Brief Reports

Two Pilot Treatment Initiatives

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Introducing Problem-Solving Therapy Training: Changing current practices of care for older adults living with mental health issues

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Adventure-Based Counselling: Promoting positive interpersonal behaviour in a forensic psychiatric sample – a pilot study

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Key words: Adventure-Based Counselling, Adventure Therapy, Forensic Psychiatric Patients, Interpersonal Behaviour, Rehabilitation, Program Evaluation

ABSTRACT
The purpose of the current study was to examine the effectiveness of an adventure-based counselling (ABC) program on the interpersonal behaviour of forensic psychiatric inpatients. To our knowledge, no research had examined the use of an adventure therapy approach with this population despite the promising literature on ABC with other samples. Participants (N = 17; 16 males) were patients at the Southwest Centre for Forensic Mental Health Care in St. Thomas, Ontario, who were designated not criminally responsible on account of a mental disorder. Ages ranged from 27 to 61 years old (M = 42.88, SD = 11.85). Patients took part in a 10-session ABC program which addressed interpersonal skills through challenge activities. Interpersonal behaviour was assessed using measures of anger, mindfulness, quality of life, coping, physical assault, and events requiring seclusion or restraint. It was hypothesized that participants would show significant improvements on all measures following participation in the ABC program. Results indicated that several variables (i.e., anger, mindfulness, self-blame, seeking social support, detachment, events of physical assault, and events requiring seclusion/restraint) changed in the hypothesized direction and showed marginal, but statistically non-significant, improvements over time. The results suggest that the use of adventure-based counselling interventions with forensic psychiatric patients could potentially improve client outcomes; however, larger samples of patients, and/or more treatment sessions would be necessary to adequately evaluate the significance of its effectiveness.

Background Highlights
Adventure therapy is a hands-on, experience-driven form of therapy. It is used to enhance the effectiveness of behaviour change through participation in activities that kinesthetically involve clients on cognitive, emotional, and behavioural levels. The activities emphasize learning through experience and the arousal of perceived risk to facilitate learning (Buckner, Meyer, Hamilton, & Norris, 2011). Many of the principles behind adventure therapy are rooted in the field of experiential education, which asserts that direct
experience must be incorporated into the process of learning and behaviour change (Gass, 1993). This type of therapy has historically been conducted in a wilderness or outdoors setting with a group and requires active participation and engagement.

A key component of adventure therapy is the application of tools learned in therapy through role-playing and practice. Role-playing and skills training have been shown to be crucial components of successful rehabilitation programs for offenders (Antonowicz & Ross, 1994). Challenge activities are designed to address various interpersonal and social skills (e.g., anger management, problem solving, conflict-resolution, communication, teamwork, responsibility, and trust) and include activities like teamwork exercises, high ropes courses, and rock climbing.

Another key component of adventure therapy, and arguably the most important, is debriefing, during which clients translate adventure activities into everyday behaviour to solidify their learning. Program facilitators actively engage clients in understanding how the challenge activities metaphorically relate to real-life experiences and how the skills and tools learned can be practiced in the future. In doing so, adventure therapy programs have found successful outcomes with a variety of populations.

Adventure therapy has been shown to be quite effective at improving interpersonal behaviour and social skills. For example, McNamara (2002) found that participation in adventure therapy led to significant improvements in problem solving, conflict resolution, cooperation, sharing, anger management, communication, and trust in a sample of children of abuse and neglect. A more recent meta-analytic study of adventure therapy outcomes (Bowen & Neill, 2013) found significant, positive, short-term effects for outcomes related to both behaviour and social development. Variations of adventure therapy have been shown to be effective as well. For example, adventure-based counselling (ABC) has been used to promote social skills with adolescents (Tucker, 2009) resulting in gains in interpersonal learning, social skill development, problem solving and trust. Furthermore, wilderness therapy, a form of adventure therapy, has been employed extensively with at-risk youth and juvenile offenders. Wilson and Lipsey (2000) found wilderness therapy to be effective at reducing antisocial tendencies, delinquent behaviour as well as rates of recidivism. Finally, recent research investigating the use of a novel adventure- and recreation-based group intervention in a sample of individuals with schizophrenia found significant improvements in self-esteem and global functioning following an 8-month intervention (Voruganti et al., 2006).

