/ADLs at home the client replied, “I can’t imagine that it would. Oh God, I mean, hand therapy and what you do at home is different. So it’s not.” When the same question was asked about the FAP, Participant 5 stated, “Yeah! It sets me up… It’s life skills.”

4) Confidence. The second-most recurrent theme from all participants was that the FAP enhanced their confidence in returning to daily life activities at home after discharge.

“I find we get to see people succeed in things they didn’t even know they could do [in the FAP]… Or they’ll say ‘I can’t do that’, and then you might show them a way they could try doing it, accommodating it, and then they’ll say, ‘Oh! I can do it, I can do this!’” (Staff 1, OTA/PTA)

5) Perception as Upper Extremity Therapy. The FAP is perceived to moderately promote bilateral upper extremity use by most clients, though not consistently. Staff perceives the FAP is strongly encouraging bilateral upper extremity use, especially in engaging in everyday activities.

Recommendations & Discussion

The following recommendations may improve client outcomes and are based in feedback. Clients expressed wanting more choice in activity selection to promote autonomy, and desiring a better match between the challenge of the activity and current functioning. Some clients wanted the potential for homework outside of therapy time, and education should be provided to inform clients about the evidence supporting the therapeutic benefits of activities in the FAP.

The participants and the staff perceived that the FAP is successfully addressing the four objectives to a large extent. The recommendations to potentially improve the FAP are based on participant feedback and current stroke rehabilitation evidence. The clients and the staff perceived that the skills learned and practiced in FAP are relevant and applicable not only to performing functional activity during rehabilitation, but also its encouragement to engage in meaningful everyday activities (I/ADLs) post-discharge at home.

Conclusion

The FAP at St. Peter’s Restorative Care Unit was designed with the most recent stroke rehabilitation evidence available in order to promote occupational performance for clients with stroke and prepare them for discharge home. The FAP appears to be meeting its objectives based on interviews, and recommendations are included to continue to improve the program. It is interesting to note that the FAP is boosting participant confidence in their abilities to perform occupations upon discharge, possibly instilling hope in stroke clients. Functional activity is an incredibly dynamic experience, and functional retraining allows facilitators to consider the individual’s hopes and roles after stroke, rather than solely focusing on the physical body.

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Exploring the Experiences of Injured Workers who Fail to Return to Work

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Abstract

Purpose: To explore the experiences of injured workers who have difficult return to work trajectories, and to inform further research examining the complex interaction of different disability benefit systems. Methods: In-depth, semi-structured interviews with 10 injured workers who have experienced difficulty returning to work as expected following a work-related injury. Interviews were transcribed verbatim and analysed using a constant comparative approach. Findings: Six major themes emerged from the analysis that captured the journey of injured workers who experience challenging return to work trajectories. The first two themes focused on pre-injury status and the injury, followed by 4 post-injury themes: (1) WSIB and other benefit systems; (2) Return to work; (3) Impacts of injury and emotional distress; and (4) Fear and uncertainty of the future. Conclusion: This research helps to inform the many barriers faced by injured workers attempting to return to work after injury, as well as the many social, physical, and emotional consequences they experience.

Introduction

This project was designed to explore the experiences of injured workers who failed to return to work as expected and inform further research examining the complex interaction of different disability benefit systems. A minority, though significant proportion, of injured workers fail to return to work after a work-related injury or illness. While a few studies have examined the impacts of work-related injury or illness, the impacts of failing to return to work after a work-related injury or illness remain poorly understood. The questions guiding this research were: (1) What are the social, economic and emotional impacts on injured workers, their families and communities, of failing to return to work? (2) How are workers’ experiences shaped by their interactions with disability benefit systems? (3) How are workers’ experiences shaped by physical, mental, or social vulnerability?

Methods

We used interpretative approach to qualitative research to provide an in-depth analysis of what happens to injured workers when work reintegration is not successful. The overall project was comprised of three interrelated research components: 1) a scoping review of existing literature and relevant policy documents about injured workers who fail to return to work; 2) interviews with injured workers who have been unable to return to work; and 3) interviews with service providers who provide support to injured workers who do not return to work as expected. The focus of this presentation is on the findings from the interviews with injured workers.

Participants: Ten injured workers in Ontario were recruited as participants via flyers, newsletters, and emails shared through our partner organizations. Participants were also recruited through the Chinese injured Workers Support Group, the Injured Workers Facebook Support Group and the Hamilton Injured Workers Group. We used maximal variability sampling to obtain as much diversity as possible in characteristics that impact return to work, such as: the nature of injury, employment background, education level, age, and literacy.

Data Collection: Ethics approval and voluntary informed consent was obtained prior to data collection. Data was collected using semi-structured interviews with each participant either in person or by phone, and lasted approximately 60-90 minutes. One interview was conducted with an interpreter. Interviews were digitally recorded and transcribed verbatim.

Data Analysis: Data was managed with Dedoose software. Two student researchers each acted as primary coders on 5 interviews, and critically appraised the other researcher’s coding to promote comprehensiveness of the data. A total of 121 codes were used throughout the coding process. The codes were organized into groups of 13 themes that were used to generalize the data into theory using a constructivist grounded theory approach.

Findings

Results from the interviews were coded and 6 major themes emerged. Participants’ status pre-injury and how the injury occurred served as the starting point for each journey, followed by 4 post-injury themes: (1) WSIB and other benefit systems; (2) Return to work; (3) Impacts of injury and emotional distress; and (4) Fear and uncertainty of the future.
Pre-Injury: Participants described their pre-injury life as unremarkable. Common among participants was a lack of knowledge of their rights and responsibilities as an injured worker, or how the WSIB functions.

Injury: All participants were injured completing some variant of manual labour, and many shared that their workplace was prone to injuries, and that very little training was provided to workers to prevent injuries. Every participant reported their injury to their employer, however when they reported varied.

WSIB and Other Benefit Systems: No one described their experience with WSIB as positive; many described accessing WSIB as impersonal, with confusing forms and policies. Of particular concern, was a system used to classify injuries, which informed the amount of time off and compensation entitled, which many participants didn’t fit into. Due to complications in accessing WSIB, most turned to other benefit systems (ex. employment insurance, Ontario Works), though they expressed confusion and disappointment with this as they felt they should be covered by the WSIB.

Return to Work: All participants attempted to return to the workplace where their injury occurred, though none were successful. Most reported returning to a workplace that did not support them, as needed accommodations weren’t applied, and many felt harassed by their coworkers due to the stigma placed on them by their employer. Many felt their employers were trying to make them quit because they didn’t want to continue supporting them on a long-term basis. Others felt they returned too early due to WSIB policies, making them vulnerable to fail. Over half of the participants reported experiencing new or re-injury. Some who couldn’t be accommodated are being retrained, though many are frustrated as this program doesn’t take into account their interests or skills.

Impacts of Injury and Emotional Distress: Emotional distress was reported by all participants, and this feeling emerged at all points of the injured worker journey. The presence of a work-related injury impacted the roles of each participant, as it changed the dynamics of their family roles as caregivers and providers, abilities to engage in activities of daily living, and their social relationships. Impacts of financial hardship were significant.

Fear and Uncertainty of the Future: Many of the participants had concerns about the future, as they described how their injury and attempts to return to work had hampered their capacity to plan for the future, resulting in significant turmoil, feelings of anger, and a lack of direction. Most prominent themes were related to financial uncertainty, and future employment. Many described the challenge of trying to find a new position after being retrained, as it is quite difficult to secure a position as a person with permanent restrictions.

Discussion

Results from this study highlight the many social, economic, and emotional impacts on injured workers who fail to return to work. It also helps to identify those who may be most vulnerable to experiencing secondary injuries, as participants experiencing financial hardship and few alternatives often worked in unsafe conditions. Results from this study found that there are many barriers that injured workers face when returning to work, most of them stemming from a lack of knowledge about the WSIB, inflexible WSIB policies, and unsupportive workplaces. Commonalities across this data can be used to help inform workplace training, WSIB policies, and the need for consequences to workplaces that do not provide adequate accommodations for workers.

Future Research

Although the perspective of family members is beyond the scope of the current project, we acknowledge its critical importance as family members of injured workers represent an important group that is often affected by workplace injuries and difficulties with return to work, and a key player in the work reintegration process. Furthermore, the findings highlight the need to further examine how the various disability benefit systems interact, creating a complex system of support.