As the studies above illustrate, adventure therapy techniques have been used with considerable success. That being said, the application of these techniques is still relatively under-studied within forensic psychiatric settings. After a thorough literature review, it became apparent that no research to date had assessed the effectiveness of an adventure therapy program within a forensic psychiatric population.

**Objectives**

The current study sought to fill this gap in the existing literature by empirically testing the effect of a 10-session ABC program on interpersonal behaviour in a sample of forensic psychiatric inpatients. It was hypothesized that there would be statistically significant improvements on all six measures of interpersonal behaviour (anger, mindfulness, quality of life, coping, physical assault, and events requiring seclusion or restraint). It was hoped that the study would provide evidence to support the use of adventure-based counselling interventions in forensic psychiatric settings, thereby augmenting the relatively small repertoire of existing efficacious interventions with this population.
Method
Participants were adult inpatients recruited from the Southwest Centre for Forensic Mental Health Care in St. Thomas, Ontario. The sample consisted of 17 participants (16 males, 1 female) ranging in age from 27 to 61 years old ($M = 42.88$, $SD = 11.85$) who provided informed consent to participate. The ABC program consisted of 10 group sessions of active, collaborative, hands-on activities. Each of the sessions included a warm-up activity, a main challenge, and a debriefing component. The warm-up and main challenge activities were designed to address various social skills and coping strategies. The debriefing component of each session served as a reflection process for the challenge activity. In Table 1, we have provided a list of all challenge activities, the corresponding skills and coping strategies that were targeted.