Acknowledgements

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References

Exploring Perspectives of Students with Mental Illness

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Introduction

A university education is an important milestone in career development. However, we have very little understanding about how people with mental illness make decisions about attending university and their future careers. There is a growing body of literature about the experiences of students with disabilities on university campuses that has identified ongoing challenges and barriers. For example, there remains ongoing stigma associated with many disabilities and requests for accommodations (Madriaga, 2007), which extends to the admission process (Vickerman & Blundell, 2010). As a result, many students hesitate to disclose their disability. Research from the United Kingdom suggests that just over half of university applicants who disclosed their disability were contacted prior to starting their program, and only a third of those contacted found the contact helpful (Vickerman & Blundell, 2010). There is also indication that many people with disabilities lack the information they need to make informed decisions about their futures, including decisions around post-secondary education (PSE) (Madriaga, 2007). Research conducted in Ontario by the Higher Education Quality Council of Ontario (HEQCO) has examined special needs students and their transitions to PSE and revealed the effects of a range of individual differences and contexts on postsecondary school pathways (Sweet et al., 2012). Despite these developments, we have little understanding of how students with mental illness make decisions to attend PSE and pursue future careers, and the supports that assist in this process.

Purpose

The purpose of this research was to explore how people living with mental illness make decisions about attending university and their future careers, the supports and resources they utilize, the advice and guidance they are provided with, and the barriers or challenges that they encounter.

Methods

Upon approval from the McMaster Research Ethics Board:

1. Participants were recruited through relevant peer support and advocacy communities on campus, student clubs, student services, as well as a poster with study information that was posted at high traffic areas on campus. Student communities and groups were contacted and asked to circulate information about the study to their members via email and social media.
2. Nine interviews were conducted on campus; participants were given a $25 gift certificate as a thank-you for their contribution to the research.
3. Interviews were completed and audio recorded; the interviews were transcribed verbatim and uploaded into Dedoose, an online computer software program designed to code and analyze mixed methods research.
4. Using an iterative, constant comparative approach, the transcripts were read and reread to explore similarities and differences across different perspectives (Charmaz, 2006). Team meetings were used to discuss key concepts and categories that emerged from our analysis and to identify directions for further analysis.
5. Creation of a visual representation to illustrate the relationships between the key concepts.

Findings

Transitions – There is a lack of support for students with mental illness in transitions.
Academic/Career Decisions – Participants were eager to reach academic/career goals despite negative impacts on mental health. Family and peers are often major supports in their decision making.
Impact of studies on Mental Health – Although mental health has an influence on academic studies, a dynamic interaction was documented between the two.
Negotiating Accommodations – Significant time was required to register for formal arrangements and required students to predict their course of illness.
Barriers – Included stigma, financial barriers to accessing private support services; long wait lists for campus support.
Ideal Supports – Included system level changes to increase awareness and understanding of mental health; making accommodations more accessible and supportive communities at the university.

Discussion

This figure illustrates the key themes identified from the findings. There were barriers in transitioning from high school to university and from university to career. Supports were used throughout these experiences and accommodations were negotiated to be successful in the academic setting to pursue career goals. The impact of mental health was embedded throughout the transition experiences as it had an impact on completion of academic workload and passion for academic and career pursuits. Ideal supports are separated from the current illustration, as it could have a global impact on the transition experience.

This study has shed light on the gap in transitions services available. Although academic and counselling support services exist for students with mental illness, they don’t seem to be meeting the needs of the students on campus.

Conclusions, Future Directions & Occupational Therapy Implications

The transition from secondary school to PSE to the labour market can be challenging for students with mental illness. This study highlights the need for more focus on transition support into and out of university in both research and practice. There is a need for more research to determine how best to support students with mental illness during this important phase of their career development. Ongoing research should be directed at examining the interaction between student mental health and career decisions across several Canadian or Ontario universities to identify existing innovations and promising practices.

These significant decisions impact students’ occupational transition experiences to PSE and careers. Occupational therapists (OTs) are experts in assisting individuals through personal and environmental changes during transitions across the lifespan. Our insight into both occupational transitions and mental illness can position OTs as key players in both identifying best practices and delivering supports to students with mental illness as they consider their options.

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Seminal References

ABSTRACT
This project was conducted for CW CCAC to identify program evaluation ideas for the expansion of the Partnering for Change (P4C) program in their catchment area. Twelve themes across the three predetermined areas of quality, accountability and outcomes emerged from qualitative interviews. Descriptive data was gathered through a comparison between the CW CCAC billing codes and codebook tracking data collected by the P4C research team. Based on the evidence that emerged from this project, the authors have provided a number of recommendations to guide CW CCAC in planning future program evaluation activities. The program evaluation recommendations can also inform other CCACs in Ontario who are implementing the P4C program as an alternative occupational therapy service delivery model in schools.

INTRODUCTION
P4C is the innovative, evidence driven model that is being evaluated. In this model there is an emphasis on the collaboration to enhance the participation of children. Occupational therapists (OTs) work in the school, alongside educators to build their capacity and support the children. OTs are able to observe in the classrooms to provide the appropriate level of intervention, according to the model. There are three levels of intervention in the tiered P4C model: Universal Design, which looks at strategies and modifications that can help the classroom as a whole; Differentiated Instruction, where the OTs are able to work with students in groups and identify needs for strategies; and Accommodation in the form of individualized accommodations and strategies for the children who have more complex needs. CW CCAC is in its second year of implementation and decided on expansion of the model into 20 more schools, with the OTs providing services every other week. As CW CCAC is continuing to use this model the management team wanted to set up a program evaluation approach that would be relevant, affordable and sustainable. They want to know what information would be most important to collect and asked if the P4C research team could help with this. The project manager of P4C has been supervising two student OTs to conduct a small project to address the program evaluation needs of CW CCAC. This report will be used to inform CW CCAC of possible options for program evaluation.

PROGRAM EVALUATION
Program evaluation is the systematic process of assessing and reviewing the efficiency, effectiveness and implementation of a program (Lett, Law, Pollock, Stewart, Westmorland, Philpot, & Bosch, 1999). Performing a program evaluation is an integral component of an effective program. This evaluation of the expansion program by CW CCAC focused on both the process (quality and accountability) and the outcomes, as dictated by CW CCAC. As pediatric occupational therapy services are inherently family-centered, a part of the program evaluation needs to address which aspects of the P4C program are being most valued by parents, educators, OTs, and stakeholders.

METHODS
The authors chose to employ qualitative methods for the project to explore both the statistical data and the perspectives of stakeholders in regards to what is important in the P4C program. In regards to program evaluation, qualitative methods enable researchers to understand how a program was implemented, the experiences of participants, and the program’s strengths and weaknesses. Qualitative non-numerical data can be presented and explained in meaningful ways to dependably identify important themes (Patton, 2002). Semi Structured Interview. A semi-structured interview process was used to interview twelve stakeholders, with varying perspectives (coded CCAC, education or OT). Each author also shadowed a P4C OT to gather information regarding their perspectives. The questions were formulated based on literature the three areas of quality, accountability and outcomes. The authors and P4C project manager content analyzed the transcripts to identify main categories and themes based on guidelines of qualitative research and evaluation methods. Descriptive Data Comparison. CW CCAC provided the authors with the billing codes that the P4C OTs used. The authors also received the codebook from the P4C program research coordinator, which identified the different types and categories of activities the P4C OTs reported. The authors compared the two data sets in a chart, focusing specifically on the categories used and how descriptive the available data was.
FINDINGS
The findings are a combination of data collected through interviews as well as the descriptive data collected by CW CCAC and the research project. In total the authors were able to pull out twelve consistent themes and create a comparison chart of categories. Quality refers to components that participants believed contributed to the high level of excellence or value of the P4C program: Timely Access to Care, Access to OT, Good Relationships, and Consistency of Service Provision. Accountability refers to themes that contribute to delivering a service that is expected: Doing what you say you are going to do, Cost Effectiveness, and Knowledge Translation. The comparison chart of descriptive data was included in accountability. Outcomes refers to the results that occurred due to the P4C program: Confidence in Children, Satisfaction, Capacity Building, Early Identification and It’s Early Stages.

DISCUSSION
The findings from this project identified components of program evaluation to consider. Although themes have been placed under the three different categories, it is important to understand that there is interaction and overlap of the themes. For example, capacity building was identified as an indicator of quality as well as an outcome. In addition, one is held accountable for providing quality of a service or for producing an outcome. Another important point is that the implementation of the P4C model is still in its developmental phases. There is much still to be learned, which will contribute to improving and adapting the program. As the P4C program evolves, different outcomes may emerge over time. For example, there are currently changes in confidence of children, in time, this may lead to an increase in participation in the community and at school. Through the interviews with the various participants the authors have gathered ideas for monitoring and measuring the various categories and themes for program evaluation activities with surveys and documentation reviews being the main suggestions. The authors searched current literature within health care to identify methods that are currently being used for evaluation. Current measures used include the Canadian Occupational Performance Measure, the School Function Assessment, Satisfaction Surveys and the Measure of Processes of Care Questionnaire.