<table>
<thead>
<tr>
<th>Week</th>
<th>Warm-Up Activity</th>
<th>Main Challenge</th>
<th>Skills and Coping Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Icebreaker Thumball</strong>: A ball covered in questions is thrown around the circle; participants answer the question their thumb lands on.</td>
<td><strong>Buzz Ring</strong>: Participants keep a plastic ring buzzing around the circle while talking about the goals of the program.</td>
<td>Group communication, problem-solving, goal development</td>
</tr>
<tr>
<td>2</td>
<td><strong>Believe it or Knot</strong>: Participants stand in a circle and pass around a tied knot. When facilitator says ‘stop’, person touching the knot shares something about themselves while the group decides whether or not it is true; <strong>Raccoon Circle</strong>: Participants hold onto a tied piece of webbing and attempt to lean back and sit down in-sync with the group.</td>
<td><strong>Marble Tubes</strong>: Participants relocate several marbles from point A to point B using only plastic tubes.</td>
<td>Group communication, attentive listening, trust, recognizing stress and frustration</td>
</tr>
<tr>
<td>3</td>
<td><strong>Teamwork and Teamplay Word Cards</strong>: Participants choose two cards and reflect on how the characteristics listed on the cards are important for leadership.</td>
<td><strong>Bull Ring</strong>: Participants are divided into two teams and transport a tennis ball from one base to another while balancing it on the Bull Ring.</td>
<td>Leadership, planning, positive communication, working with others, dealing with frustration</td>
</tr>
<tr>
<td>4</td>
<td><strong>Group Juggle</strong>: Participants toss a ball around a circle and say their name aloud when the ball is thrown to them. Then they toss the ball around while saying the name of the person they are throwing to.</td>
<td><strong>Electric Maze</strong>: Using trial-and-error, participants navigate the group through a maze without speaking. Certain squares on the maze grid are “electric squares” and any time a participant steps on one, the entire group has to start over.</td>
<td>Leadership, group communication, managing the unknown, goal setting</td>
</tr>
<tr>
<td>Week</td>
<td>Warm-Up Activity</td>
<td>Main Challenge</td>
<td>Skills and Coping Strategies</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td>5</td>
<td><strong>Key Punch:</strong> Participants take turns running to and from a keypad punching the numbers 1 through 30, in order, as quickly as possible.</td>
<td><strong>Spider Web:</strong> Participants create two lists: the first for what they would like to accomplish during the High Ropes course, and the second for what they would need to accomplish those goals. Participants then navigate through the web structure; the holes in the Spider Web structure represent each of the goals on the list.</td>
<td>Goal setting, goal development, shared goals, teamwork, support skills, responsibility</td>
</tr>
<tr>
<td>6</td>
<td><strong>The Warm Wind Blows:</strong> Participants share their likes, dislikes, hobbies, and interests with the group; <strong>Wind in the Willow:</strong> Participants think about where they needed to exercise the act of trust in their daily lives before trusting the group to catch their fall.</td>
<td><strong>Ascend Traverse:</strong> Participants are broken into teams and traverse three planks without stepping on the ground.</td>
<td>Goal setting, goal development, teamwork, trust, risk-taking, support skills</td>
</tr>
<tr>
<td>7</td>
<td><strong>High Ropes Course:</strong> Off-site activity involving both high and low elements, wire ropes, friction devices, and climbing harnesses.</td>
<td><strong>Climbing Wall:</strong> Off-site rock wall climbing activity following the safety requirements of an adventure facility.</td>
<td>Goal setting, goal development, goal achievement, teamwork</td>
</tr>
<tr>
<td>8</td>
<td><strong>Feelings Cards:</strong> Participants look through the Feelings Cards and choose cards that best describe how they felt prior to going to the Climbing Wall, during the activity, and after they climbed.</td>
<td><strong>Body Parts:</strong> Participants identify members of the group who show, need or provide a particular quality identified in a specific body part.</td>
<td>Goal reflection, managing commitments</td>
</tr>
<tr>
<td>9</td>
<td><strong>The Magic Genie:</strong> Participants identify one goal and three ‘wishes’ that would help make the goal possible; <strong>Tunnel Vision:</strong> Participants answer a series of personal questions about themselves honestly.</td>
<td><strong>Mine Field:</strong> Participants broken into pairs and discuss barriers that stand in the way of accomplishing a goal. Objects representing these barriers are thrown into a play ‘mine field’. Then, one partner instructs their blind-folded teammate how to navigate through the field while avoiding the objects using only verbal communication.</td>
<td>Goal-setting, challenge mastery, understanding biases, support skills, verbal communication</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Week</th>
<th>Warm-Up Activity</th>
<th>Main Challenge</th>
<th>Skills and Coping Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td><strong>Conversation Starter Buttons</strong>: Participants choose a button they are drawn to and pin it to themselves. Later in the session, they share why they chose the particular button they did.</td>
<td><strong>Tangled</strong>: Participants determine which of four tangled topes hold all of the ropes together without touching them; <strong>Squeeze Chicken</strong>: Participants stand in two lines holding hands and pass down a squeeze as quickly as possible. The participant in each line who gets squeezed last races to grab the Rubber Chicken first.</td>
<td>Celebrating accomplishments</td>
</tr>
</tbody>
</table>

**Note:** For comprehensive descriptions of all activities, materials, instructions, debriefing questions, and skills targeted, please email the author at tsalisb4@alumni.uwo.ca

In this study, interpersonal behaviour was assessed using six dependent measures. Four of the variables were measured using paper-and-pencil questionnaires, including: anger [Novaco Dimensions of Anger Reactions - Short Form (Novaco, 1975)], cognitive and affective mindfulness [Cognitive and Affective Mindfulness Scale - Revised (Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007)], quality of life [WHO (2004) Quality of Life - Brief Form], and coping style [Ways of Coping - Revised Scale Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986]]. The remaining two measures (i.e., events of physical assault and events requiring seclusion/restraint) were assessed using an extensive file review. Participants were assessed on all measures before and after completing the ABC program.

**Results**

A repeated measures multivariate analysis of variance (MANOVA) was conducted in order to test the effect of the ABC program on the dependent measures. The results of the MANOVA were not significant for time, Pillai's Trace = .97, F(16, 1) = 1.85, ns, η² = .97, indicating that interpersonal behaviour scores did not change significantly. Despite these results, univariate main effects were examined for each dependent measure to get a better understanding of each variable and its directionality (see Table 2).

<table>
<thead>
<tr>
<th>Variable</th>
<th>M_Pre</th>
<th>SD_Pre</th>
<th>M_Post</th>
<th>SD_Post</th>
<th>F</th>
<th>p</th>
<th>η²</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger ✓</td>
<td>9.06</td>
<td>1.95</td>
<td>7.65</td>
<td>2.45</td>
<td>.79</td>
<td>.39</td>
<td>.05</td>
<td>.13</td>
</tr>
<tr>
<td>Cognitive and Affective Mindfulness ✓</td>
<td>34.41</td>
<td>1.34</td>
<td>35.51</td>
<td>1.52</td>
<td>1.30</td>
<td>.27</td>
<td>.08</td>
<td>.19</td>
</tr>
<tr>
<td>Quality of Life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical health</td>
<td>62.94</td>
<td>3.28</td>
<td>65.12</td>
<td>2.73</td>
<td>.71</td>
<td>.41</td>
<td>.04</td>
<td>.12</td>
</tr>
<tr>
<td>Psychological health</td>
<td>64.00</td>
<td>2.90</td>
<td>63.35</td>
<td>3.03</td>
<td>.07</td>
<td>.79</td>
<td>.01</td>
<td>.06</td>
</tr>
</tbody>
</table>

Table 2. Descriptive and Univariate Statistics for all Pre- and Post-ABC Program Dependent Measures
<table>
<thead>
<tr>
<th>Variable</th>
<th>M\textsubscript{Pre}</th>
<th>SD\textsubscript{Pre}</th>
<th>M\textsubscript{Post}</th>
<th>SD\textsubscript{Post}</th>
<th>F</th>
<th>p</th>
<th>η\textsuperscript{2}</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social relationships</td>
<td>56.00</td>
<td>6.92</td>
<td>48.18</td>
<td>5.07</td>
<td>6.57</td>
<td>.03*</td>
<td>.27</td>
<td>.62</td>
</tr>
<tr>
<td>Environment</td>
<td>63.29</td>
<td>3.59</td>
<td>62.47</td>
<td>3.77</td>
<td>.19</td>
<td>.67</td>
<td>.01</td>
<td>.07</td>
</tr>
<tr>
<td>Coping Style</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem-focused coping</td>
<td>18.06</td>
<td>1.53</td>
<td>16.82</td>
<td>1.78</td>
<td>5.00</td>
<td>.49</td>
<td>.03</td>
<td>.10</td>
</tr>
<tr>
<td>Wishful thinking</td>
<td>7.35</td>
<td>1.04</td>
<td>5.94</td>
<td>1.07</td>
<td>2.66</td>
<td>.12</td>
<td>.14</td>
<td>.34</td>
</tr>
<tr>
<td>Detachment ✓</td>
<td>8.29</td>
<td>1.12</td>
<td>6.94</td>
<td>1.24</td>
<td>1.55</td>
<td>.23</td>
<td>.09</td>
<td>.22</td>
</tr>
<tr>
<td>Seeking social support ✓</td>
<td>9.59</td>
<td>1.09</td>
<td>10.71</td>
<td>1.48</td>
<td>.76</td>
<td>.40</td>
<td>.05</td>
<td>.13</td>
</tr>
<tr>
<td>Focusing on the positive</td>
<td>6.06</td>
<td>.82</td>
<td>5.94</td>
<td>.70</td>
<td>.01</td>
<td>.91</td>
<td>.001</td>
<td>.05</td>
</tr>
<tr>
<td>Self-blame ✓</td>
<td>3.94</td>
<td>.42</td>
<td>3.29</td>
<td>.54</td>
<td>1.10</td>
<td>.31</td>
<td>.06</td>
<td>.17</td>
</tr>
<tr>
<td>Tension-reduction</td>
<td>3.65</td>
<td>.51</td>
<td>2.59</td>
<td>.43</td>
<td>4.85</td>
<td>.04*</td>
<td>.23</td>
<td>.54</td>
</tr>
<tr>
<td>Keeping to oneself</td>
<td>3.47</td>
<td>.50</td>
<td>4.00</td>
<td>.56</td>
<td>3.43</td>
<td>.08</td>
<td>.18</td>
<td>.41</td>
</tr>
<tr>
<td>Events of Physical Assault ✓</td>
<td>.24</td>
<td>.14</td>
<td>.00</td>
<td>.00</td>
<td>2.98</td>
<td>.10</td>
<td>.16</td>
<td>.37</td>
</tr>
<tr>
<td>Events Requiring Seclusion/ Restraint ✓</td>
<td>5.18</td>
<td>5.18</td>
<td>.76</td>
<td>.65</td>
<td>.70</td>
<td>.41</td>
<td>.04</td>
<td>.12</td>
</tr>
</tbody>
</table>