RECOMMENDATIONS/FUTURE DIRECTIONS
Billing Codes/Workload Measurements. The billing codes currently used are unable to capture a meaningful picture of what a P4C OT is doing. The codes reflect more of the ‘old’ service delivery model, which was more concerned with an OT’s caseload. In the P4C model, billing codes should focus more on overall workload, as the whole school has become the OT’s client (Jackson, Polichino, & Potter, 2006). The workload approach will capture how the OTs are using their full range of skills. Chart Review. CW CCAC would benefit from performing regular chart reviews, to get a sense of what the OT is doing throughout their day. These can also serve as a way to inform the future process and direction of the P4C program. A variety of sources should be examined. Survey by CCAC Care Coordinators. It is recommended that a survey be used to measure components such as capacity building, satisfaction, accessibility to the OT and relationships. The survey would be conducted once or twice a year during school visits. It is suggested that a Likert scale be used with room to comment, instead of a yes or no method. This will allow respondents to give a rating, and observe change in key areas of program evaluation. Continue using the RACI Model and Lean Management Model. CW CCAC is currently using the RACI model (Responsible, Accountable, Consulted, Informed) for identifying the roles and responsibilities during this organizational change process, the P4C expansion program. By continuing to use these models, CW CCAC will be able to manage quality and accountability. It is recommended that in a future program evaluation, CW CCAC examines each activity in the P4C program and determines whether it is “value-added” or “non-value-added” (Deans & Wade, 2011). Ongoing Communication and Evolution. CCAC should continue to have meetings on a regular basis involving staff and stakeholders to discuss the P4C program and plan for the future. Throughout the interviews, it had been verbalized that participants need help when first implementing the P4C program, as it is a major shift in thinking, and an open forum for sharing information and ideas could be helpful. Possibilities of future research include evaluation of the P4C program for children with different diagnoses, and as a service delivery model for other healthcare services such as physiotherapy and speech therapy in schools.

ACKNOWLEDGEMENTS
The authors would like to acknowledge Debra Stewart (Project Supervisor), and Susan Wynes and Naomi Uy from CW CCAC for their mentorship and guidance.

REFERENCES
Development of a Fidelity Measure for Partnering for Change

Tiffany Clarke, Maija McKibbon, Brittany So, Emily Warren, M.Sc. (OT) Candidates 2015, McMaster University
Supervisors: Wenonah Campbell, Ph.D. and Nancy Pollock, M.Sc. OT (Reg.) On

Purpose: To develop a process for measuring the fidelity of the Partnering for Change (P4C) school-based occupational therapy service model. Methods: Cognitive interviews were conducted with 7 P4C occupational therapists (OTs) to elicit their interpretation of a list of “core” or essential attributes of the P4C model and their views on how these could be measured in practice. Content from the interviews was used to develop an observation checklist that was subsequently pilot tested during field observations in four P4C schools. Results: Analysis of the cognitive interviews lead to the naming of six themes or concepts that needed to be included in the checklist (family support, knowledge translation, OT-teacher partnership, integration into school, what the OT is doing, and evidence of universal design). Field observations resulted in further refinement of this checklist. Data from the interviews and field observations indicated that not all of the core attributes of P4C can be observed. Conclusion: P4C is a complex service model that will require multiple components to adequately measure its fidelity. Along with an observation checklist, this fidelity process should also include teacher, parent, and OT questionnaires as well as documentation review. Prototypes for each of these components were generated using existing P4C quality assurance tools and documentation materials in anticipation of “next steps” in the larger program of P4C research. Additional studies will be required to evaluate the use of these tools to

Introduction
Partnering for Change (P4C) is a model for school-based occupational therapy (OT) services that is currently being evaluated. P4C aims to facilitate early identification of students with motor coordination challenges and to build the capacity of parents, teachers, and schools to support these children’s needs (Missiuna et al., 2012b). To ensure the validity of the P4C model, fidelity must be established (Missiuna et al., 2012a). Fidelity examines how closely the implementation of a program matches the theory or intentions behind it, and ensures that interventions are being delivered consistently (Di Rezze et al., 2012). This project builds on a previous study that used a consensus approach to determine a list of “core” or essential attributes that distinguish P4C from the current school health approach (Castle, Hodson, LeBlanc, & Poulton, 2014). The objective of this research study was to develop a process for measuring the fidelity with which the core P4C attributes are implemented in practice.

Methods
Cognitive Interviews. Modified cognitive interviews were completed with 7 P4C OTs. Cognitive interviewing is a method for evaluating the understandability of survey items and usually is used to pretest questionnaire content (Drennan, 2003; Irwin, Varni, Yeatts, & DeWalt, 2009; Willis, 1999). In this study, it was used to assess how therapists interpreted the list of P4C core attributes and how they thought these attributes could best be measured. Braun and Clark’s (2006) six-step process to content analysis was applied to data from the interviews to aid in the development of an observation checklist.

Field Observations. Four full-day field observations in P4C schools were conducted to pilot test the proposed observation checklist. An iterative process was used such that the checklist was revised after each field observation. In total, four versions of the checklist were trialled.

Results & Discussion
Seven cognitive interviews were analyzed and six themes were identified of the types of content needed to measure fidelity: family support (e.g., phone calls and visit notes), knowledge translation (e.g., lunch and learns), OT-Teacher partnership (e.g., relationship building and problem solving between the OT and teacher), integration into school (e.g., participating in school-wide events and spending time with staff), what the OT is doing (e.g., the therapeutic activities the OT demonstrates in the schools), and evidence of universal design for learning (e.g., the actions the OT takes to benefit all students in the classroom). From these themes, specific items were generated to include in the checklist. Through the field observations, it became evident that not all P4C attributes are directly observable. It also became evident that while some observations were consistent with the core attributes, others were not (e.g., OT working in context with one student but not with another). Regardless, the observation checklist appears promising as it captures the variability of P4C implementation and features that would not be consistent with P4C (e.g., students being pulled from the classroom). Additional tools would be needed to collect data from other sources (Figure 1). Although not an original objective of this study, the authors constructed prototypes of four other fidelity tools by reformulating existing educator, parent, and OT questionnaires and consulting P4C training materials (e.g., documentation examples from charts and service summary reports). It is anticipated that these tools will more fully capture the complexity and multiple dimensions of P4C, which could be trialled in a future study.
**Limitations**

Responses to the cognitive interviews suggested that the OTs may have misinterpreted the question on how best to measure the implementation of core P4C attributes (e.g., OTs’ responses described how they would measure clinical outcomes as opposed to methodological fidelity). Additionally, field observations occurred near the end of school year when many OTs may have already demonstrated certain attributes. Thus, observations should be conducted at several points throughout the year. This should include the beginning of the school year, when OTs reportedly conduct initial school assessments and begin integrating themselves into the school environment. Finally, when P4C OTs knew that they were being observed by student OTs, they tended to engage in more clinical discussions, which might have impacted the extent to which observations could be deemed “non-invasive” and considered representative of “typical” implementation. In response to these limitations, the authors recommend that future observations take place over the course of the school year to fully capture P4C activities and that guidelines be developed outlining the expected roles and interactions of the observer and the OT. Observers should be prepared with strategies to redirect the OT back to “a typical day”.

**Conclusion & Future Directions**

This study has furthered efforts to develop a process for measuring fidelity of the P4C service. It also has contributed to the recognition that multiple tools are needed to measure P4C fidelity. Specifically, this study lead to the development and pilot testing of an observation checklist as well as the development of additional tool prototypes to be included in the fidelity process. Further research is required to determine the type, quantity, and quality of data that can be gathered from these sources. Furthermore, given the variation in the degree of P4C’s implementation throughout classrooms and the school year, it is also recommended that future research explore the use of a rating scale for the observation checklist. This may provide an overall fidelity score for the OT, rather than one based solely on one incident, time or location. This will also allow the measure to account for these small differences that occur naturally, without hindering the collection of fidelity data. This will contribute to the P4C project by ensuring that therapists deliver the model as it is intended and allow for a greater consistency of services.

**Acknowledgements:** Thank you to Nancy Pollock and Wenonah Campbell for their time and guidance. And thank you to Sandra Sahagian-Whalen and the participating P4C occupational therapists.

**References**


Objectives: The purpose of our research project was to gain an understanding from children and families in the Hamilton community about their experiences with the accessibility of playgrounds and their need for inclusive playspaces.