✓ Interpersonal behaviour variables indicating a change in the hypothesized direction.

Most results of the univariate analysis were also not significant; however, several variables did show marginal improvements over time, warranting discussion (see Figure 1).

**Figure 1.**

Means scores of interpersonal behaviour variables showing hypothesized directionality from pre-test to post-test. Error bars indicate standard error of the mean.
Discussion
Results indicated that several dependent variables changed in the hypothesized direction (i.e., anger, mindfulness, self-blame, seeking social support, detachment, events of physical assault, and events requiring seclusion/restraint). However, these changes were statistically not significant, presumably due to sample size. According to these trends at p < .05, participants in this pilot study showed small improvements in their interpersonal behaviour and social skills after participating in the ABC program. It is predicted that these trends would become statistically significant when evaluated with larger samples and/or more treatment sessions. Surprisingly, scores for two of the variables actually decreased significantly (i.e., quality of life [social relationships] and coping style [tension-reduction]), contrary to what was expected. Although the study’s original hypotheses were not adequately supported from a statistical standpoint, trends in the data point to the idea that participants could show some improvements in interpersonal behaviour after participating in ABC. The direction of the trends that emerged is consistent with current findings in the field (Bowen & Neill, 2013) and is promising for continuing research with this population of patients. Additional research with larger samples and/or with greater than 10 therapy sessions is needed to verify this promising possibility that could have positive implications for forensic psychiatric care.

Limitations
There are a number of limitations that may have contributed to the null findings. First, the small participant sample in this study is directly related to its inherently low statistical power. Very large effect sizes would have been required in order to generate statistically significant changes in interpersonal behaviour (Schmidt, Hunter, & Urry, 1976). Another limitation is the use of self-report data. Research across many settings (e.g., educational, workplace, health) has shown that self-report data can be biased (Dunning, Heath, & Suls, 2004). Finally, the lack of a suitable control group undermined the scope of the inferences that were able to be drawn from the results.

Future Directions
The results of this pilot study add support to the idea that ABC programs could promote positive interpersonal behaviour in forensic psychiatric settings. Unpublished research drawn from the same dataset showed equally promising results when investigating intrapersonal behaviour (i.e., behaviour within the individual; Reinblatt, Hoaken, Balsom, & Ruddell, 2014). For example, participants showed significant improvements in both depression and anxiety scores following participation in the same ABC program. Taken together, these results suggest that ABC techniques are effective with this population. Innovative attempts at advancing forensic psychiatric rehabilitation and improving patient care should continue to be assessed and ABC could be one way to achieve that.

As these findings represent only the first iteration of this ABC study, future repetitions may be improved through methodological nuances that aim to increase statistical power. The inclusion of data from additional participants is one way to serve this function. Exploring the use of alternative measures that do not rely on self-assessment may also be beneficial. Finally, including a ‘waiting list’ control group of participants would isolate treatment specific effects.

References


Buckner, E., Meyer, T., Hamilton, K., & Norris, K. (2011). Wilderness and adventure therapy for...


**Introducing Problem-Solving Therapy Training: Changing current practices of care for older adults living with mental health issues**

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**Key words:** Interdisciplinary Clinician Training, Problem-Solving Therapy, Ontario, Older Adults, Mental Health, Community Access to Mental Health Services

**ABSTRACT**

Despite established efficacy, psychotherapeutic modalities are not frequently used among older adults living with depression and other mental health issues. Current practice needs to change. This paper describes the introduction of Problem-Solving Therapy (PST) training to Ontario clinicians who provide community-based mental health outreach services to older adults. Eight trainees were selected from a pool of 36 applicants. All trainees attended an eight hour in-person didactic training session and eight one-hour case-based role-play sessions; both run by a PST certified trainer from Kingston, Ontario. The clinicians’ level of adherence to PST principles in clinical interactions, and satisfaction with the training program itself were measured. This pilot project provides evidence that a PST certified trainer can successfully train a variety of clinicians, in a short period of time, in an evidence-based psychotherapeutic modality suitable for older adults.

**Background Highlights**

Despite variability in conception and technique, the efficacy of psychotherapeutic modalities has been well established for the treatment of specific mental health conditions in multiple populations (Chorpita, Bernstein, & Daleiden, 2011; Mackin & Arean, 2005), either on their own or as an adjunct to pharmacotherapy (Hollon et al., 2014; Richards et al., 2013; van Apeldoorn, Stant, van Hout, Mersch, & den Boer, 2014; Wiles et al., 2014). Older adults, who often have many comorbid conditions (Salive, 2013) and are frequently susceptible to polypharmacy (Takane, Balignasay, & Nigg, 2013) as well as adverse drug side effects (Lindsey, 2009), often benefit from nonpharmacological interventions for depressive disorders (Apostolo, Queiros, Rodrigues, Castro, & Cardoso, 2015). Further, studies have shown that older adults prefer counselling modalities over medications for the treatment of depression (Gum et al., 2006) and...
often benefit from psychotherapeutic approaches following completion of an acute course of care, possibly leading to a more sustained remission of mental health disorders (Abbass, Hancock, Henderson, & Kisely, 2006; Leichsenring & Rabung, 2008). While cognitive behavioural therapies (CBTs) are likely to be efficacious in treating depression among older adults when compared with treatment as usual (Jayasekara et al., 2015; Peng, Huang, Chen, & Lu, 2009), CBT as a treatment for this population remains uncommon, despite its benefits.

First developed by D’Zurilla and Goldfried in 1971 (D’Zurilla & Goldfried, 1971), Problem Solving Therapy (PST) is a psychotherapeutic modality that emerged from the principles of CBT. PST relies on the strong association between problem-solving deficits and the vulnerability it poses in developing and maintaining depression (Nezu, 1987). The psychological impact of these problems is moderated by the coping abilities and ability to render solutions to these events (D’Zurilla & Nezu, 1999).

PST is an evidence-based short-term manualized therapeutic modality that is provided over four to eight brief sessions. During these sessions, the clinician teaches the client a 7-step structured approach to solving problems that they can then use to actively engage in their own recovery. Defining the problem in a clear and specific manner starts the problem-solving process. The next step involves objective goal setting around what the client would like to change about the problem. Multiple potential solutions to the problem are identified next through brainstorming possible solutions. The advantages and disadvantages for each potential solution are identified next and the best solution is picked from the list in the sixth step of PST. An action plan with specific steps required to implement the solution is identified; and implemented as the final step of PST.