Methods: This project utilized an applied research approach. Paper and online surveys collected experiences and needs of families in a Hamilton community. Two semi-structured focus groups and one interview were conducted with health and educational professionals knowledgeable about child development. Transcripts and written survey responses were combined and analyzed using an interpretive description qualitative thematic analysis. Survey responses were organized into frequency graphs. Results: Major themes informed a conceptual model outlining key considerations for the creation of inclusive playspaces. Conclusion: The proposed conceptual model may be used to guide construction of an inclusive playspace. Testing and application of the model in the creation of inclusive playspaces will contribute to further development and validation of the model.

Introduction

Play is the primary occupation of children and is crucial for children’s physical, cognitive and social development (Missiuna & Pollock, 1991). Indoor and outdoor playspaces can facilitate play for children and families. Unfortunately, these playspaces are not always accessible or usable by children and families with diverse needs and abilities (Prelwit & Skar, 2007). For children or parents with a disability, the environment of community playspaces may present barriers to full participation in play, leisure and recreational activities. Previous research on playspaces has typically focused on children with physical disabilities, often wheelchair or mobility aid users, and on outdoor playgrounds (Ripat & Becker, 2012) with a lack of consideration for indoor playspaces and varying cognitive, emotional or sensory abilities. The purpose of our study was to explore the needs and experiences of children and families in a community in Hamilton, Ontario to gain an understanding about their experiences with the accessibility of playgrounds and their need for inclusive playspaces.

Methods

Surveys were created based on the validated playability project questionnaire (Ontario Parks Association, 2001). Questions explored common barriers to accessing playgrounds and desired play activities of children and families. Additional questions were added to gain information regarding desirable indoor playspace characteristics and the needs of parents with disabilities. Online surveys were hosted on LimeSurvey, a secure online survey tool. Focus group times, paper surveys and posters with the online survey link were advertised at Children's Developmental Rehabilitation Program (CDRP) and Peoples Church. Emails were sent to families who access the daycare and programs provided at Peoples Church/Little Peoples Daycare to inform them of the online survey. Surveys targeted families of all abilities including children and parents with disabilities. Focus group questions included additional prompts for more in-depth information about personal experiences than what may be obtained via the survey. Qualitative data from completed surveys and focus groups/interview were combined, coded individually by research team members using a priori codes and analyzed in a large group using an interpretive description approach. Frequency tables of responses to closed-ended survey questions were completed using Excel. Memos were written by the research team throughout the process and referred to during analysis. Focus group participants were sent a summary of the research findings.

Results

A total of 15 participants were included in two focus groups (10 and 4 participants) and one interview comprised of early childhood educators and rehabilitation professionals. No child or parents were successfully recruited for focus groups and demographic information was not collected outside of vocational status. Thirty-three paper and online surveys were submitted by families, 14 of which were fully complete. Demographic information is located in Table 1.

<table>
<thead>
<tr>
<th>Table 1: Demographic Information for Complete Survey Respondents (n=14)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Parent Age (two respondents stated age of 0 and were not included)</strong></td>
</tr>
<tr>
<td><strong>Parenting status</strong></td>
</tr>
<tr>
<td><strong>Number of children in home</strong></td>
</tr>
<tr>
<td><strong>Average age of children</strong></td>
</tr>
<tr>
<td><strong>Gender of survey respondent</strong></td>
</tr>
<tr>
<td><strong>Survey participants reporting disability</strong></td>
</tr>
</tbody>
</table>

Major themes that emerged from our interpretive description analysis are represented in our conceptual model (Figure 1). Average satisfaction levels with the playspaces currently used by survey participants was 6.29 on a 10 point scale ranging from 1 to 10. The majority of survey respondents (55%) used outdoor
playspaces daily or at least once a week in contrast to 16% of indoor playspace users. The most common reason for indoor playspace use was for special occasions (39%).

**Discussion**

Our model organizes the major themes into a conceptual framework representing a hierarchy of key considerations required to create an inclusive playspace. The steps serve to inform change or actions that support the main goal of children and families experiencing the benefits of play in an inclusive environment. Removing barriers to promote participation was seen as the first key consideration for inclusiveness. Removal of physical, social and institutional barriers will contribute to creating an inclusive playspace. Balancing risk and safety is step two of the model and was found to be a central topic in the focus groups as well as a major concern in the open-ended answers on the surveys. Participants and respondents expressed their understanding that a child’s need for risk-taking and independence should be supported in a playspace but not at the expense of safety. The third step includes creating opportunities and activities for play. Survey responses and focus group discussions highlighted consideration of physical, cognitive, sensory, and developmental factors when choosing activities for an inclusive playspace. The final step of the model and ultimate goal of an inclusive playspace is for children and families to enjoy the benefits of play. This step is identified as burning energy, physical activity, socializing, learning, a means to de-stress and to have fun. The designing and/or building of an inclusive playspace requires change at each step identified within the model and can manifest in the form of advocating for the change of playground designs and promoting community involvement and awareness. The model is enclosed within a circle labeled “inclusion” as it was the overall theme identified in the survey and focus group discussions and is integral to each step of the model. Data gathered from survey respondents and focus group participants were consistent as both revealed outdoor playspaces are accessed more frequently than indoor playspaces. It is hypothesized this may be due to cost, increased prevalence of outdoor playspaces, ease of access via public transport and playspace location in residential communities. Average satisfaction ratings with the playspaces currently used by families was 6.3. While the data does not allow us to make conclusions about causal factors for this satisfaction rating, this rating may reflect the barriers and difficulties that families currently experience when using a playspace. Difficulty recruiting parents and children for focus groups may be attributed to the time restrictions of the project as participants may not have had sufficient notice to plan to attend scheduled focus group dates. The comparison of focus group and survey data, worked to establish the trustworthiness of the data and while similarities in responses were noted, it is unknown if data saturation was reached. It was not possible to compare and contrast the responses of both data collections methods as sufficient demographic information was not collected from focus group participants.

**Conclusion**

The creation of inclusive playspaces is a multifaceted stepwise process and the emerging model may serve as a guide for the development of inclusive playspaces. Research is required to test the validity and reliability of the model.

**Acknowledgements**

The authors would like to acknowledge: Little Peoples Day Care/Peoples Church, McMaster Children’s Hospital and Children's Developmental Rehabilitation Program (CDRP) for their support of this project.

**References**


Abstract

**Purpose**: To evaluate the effectiveness of the Adolescent Program at the George Jeffrey Children’s Centre (GJCC). **Methods**: Goal attainment was measured with the Canadian Occupational Performance Measure (COPM) or with Goal Attainment Scaling (GAS). Caregiver satisfaction was measured through the Measures of Processes of Care-20 (MPOC-20). Waitlist management was analyzed through a review of youth on the waitlist between September 2012 and December 2014 along with the number of youth who transitioned to the program from the school-aged program. **Results**: The Adolescent Program is meeting the needs of youth in terms of goal attainment and caregiver satisfaction. Waitlist times recorded in this study can be used as a baseline for future research.

Introduction

The Adolescent Program at GJCC consists primarily of an occupational therapist (OT), physiotherapist (PT) and speech language pathologist (SLP). These therapists collaborate with youth aged 11-19 and their caregivers by identifying collaborative functional goals, completing assessments, establishing and implementing intervention plans and preparing youth for discharge from paediatric services. In 2012, the Adolescent Program made a fundamental change to the program based on the 6 F-words of Childhood Disability (Rosenbaum & Gorter, 2011), the principles of client-centered practice, collaborative goal setting, working within a transdisciplinary team model, and innovative models of service delivery.

Adolescent Program Service Delivery Flow Chart

### Results

**COPM**: n = 37. The mean COPM score at initial assessment for the performance scale was 3.49 (SD = 1.48, range = 1-10) and 2.80 (SD = 1.23, range = 1.5 - 8) for the satisfaction scale. At the goal reassessment the mean COPM score for performance was 6.51 (SD = 1.70, range = 2 - 10) and 7.12 (SD = 2.41, range = 2 - 10) for the satisfaction scale. The performance mean change score was 3.02 (SD = 1.49, range = -0.83 - 5.4) and 3.48 (SD = 1.90, range = -0.17 - 8) for the satisfaction scale. The performance and satisfaction change scores are statistically significant for performance (t = 12.33, SD = 1.49, p < .01) and for satisfaction (t = 11.23, SD = 1.90, p < .01) along with clinically significant.

**Modified GAS**: n = 49. Frequency of final modified GAS scores were as follows: -3 (n = 0), -2 (n = 19), -1 (n = 29), 0 (n = 66), 1 (n = 25), 2 (n = 22). Overall, scores indicate that 70.17% of youth goals (n = 97) were met or
exceeded. The scale utilized by the Adolescent Program was as follows: -3= decrease from baseline performance, -2= baseline (ability prior to treatment), -1= less than expected outcome, 0= expected outcome, 1= greater than expected outcome and 2= much greater than expected outcome.

**Caregiver Satisfaction:** n = 22 caregivers. The MPOC-20 uses a scale of 0 – 7 to rate responses, with 1 representing that expectations are nearly never met and 7 indicating that needs are met to a great extent (King et al., 2004). Mean scores for all five domains fell within two points from the highest scaled score of 7.

**Wait List:** n = 50. The combined average wait time for OT, PT and SLP was 1.02 years. SLP had the longest wait times with an average length of 1.22 years (n = 15, SD = 0.59, range = 0.1 – 2.17). The average wait for OT services was 1.10 years (n= 26, SD = .74 range = .03 – 2.53). PT had the shortest average wait time of 0.66 years (n = 18, SD = 0.70, range = 0 – 2.36).

**Transitions:** n = 52. OT services had the highest number of youth transition into their program (n = 25), followed by SLP (n = 19) and finally PT (n = 8).

**Discussion**

**Goal attainment:** The results of COPM and modified GAS data analysis indicate that youth overall are meeting or exceeding goals set in the Adolescent Program.

**Caregiver satisfaction:** The results of the MPOC-20 indicate that the Adolescent Program is meeting or exceeding caregiver expectations in the areas measured. The strongest domain was comprehensive and coordinated care. The lowest scores were obtained in the area of providing general information.

**Waitlist/transitions:** The majority (72%) of youth waiting for PT services were seen within one year compared to 54% of youth waiting for OT and 40% for SLP. OT had the highest number of youth transition into the program at age 11 followed by SLP and then PT.

**Key Recommendations**

- It is recommended that the Adolescent Program staff develop a variety of resources for caregivers including information on diagnosis, child development and services. It is recommended that this information be available in a variety of formats including written and visual.

- It is recommended that the Adolescent Program help to foster relationships between caregivers as this may assist with general information sharing, a noted area in the MPOC-20 where caregivers felt less satisfied. A caregiver group would provide the opportunity to share useful resources and strategies along with ongoing support.

- It is recommended that the Adolescent Program explore options to improve consistency in staffing, particularly in the SLP program to assist in addressing wait list times. It is recognized, however, decisions about employment and staff retention is not the responsibility of the Adolescent Program clinicians. The SLP program saw changes in staff members, which can affect consistency of services and the client-therapist relationship.

- It is recommended that the Adolescent Program share the results of this study along with any future studies to other children’s rehabilitation centres. A potential avenue for this information sharing is at the Ontario Association of Children’s Rehabilitation Services (OACRS) annual conference. Sharing the findings of this study would assist in developing a research base for adolescent rehabilitation programs.

**Conclusion**

This project has the potential to contribute to the literature on effective adolescent rehabilitation programs along with important implications in terms of service delivery for the adolescent program at GJCC.

**Acknowledgements**

We would like to thank Scott McBean and Lindsay Jarvis for their dedication to the project and the support and guidance they provided to us. We would also like to thank Brittan Adamson who helped with the study design and the staff at GJCC.

**References**


Evaluating Knowledge Translation of IPE for Health Sciences Students and Educators Using E-Modules
Carly Maunula, Caitlyn Start, Bonny Jung & Allison Sohanlal
In Affiliation with McMaster University, & PIPER

Abstract: The purpose of this summary is to provide an outcome of an evaluation of implementation of interprofessional education (IPE) e-modules for students, faculty and clinicians at McMaster University. IPE has been identified as a crucial component to the education of health care students and professionals, promoting collaboration to enhance client care (MacDonald & Archibald, 2008). Students, faculty and clinicians (n=594) attending IPE Day completed two e-modules (Introduction to IPE and an Introduction to the Canadian Interprofessional Health Collaborative [CIHC] Competency Framework). Data was collected via survey methodology (which included a space for qualitative feedback); response rates for e-modules 1 and 2 were 31.6% and 26.3%, respectfully. Results were reviewed using thematic analysis. Results indicate e-modules were generally well received by participants; several recommendations for modifications were suggested and implemented to improve the e-learning experience. Future studies should include a multidisciplinary team, larger sample size, and include participant demographic information.

Purpose: The purpose of this summary is to present the outcomes of an evaluation of the implementation of IPE e-modules for health science students, educators, and faculty as a precursor to IPE Day. The e-modules are part of a broader initiative to promote interprofessional education at McMaster University. The content of the e-modules incorporates an Introduction to IPE and an Introduction to the CIHC Competency Framework.

Introduction/Background: Interprofessional education is “an activity involving two or more health or social care professions engaged in learning with, from, and about each other.” (Zwarenstein & Reeves, 2006, p. 48). The advantages of IPE include: promoting collaboration, improving efficiency, eliminating redundancies, improving client care and enhancing knowledge translation (Earland, Gilchrist, McFarland & Harrison, 2011; MacDonald & Archibald, 2008). Online learning is ideal for clinicians, students and faculty with hectic schedules, large clinical caseloads and individuals in remote settings (MacDonald & Archibald, 2008). It has been recommended that IPE be implemented in preregistration education, as readiness for IPE is greatest at this time (Earland, Gilchrist, McFarland & Harrison, 2011).

Methods: In February 2015, PIPER invited students, faculty, and clinicians to participate in IPE via two e-modules accessible through a web-based course management system (Avenue 2 Learn).

• E-Module 1: Introduction to Interprofessional Education
• E-Module 2: Introduction to the Canadian Interprofessional Health Collaborative (CIHC) Competency Framework

All IPE Day participants (n=594) were eligible to complete the e-modules and provide quantitative and qualitative feedback; data collection was implemented via survey methodology from 02/26/15 to 03/05/15. Participants rated content, organization, creation of interest in IPE/CIHC, design, applicability to education and applicability to future roles on a Likert-type scale (1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent); participants also provided qualitative feedback. Quantitative data analysis and thematic analysis of qualitative data was completed on March 26, 2015.

Results: The response rates for e-modules 1 and 2 were 31.6% and 26.3%, respectfully. Based on qualitative and quantitative data (displayed below) results show that the e-modules were generally well received by participants. After completing thematic analysis of the qualitative data, six themes were uncovered including: (1) level of IPE/CIHC knowledge; (2) content (information); (3) content (applicability); (4) interactive components; (5) design; and (6) technical difficulties.
Table 1: Introduction to Interprofessional Education E-Module Survey Results

<table>
<thead>
<tr>
<th></th>
<th>1 – Poor N (%)</th>
<th>2 – Fair N (%)</th>
<th>3 – Good N (%)</th>
<th>4 – Very Good N (%)</th>
<th>5 – Excellent N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>7 (3.72)</td>
<td>21 (11.17)</td>
<td>88 (46.80)</td>
<td>57 (30.31)</td>
<td>15 (7.97)</td>
</tr>
<tr>
<td>Organization</td>
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<td>4 (2.12)</td>
<td>70 (37.23)</td>
<td>74 (39.36)</td>
<td>36 (19.14)</td>
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<td>45 (23.93)</td>
<td>77 (40.95)</td>
<td>37 (19.68)</td>
<td>14 (7.44)</td>
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<td>E-module Design</td>
<td>7 (3.76)</td>
<td>21 (11.29)</td>
<td>73 (39.24)</td>
<td>55 (29.56)</td>
<td>36 (19.47)</td>
</tr>
<tr>
<td>Usefulness to your education</td>
<td>11 (5.88)</td>
<td>33 (17.64)</td>
<td>81 (43.31)</td>
<td>46 (24.59)</td>
<td>16 (8.55)</td>
</tr>
<tr>
<td>Applicability to your future role</td>
<td>6 (3.22)</td>
<td>21 (11.29)</td>
<td>64 (34.40)</td>
<td>57 (30.64)</td>
<td>38 (19.89)</td>
</tr>
</tbody>
</table>