PST is an effective care strategy for those living with many mental health conditions. Randomised controlled trials have shown that PST is as effective as antidepressants for individuals with major (Kirkham, Choi, & Seitz, 2015; Mynors-Wallis, Gath, Day, & Baker, 2000; Mynors-Wallis, Gath, Lloyd-Thomas, & Tomlinson, 1995) and minor depression (Barrett et al., 2001). The modality has been specifically adapted to meet the needs of older adults (i.e. 65-years or older) (Arean et al., 1993; Arean & Reynolds, 2005; Robinson et al., 2008) to address the clinical vulnerabilities common within this population. For example, late-life depression may be associated with a range of medical illnesses, cognitive impairment and executive dysfunction. What has been termed as the ‘depression executive dysfunction syndrome’ afflicts a considerable number of depressed elderly patients who may present with reduced interest in activities, impaired verbal fluency and visual naming and who may be resistant to conventional pharmacotherapy (Alexopoulos, Raue, Kanellopoulos, Mackin, & Arean, 2008). Non-pharmacological approaches such as PST have been shown to produce a positive response in older adults who experience pharmacotherapy treatment resistance (Alexopoulos et al., 2008), including those with mild cognitive impairment (Alexopoulos, Raue, & Arean, 2003; Alexopoulos et al., 2008).

PST has also been shown to be an effective intervention for treating generalized anxiety disorder, substance abuse, suicidal ideation, and personality disorders for a wide variety of adult populations (D’Zurilla & Nezu, 1999; Malouff, Thorsteinsson, & Schutte, 2007). However, despite clear evidence of efficacy, increased access to psychotherapy is needed. In Canada, approximately 326,000 older adults have been diagnosed with depression or other mood disorders (Statistics Canada, 2011). As well, open-ended therapy and supportive counselling often leads to poor patient goal setting (Alexopoulos, 2003; Arean, 2010).
this paper, we describe how PST training for clinicians from multiple clinical backgrounds was introduced into a geriatric mental healthcare program across the South West Local Health Integration Network (LHIN). Further, we suggest how this modality can quickly be propagated to facilitate existing community and hospital strengths, which would result in a cost efficient breakthrough for mental healthcare recovery and rehabilitation.

**Methods**

**Clinician Recruitment**

In early December 2015, hospital directors from St. Joseph’s Health Care London as well as LHIN-wide leaders from Schedule 1 Facility-based mental health programs and local community-based organizations were invited to send staff to a PST training opportunity. Interested individuals were sent a letter of information and a questionnaire that asked applicants to describe regularly seen mental health conditions, their professional attainment/experience, and any previous knowledge of/formal training in psychotherapeutic modalities. In late December, eight clinicians were selected for PST training from a pool of 36 applicants. They were selected because they indicated that PST would likely benefit their clients; they regularly treated older adults; and they were able to commit to the training schedule.

**PST Training**

The training approach used by the certified PST trainer, a Geriatric Psychiatrist from Kingston Ontario, was developed at the National Network of PST Clinicians, Trainers and Researchers at the University of California, San Francisco (Hegel, Barrett, Cornell, & Oxman, 2002; Hegel, Barrett, & Oxman, 2000). PST training was provided over a 3-month period from January 2015 until March 2015. Half of the full-day in-person workshop was dedicated to PST theory and learning the foundational seven steps, while the other half was active learning through role-play sessions. Paired trainees practiced the PST modality by taking turns role-playing client and clinician. Following the workshop, eight 1-hour role-play sessions were arranged through videoconferencing to virtually connect the trainees with the trainer. The trainer played the part of a depressed client and a different trainee was assigned each week to act as the clinician.

Survey tools, based on a 5-point Likert scale, were created and used to measure the trainees’ satisfaction with the training program. At the end of their training, the trainees also participated in an informal/unstructured debriefing session, where they were free to discuss their overall impressions of PST. As program evaluation methods were used here, the study was exempt from standard research ethics requirements.