Table 2: Canadian Interprofessional Health Collaborative E-Module Survey Results

<table>
<thead>
<tr>
<th></th>
<th>1 – Poor N (%)</th>
<th>2 – Fair N (%)</th>
<th>3 – Good N (%)</th>
<th>4 – Very Good N (%)</th>
<th>5 – Excellent N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>5 (3.21)</td>
<td>19 (12.18)</td>
<td>65 (42.67)</td>
<td>51 (32.69)</td>
<td>16 (10.26)</td>
</tr>
<tr>
<td>Organization</td>
<td>5 (3.21)</td>
<td>7 (4.49)</td>
<td>47 (30.31)</td>
<td>61 (39.1)</td>
<td>36 (23.08)</td>
</tr>
<tr>
<td>Creation of interest in CIHC framework</td>
<td>14 (8.97)</td>
<td>27 (17.31)</td>
<td>62 (39.74)</td>
<td>37 (23.72)</td>
<td>16 (10.36)</td>
</tr>
<tr>
<td>E-module Design</td>
<td>6 (3.87)</td>
<td>11 (7.1)</td>
<td>58 (37.42)</td>
<td>53 (34.19)</td>
<td>27 (17.42)</td>
</tr>
<tr>
<td>Usefulness to your education</td>
<td>8 (5.13)</td>
<td>19 (12.18)</td>
<td>70 (44.87)</td>
<td>37 (23.72)</td>
<td>22 (14.1)</td>
</tr>
<tr>
<td>Applicability to your future role</td>
<td>4 (2.58)</td>
<td>11 (7.1)</td>
<td>57 (36.77)</td>
<td>46 (29.68)</td>
<td>37 (23.87)</td>
</tr>
</tbody>
</table>

**Recommendations:** The following modifications were recommended and implemented: (1) improving navigation/simplicity of accessing e-modules; (2) editing transcripts/text on slides to match information present in the e-modules (3) simplifying vocabulary; (4) reducing redundancy between e-modules (5) using interprofessional language; (6) simplifying and enlarge graphics; (7) creating interactive components; (8) editing speaker videos to increase engagement with audience; (9) including a description of the roles involved in IPE; and (10) introducing modules to first year students. These reflect general principles of IPE/e-module design: (1) introduce IPE to new learners; (2) enhance user experience by implementing accessible viewing platform; (3) improve accessibility by using simple, interprofessional language, providing access to transcripts, and using large graphics; and (4) include interactive components to increase viewer engagement.

**Implications & Future Directions:** E-modules 1 and 2 will be launched in Fall 2015 targeting new learners. Knowledge translation through e-modules will not only improve efficiency of IPE, but also overcome geographical boundaries; this will enhance collaboration, role clarity, and ultimately improve client care. There is still a need for more rigorous research evidence in the area of interprofessional education implemented through the use of e-modules. To improve rigor, future studies should include multidisciplinary research teams.

**Limitations:**
- Demographic information of participants was absent. 
- It was unclear if participants providing feedback were students, clinicians, or faculty. 
- Case scenario and quizzes were developed without a focus group or feedback from other health care professionals. 
- Module revisions based in part on low survey response rates.

**References**


Targeting the Globe
Preparing Student Occupational Therapists for Global Clinical Education Practice
Hanin Al-Helo, Danielle Kandel-Lieberman, Mara Kremenovic, & Kim Roorda

Supervisors: Lorie Shimmell & Sue Baptiste

Purpose of study: To enhance the current understanding of the facilitators, challenges, and barriers that student occupational therapists face in relation to international clinical placements.

Introduction
International clinical placements (ICPs) provide student occupational therapists (SOTs) with holistic and positive experiences resulting in personal and professional gains (Button et al., 2004). Additionally, ICPs have been said to arm students with important skills related to appreciating cultural sensitivities, understanding global issues, enhancing problem solving ability, and increasing receptiveness to global health (Suarez-Balcazar et al., 2012). However, there is a significant lack of information exploring student perspectives of applying to, preparing for, and embarking on an ICP.

Targeting the Globe is a multi-phase study that was designed to address this gap and enrich the current understanding of the ICP experiences of clinical educators and student/graduate OTs worldwide. Phase two of the study was focused on obtaining student/graduate perspectives in order to gain a better understanding of the facilitators, challenges, and barriers that SOTs face in relation to ICP opportunities. Students from all over the world were engaged in this study in order to establish a broader, more culturally informed understanding of this phenomenon. The information gleaned from Targeting the Globe will be utilized to formulate recommendations for how students can be better supported for international learning experiences. These recommendations will set the stage for the development of knowledge translation resources that can support students globally as they consider international placement and practice.

Methods
An interpretive phenomenological approach was used to explore the unique perspectives and opinions of participants’ ICP experiences. Participants were initially recruited using convenience sampling and an electronic survey was sent to the 773 membering educational OT programs associated with the WFOT. One hundred and fifty-one surveys were completed by student and graduate OTs from around the world. Thirty-six of these respondents indicated that they would be willing to participate in a semi-structured interview. A purposeful sample was then used to identify which of these survey respondents would be interviewed. Participants were stratified based on geographic location, ICP status, student status, and degree type. This resulted in the selection of 14 participants who each participated in a 30-60 minute semi-structured interview process. Thematic analysis was conducted using Nvivo 10 software. Reflexivity exercises were an important component of the research process.
Data from the survey was collected from 6 continents as represented by the map below (in number of respondents from each):

![Map showing continents with numbers representing respondents](image)

**Results**

The findings of this study support that there is an overall inconsistency in the ways in which programs affiliated with the WFOT are participating in ICPs. This discrepancy suggests that even though the idea of international placement may be valued by an academic institution, barriers may be present that are limiting opportunities for ICPs. The below results are organized using a chronological format as it correlates to the sequence in which SOTs engage in ICPs. These sequences follow information that related to the timing of these events: prior to, during, or post ICPs.

<table>
<thead>
<tr>
<th>Prior</th>
<th>During</th>
<th>Post</th>
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<tbody>
<tr>
<td>Motivation</td>
<td>Culture</td>
<td>Evaluation</td>
</tr>
<tr>
<td>Securing the Placement</td>
<td>Newness</td>
<td>Personal &amp; Professional Gains</td>
</tr>
<tr>
<td>Finances</td>
<td>Language</td>
<td>Overall Perceptions</td>
</tr>
<tr>
<td>Preparation</td>
<td>Supervision</td>
<td>Helpful Practices</td>
</tr>
</tbody>
</table>

**Educational Values and Beliefs:**

There was a lack of awareness of ICP opportunities through academic institutions, despite ICPs being perceived as valuable. **Securing the Placement:** There was a lack of clarity and support in the process of acquiring an ICP. International partnerships between schools and placement sites were a meaningful facilitator that mitigated many of these barriers. **Finances:** This was the most consistently identified barrier to ICPs, as there are many costs associated with ICPs and funding/financial aid was often not available or not sufficient. **Preparation:** It was identified that more effective preparation for ICPs was needed. This included preparation through the school or personal endeavors. Students who had completed more preparation in areas such as clinical skills, communication, and cultural competence, found this to be a facilitator. **Negotiating Expectations:** Participants identified the importance of having mutually agreed upon expectations for the placement, preceptor and student prior to ICPs as this is was not always the case. **Culture:** This was seen as both a barrier and facilitator as it sometimes impeded the students’ ability to carry out their clinical duties and for others culture was viewed as the catalyst that led to skill development. Organizational culture was important in that organizations that were accepting and supportive of student learning fostered success. **Language:** Differences in language were frequently identified as a challenge that impacted learning, however, in some cases helped students to develop their communication skills. **Supervision:** Models and quantities of supervision varied greatly, however, a more direct approach with more frequent opportunities for discussion and feedback were most desirable. **Helpful Practices:** participants identified having peer support, engaging in regular reflection and being personally flexible and open-minded as useful strategies for success. **Professional & Personal Gains:** Gains in cultural competence, communication, problem solving skills and creativity were identified as transferable into clinical practice. However, clinical skill development was not as prevalent.

**Recommendations**

1. Development of an internationally accessible web-based resource that includes:
   a. A database of countries and facilities within each that are willing to host SOTs
   b. An interactive forum where students who are exploring possibilities pertaining to ICPs can engage, discuss, and share information and resources
   c. A gateway where student OTs can access information on each country.
   d. Resources to support students in their preparation for ICP’s (e.g. training modules for language barriers and supports for working in developing countries).
2. The establishment of international relationships between schools and placement facilities
3. Increased availability of funding/financial aid for students wishing to participate in ICPs
4. The establishment of clear expectations prior to an ICP, including clarification of student/supervisor roles and important placement information

**Conclusion**

ICPs provide students with valuable experiences, knowledge regarding international OT practice, and cultural competencies. Careful planning, preparation and support are required to ensure a successful and fulfilling experience.

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Integrating Interprofessional Collaboration through an Electronic Documentation System: Preparedness of Rehabilitation Staff

Authors: Justin Krupa & David Burzynski
Supervisor: Margareta Vanderheyden

Abstract

**Purpose.** Define interprofessional electronic documentation and help identify evidence-based strategies to prepare the staff at Joseph Brant Hospital (JBH) for its implementation. **Methods.** A staff survey was sent out to assess the preparedness for the transition. **Results.** Staff identified the importance of effective goal setting and recognized the need for collaborative practice within electronic documentation. Staff also identified barriers and benefits of electronic documentation. **Recommendations.** Authors proposed a working definition of “interprofessional documentation” followed by practical recommendations regarding training and support, setting realistic expectations, effective system design elements, and establishing clear communication. **Conclusion.** Further research is warranted to explore the concept of “interprofessional documentation” and how it applies to various interprofessional teams and across different platforms.

Introduction

The methods used by healthcare providers (HCPs) to keep records of their patient interactions affect the overall care experience (McDonald, 2014). In recent years, there has been a general trend away from handwritten documents toward electronic methods of documentation (Keshavjee et al., 2006). JBH currently operates a limited electronic medical record (EMR), and is planning for the transition to a comprehensive electronic documentation system. It is not only important to have patient information localized to an easily accessible location (such as an EMR) but it must also be organized in a manner that facilitates efficiency among those contributing to these documents.

Recent literature has suggested that this dilemma may be best addressed through interprofessional collaboration (IPC) among HCPs, their patients and patients’ families (Curran et al., 2011; Wood et al., 2009). This project aimed to discover the readiness of the rehabilitation staff at JBH for a transition to interprofessional electronic documentation, and make evidence-based recommendations to facilitate this transition.

Methods

Current literature regarding interprofessional practice and documentation was investigated to develop survey categories to determine staff readiness for the implementation of an interprofessional electronic documentation system. The survey population included JBH’s current rehabilitation staff. Members of the JBH rehabilitation team were sent an email inviting them to participate in the anonymous survey. Additional paper copies of the survey were made available. After surveys were completed, data was compiled by the eSolutions group. Investigators then worked to explore themes resulting from the survey.

Results

**Goal Setting:** A majority of the staff felt they were able to educate patients on the focus of the rehabilitation program, encourage patients to be an active member in establishing goals, and set goals that fit the focus of the acute rehabilitation program. Most staff felt it is important for patients and team members to know and understand patient goals and the status of these goals, since they felt the estimated date of discharge is partly influenced by their progress. Staff had mixed thoughts on whether they considered the patient as an expert on their own disease/illness. **Collaboration:** The majority of JBH staff stated that they work collaboratively with staff and patients, and that they are always willing to communicate collaboratively with the team. They understand and reflect on their role as well as the role of others. Most staff stated they sometimes take on tasks outside of their normal role, and that there is some overlap between rehabilitation professions. Majority felt trusted and respected on the team, and stated that they trusted and respected their colleagues. Most of the staff also felt that the team valued their professional opinion. Staff agreed that a shared care plan would be supported at least sometimes, with time/staffing constraints listed as a potential barrier. **Electronic Documentation:** Survey revealed a great variety in comfort levels regarding various components of the existing electronic medical record. The staff also identified potential benefits of a new interprofessional documentation system including: quick access to interprofessional notes and patient information, simplified and more efficient (time, organization, less errors) documentation, better continuity of care, and multi-team access at a glance. Perceived barriers noted by staff largely included time commitments and restraints, ability to access computers and wifi, learning to use the system (comfort with the system, efficiency, not knowing where to find information), software problems, and staff difficulty with change.
Goal Setting: Barriers to effective goal setting experienced by the rehabilitation staff are similar to those commonly referenced in rehabilitation literature, such as time constraints and the complexity of goal setting (Playford, Siegert, Levack & Freeman, 2009). Although goal setting may require an initial time investment, evidence suggests that a team effort in setting goals facilitates efficiency and the effectiveness of rehabilitation (Wade, 2009). Collaboration: Taking on tasks that are normally outside the normal professional role of a staff member suggests that the team has adopted some transdisciplinary elements of health care. There is evidence to support transdisciplinary care as the most effective form of rehabilitation (Reilly, 2001; Davis et al., 1992). Some staff acknowledged that although it is important for all rehabilitation team members to be aware of patient goals, there is sometimes little communication of these goals or changes in their status. Literature suggests that having a forum in which clinicians are able to form joint objectives across disciplines is key for effective interprofessional care in rehabilitation (Davis et al., 1992).

Electronic Documentation: Staff identified common barriers to the adoption of an electronic documentation system, which were consistent to those in the literature such as time constraints, system navigation, technology concerns, and staff computer skills (Whittaker, Aufdenkamp & Tinley, 2009). With these results in mind, the question becomes: “How do we best support the rehabilitation staff in a transition to the new electronic documentation system?” Evidence-based research was integrated with clinical reasoning stemming from survey results to create recommendations for a smooth implementation of electronic documentation at JBH.

Summary of Recommendations for Successful Implementation of Interprofessional Electronic Documentation at JBH

Recommendations were made via a two-step process. First, a proposed definition of interprofessional documentation was developed. After consulting current literature on interprofessionality and effective electronic documentation, the following definition was created: “Interprofessional documentation is a process by which professionals develop ways of practicing/documenting that involves continuous interaction and knowledge sharing between professionals and their patients/families using a shared and agreed upon platform.” Through a literature search, we were able to discover 4 common themes for the successful implementation of interprofessional electronic documentation (See fishbone chart). Therefore, practical recommendations were made regarding strategies to implement effective training and support, realistic expectations, effective system design elements, and clear communication among staff members.

Conclusion and Future Research

Results of this project have identified and discussed the many practical implications of a transition from interdisciplinary paper documentation to interprofessional electronic methods of communicating. Further research is warranted to explore the evolving concept of “interprofessional documentation” as it is an emerging construct that can affect all members of an interprofessional team.

Acknowledgements

The authors would like to thank Margareta Vanderheyden of the electronic documentation team at JBH for supporting us throughout this project. We would also like to thank the members of the rehabilitation and the administrative staff for allowing us to be a part of this exciting transition.

References


Investigating interventions to reduce work-related burnout in long-term care workers

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Sherrie Cheers MSc OT, OT Reg. (Ont.) & Marion Penko OT Reg. (Ont.), M.Ed, St. Joseph’s Healthcare Hamilton

Abstract

Rationale: Front Line Workers (FLWs) in long term care (LTC) homes are faced with many unique occupational and organizational stressors that place them at significant risk for work-related burnout. This research paper represents the second phase of a three-phase research project investigating interventions to reduce work-related burnout in LTC workers.

Purpose: The two objectives for this research project were: (a) To explore the current literature on interventions to reduce work-related burnout in healthcare workers, and; (b) To design a study investigating LTC worker’s perceptions of interventions that reduce work-related burnout.

Methods: In order to meet the first study objective, a literature review was conducted to understand the type and scope of interventions that are effective in reducing work-related burnout as well as inform which interventions would be investigated in the next phase of the study. To meet the second objective, six different methods were researched and reviewed to determine the study design. Nominal group technique (NGT) was chosen and a pilot group was conducted with the goal of receiving feedback on the clarity of the script the researchers would be using. During the trial group, several interesting themes emerged from the participants comments which significantly impacted the final project.

Outcome: The final study design is a cross-sectional, mixed methods design using NGT), with the purpose of investigating LTC workers perceptions of three evidence based interventions (Cognitive Behavioural Therapy, Mindfulness and Peer Support Groups) and to develop a ranking system of these interventions to determine the preference, applicability and feasibility of implementing them into LTC homes.

Conclusion: The next phase of this research project fills a current gap in research and will help inform how future interventions are integrated into LTC settings to reduce burnout.

Introduction

The Canadian aging population continues to grow increasing the demand for LTC. In Ontario, there are approximately 45, 000¹ FLWs providing care to over 76, 000² residents in LTC. FLWs are faced with many occupational and organizational stressors related to their work-setting that significantly increase their risk for burnout.

The prevalence of work-related burnout in FLWs was established in the first phase of this research project for the Mississauga and Halton Local Health Integration Network (LHIN) and the City of Burlington. Compared to established norms, FLWs were found to have significantly higher levels of perceived stress, personal burnout and work-related burnout.

This project is phase 2 of 3 which answers the following research question: In FLWs who experience work-related burnout, what are the interventions to address burnout that have been investigated within the literature?

Methods

Step One: A literature review was conducted to examine interventions that reduce work-related burnout in healthcare workers. Results of the literature review demonstrated that there are two types of interventions that address work related burnout: person-directed and work-directed interventions. Person-directed interventions address person, job and organizational characteristics that contribute to burnout while work-directed interventions address organizational characteristics.

Results of the literature review also showed there is low to moderate quality demonstrating statistically significant results for both types of interventions.