**PST Certification**

To obtain PST certification, each trainee was required to submit audio recordings of at least two treatment sessions with actual clients (an introductory PST session and a follow-up session). While some of the literature has focused on the impact of PST on those living with depression with poor executive function (Alexopoulos et al., 2008), trainees were not asked to identify clients with this specific health issue. The trainer graded each recording in accordance with specific PST certification criteria (Hegel et al., 2002; Hegel et al., 2000) where a minimum overall score of 3/5 on each submitted recording is required. Each trainee was allowed to submit up to three recordings.

**Results**

**Study Participants**

The eight selected trainees included one physician, one registered practical nurse, four registered nurses, and two social workers. One trainee came from the northern area of the South West LHIN, one came from the central area, and six came from...
the southern area. On average, trainees had been in their current position for 8.8 years and 75% declared that they had no formal psychotherapeutic modality training.

**Feedback on the Training Process**
After the full day workshop, trainees strongly agreed that the workshop met their learning needs (5-point Likert scale: mean 4.8). Trainees reported that they were very satisfied with the information that was presented, the trainer’s preparedness, knowledge in PST, explanations of concepts, and ability to keep the workshop engaging (mean values ranged from 4.8 to 4.9).

Trainees indicated that the role-play sessions were very valuable and helped them understand how to apply the information they had learned during the full day workshop. During an informal debriefing session at the end of March, one trainee stated: “I like how my interaction with clients is now structured... It’s a great way to provide wonderful care in a short period of time.” Another trainee stated: “My clients see a big difference in their depressive symptoms after only one session.” As noted by another trainee: “PST makes clients accountable for their own recovery and they begin to rely less on me to help them.”

**Adherence to PST and Completion of Certification**
Submitted audio recordings with actual clients were graded using a tool that examines the level of adherence to PST principles (Hegel et al., 2000). Aligned with the 7-step process, the tool has a number of dimensions (time management, psycho-education, development of problem list, overall problem solving, defining the problem, setting client goals, generating solutions, decision making, generating an action plan, processes used, communication, adherence to PST principles/competence, and a global rating). Of the eight clinicians who participated in the training program, five obtained PST certification with their first set of submitted recordings. Two clinicians achieved certification after they submitted a second case. The overall mean adherence score for the successfully certified trainees was 3.9/5 for the introductory session and 4.1/5 for the follow-up session. Trainees had the most difficulty adhering to the PST principles when it came to defining the problem and setting client goals.

**Discussion**
Our results provide the first evidence that PST can be introduced within a regional geriatric mental health service in Canada. Seven of eight PST trainees from multiple clinical backgrounds became PST certified. Clinicians were very satisfied with the training approach and were able to apply their skills to their clinical work. Increasing access to PST training is feasible and economical. As the time needed to learn PST skills and become certified is relatively short (approximately 20 hours), this strategy can be quickly propagated. In contrast, training interdisciplinary clinicians in other psychotherapy modalities can be time intensive (Pinninti, 2006) and often requires changes to education curriculums.

Current practice needs to change as clients should have access to the newest and best approaches to care. Despite PST being a well-supported psychotherapeutic approach for depression in older adults (Kirkham et al., 2015), few clients within the South West LHIN have access to clinicians who are PST certified. Older patients prefer counselling (Gum et al., 2006) and may lack coping skills making them more vulnerable to repeated depressive episodes. By teaching patients the skills needed for effective problem solving, the potential for recidivism should be diminished.

There is a need to invest in training more clinicians in PST. As the need for mental healthcare services increases, provincial governments are encouraging the use of all mental healthcare providers to provide evidence-based care (Peachey, Hicks &
Adams, 2013). We have received a grant to explore how this technique could be propagated across the South West LHIN. We need to encourage clinicians from various backgrounds who are working in geriatric mental health programs to develop their psychotherapeutic skills. Through the propagation of PST, community access to an evidence-based psychotherapy will be increased and more clients will have both greater access to evidence-based care and greater capacity for future self-management.

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References


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