Researchers used the results to determine which interventions would be investigated in the next phase of the study. Person-directed interventions were chosen because: (a) There are many barriers to implementing work-directed interventions that are beyond the control of the FLW; (b) Many FLWs work in multiple work settings, therefore, changing the work environment in one LTC home may not impact burnout and; (c) Person-directed interventions provide FLWs with the control and autonomy to choose to participate in the intervention. The person-directed interventions being investigated in the next phase of the study are:
Cognitive Behavioural Therapy, Mindfulness and Peer Support Groups.

**Step Two:** Six different methods were researched and reviewed when determining the study design for the next phase of the study. The research team decided to use nominal group technique (NGT) because it produces both qualitative data of the perspectives of the FTWs regarding the interventions, as well as a ranking of each intervention in terms of preference, applicability and feasibility.

**Step Three:** A pilot group was ran with the goal of receiving feedback on the clarity of the script the researchers would be using for the group. During the trial group, several interesting themes emerged from the participants' comments which significantly impacted the final project. These themes included: (a) Stigma associated with interventions; (b) Lack of understanding of the interventions; (c) Lack of trust among co-workers, and; (d) Participants having difficulty looking past feasibility issues to choose their personal preference. The themes that emerged from the trial group helped to increase the rigour of the study in several ways. First, researchers added a part to the script which addressed the associated stigma by framing the interventions as techniques which promote overall wellness. Next, researchers modified the descriptions of the interventions to increase clarity as well as developed videos which provided a visual example of each intervention. To decrease mistrust among co-workers, researchers added to the script by addressing the importance of confidentiality. In addition, ensuring participants’ ranking forms were kept private and confidential became a priority. To try and reduce the focus on feasibility, the ranking form was modified so that each question (re: preference, applicability, feasibility) was presented on a separate page and guiding questions were used to try and encourage participants to think about each question in isolation.

**Outcome and Next Steps**

The following is the study design for the final phase of this research project;

**Study Purpose:** (a) To investigate LTC workers' perceptions of three evidence-based interventions that have been shown to reduce work-related burnout, and; (b) To use a ranking system to determine the preference, applicability and feasibility of implementing the interventions into LTC homes from the perspective of the LTC home workers.

**Study Design:** Cross-sectional, mixed methods design using NGT.

**Participants:** LTC workers in Mississauga and Halton Regions and City of Burlington.

**Sampling and Recruitment:** The Directors of Care of the 38 LTC homes within the Mississauga and Halton Regions and City of Burlington will be contacted for participation. The target for recruitment will be ~ 6 to 10 participants at each site, at 3-6 sites.

**Procedure:** (a) Participants will take part in a NGT structured discussion led by one supervisor-student pair at their LTC site; (b) The facilitators will provide an explanation of each intervention; (c) Participants will be asked to write down their thoughts on each intervention; (d) Their comments will be collected and anonymously discussed with the group for 10 minutes; (e) After each intervention has been explained and discussed, participants will privately rank each intervention based on personal preferences, applicability, and feasibility of each intervention.

**Data Collection:** The NGT sessions will be audio recorded and participants rank each intervention on a form.

**Data Analysis:** Qualitative analysis includes transcribing participant responses and integrating these responses with field notes. Content analysis will be completed to derive mutually exclusive themes. Quantitative analysis involves determining the ranking of each intervention.

**Conclusion**

The next phase of this research project fills a current gap in research and will help to inform how future interventions are integrated into the LTC setting to reduce burnout.

**References**

Abstract

Purpose: To explore the perspectives of occupational/physiotherapy assistant (OTA/PTA), occupational therapists (OT) and physiotherapists (PT) at Trillium Health Partners (THP) regarding the new Collaborative Care by Design (CCbD) model using a phenomenological approach. Literature review: The social exchange theory was chosen as a framework for this project. Method: A total of 11 individual 45 minute, audio-recorded interviews were completed; however, only 4 were analyzed due to time constraints. Open coding process was used to identify emerging main themes. Results: 3 main themes emerged: team function, communication and role clarity. Emerging sub-themes were also identified. A preliminary model was developed based on team discussion on the relationship between themes and sub-themes. Discussion: Limitations include time constraints, possible researcher bias and limited transferrability of results to other collaborative models. Implications for future directions include further research on other allied health members, linking team function with patient care and developing interprofessional education (IPE) for therapists and OTA/PTAs.

Introduction & Literature Review

Context: This research project was based at Trillium Health Partners (THP) where the CCbD model was implemented 3 years ago. The goal of the CCbD model is to improve patient care where OTA/PTAs provide direct treatment while therapists focus on assessment, treatment planning and discharge planning. Theory: The social exchange theory was chosen to guide the research process since the authors wanted to investigate the exchange and collaboration between therapists and support personnel. Social exchange theory focuses on interpersonal exchange, trust, negotiation and role differentiation (D’Amour, Ferrada-Videla, Rodriguez & Beaulieu, 2005). Literature review: Competencies for collaborative teams include active listening, respect, assigning or accepting duties within the scope of practice, knowing when to seek information, accepting accountability, and psychological safety (Jelley, Larocque, & Borghese, 2012; Leonard & Frankel, 2011).

Methods

Design: This study is the second stage of a phenomenological study exploring the perspectives of OTs, PTs and OTA/PTAs at THP Mississauga site under the new CCbD model of care. The study was approved by the Research Ethics Board. Recruitment/Participants: A purposeful selection process was used to recruit OTs, PTs, and OTA/PTAs on Medicine units at THP. A total of 11 participants were interviewed by OT/PT students. The participants consisted of 4 OTA/PTAs, 4 PTs, and 3 OTs. Data collection: Individual audio-recorded interviews of approximately 45 minutes were completed by OT/PT students at the THP. Consent was obtained at each interview. An iterative, constant comparison process was used to refine the interview questions to further explore emerging themes. After the interviews, the student OTs de-briefed and reflected on personal biases with the supervisors. Data analysis: All interviews were transcribed by an external party with personal identifiers removed. Due to time constraints, data from only 4 interviews were analyzed using open coding process (2 OTA/PTA and 2 therapists). The team read the transcripts individually before meeting on two occasions to discuss analysis of the data. At the meetings, the team identified emerging themes and sub-themes and developed a model based on the themes. The decision-trail for data analysis was recorded.

Results/Discussion

Results: From the data analysis, 3 main themes emerged: team function, communication and role clarity. The team discussed and created a model depicting a relationship between communication and role clarity as constructs that seem to facilitate or disrupt team function. In describing their experience of team function, 1 participant described a power struggle, while the other 3 described collaborative team function. As a result, the research team discussed and depicted collaboration and power struggle as sub-themes under the theme of team function in the model. Under the theme of communication, the sub-themes of receptiveness, safety and transparency emerged. The research team discussed the relationship between the 3 sub-themes: increased receptiveness seemed to increase safety and transparency. Under the theme of role clarity, the sub-theme of knowledge of roles emerged. Finally, the research team discussed personal factors as a sub-theme under both communication and role clarity in the model. Literature on collaborative practice supports the emerging themes and sub-themes found (Jelley et al., 2012; Leonard & Frankel, 2011). Note: relationships between themes and
sub-themes in the model were made based on team discussion and inference. **Limitations:** Although the authors interviewed 11 participants, the authors were only able to complete preliminary data analysis for 4 interviews due to time constraints. As well, there is possibility of researcher bias to favor therapist participants over OTA/PTA since data analysis were completed by therapists and therapy students. However, the team made effort to mitigate this bias by reflecting on author bias and analyzing data as a team to increase objectivity. Finally, since this project was specific to the CChD model, there may be limited transferrability of study results to other models of collaboration. **Implications for OT practice:** Since collaboration is a core competency for OTs as identified in the Profile of OTs in Canada (Canadian Association of Occupational Therapists, 2007), research on collaboration is directly relevant to OTs. Results from this study highlights the importance of receptive, safe and transparent communication as well as knowledge of roles in improving collaboration between therapists and OTA/PTAs. With better collaboration, therapists and support personnel can work together for the common goal of patient care.

**Conclusion/Future directions**

This phenomenological study aimed to explore the perspectives of therapists and OTA/PTAs on collaborative practice within the CChD model at THP. Based on preliminary data analysis from 4 participants, a model on collaborative practice was created, which highlighted the importance of communication and role clarity in fostering team function. Since the study is ongoing, further themes may be developed, leading to further evolutions of the model. Directions for future research include interviewing other allied health members to gain a holistic view of team function, and exploring the link between collaborative practice and patient care. Further steps can also be taken to translate the results of this study to IPE between therapists and OTA/PTAs.

**Acknowledgements**

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**Seminal References**


