Implementation and Evaluation of an Evidence-Based Treatment of Disruptive Behaviour within a Children's Mental Health Program

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Abstract: *This practice note details the synchronous implementation and developmental evaluation of a novel model of care that integrates an evidence-based treatment of children with disruptive behaviour within a community-based children's mental health centre in Canada. The overall objective of the project was to evaluate the impact and viability of the integrated program. A multidisciplinary team used a "knowledge to action" framework to guide implementation activities and a developmental evaluation approach to support learning and innovation, as well as measure program success. Key insights and lessons learned with regards to building staff capacity and appreciation for evaluation, balancing clinical and evaluation practices, and sustaining evaluation procedures are discussed. Suggestions for future similar efforts within a children's mental health context are provided.*

Keywords: *children, developmental evaluation, implementation, knowledge to action, mental health*

Résumé : *Cette note sur les méthodes donne une explication détaillée de la mise en œuvre synchrone et de l'évaluation évolutive d'un nouveau modèle de soins qui intègre un traitement fondé sur des données probantes destiné aux enfants au comportement nuisible au sein d'un centre de santé mentale canadien en milieu communautaire. L'objectif général du projet était d'évaluer l'impact et la viabilité du programme intégré. Une équipe multidisciplinaire a utilisé un cadre « connaissance à la pratique » pour guider les activités de mise en œuvre et une approche « évaluation évolutive » pour soutenir l'apprentissage et l'innovation ainsi que mesurer le succès du programme. Les leçons clefs apprises en matière du développement des capacités du personnel et de l'appréciation de l'évaluation, de l'équilibre entre les pratiques cliniques et d'évaluation ainsi que la durabilité des procédures d'évaluation sont*

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examinées. Des suggestions en matière de travaux futurs semblables au sein d'un contexte de santé mentale pour enfants sont fournies.

Mots clés : *enfants, évaluation évolutive, mise en œuvre, connaissance à la pratique, santé mentale*

Mental health problems in childhood are a pervasive public health concern and a tremendous financial burden to the social system (Foster, Jones, & Conduct Problems Prevention Research Group, 2005; Offord, Boyle, & Racine, 1991). Although several children's mental health services exist in Canada, few have been systematically evaluated. Given the tremendous fiscal costs and potential social benefits, there is a pressing need to better understand outcomes associated with these programs. To address this knowledge gap, some agencies have adopted data collection methods to monitor outcomes or the effects of their services to meet the requirement established by government or accreditation bodies (Kirsh, Krupa, Horgan, Kelly, & Carr, 2005). However, these evaluation practices, although important, may lack scope and breadth. Data collected may fulfill accreditation requirements, but may not contribute to continuous quality improvement or sustained evidence-based practice. Although evaluation may be deemed important by some agencies, expansion of measurement to include a range of outcomes is often limited by insufficient expertise, acquiring dedicated funding for evaluation activities (Kirsh et al., 2005), and possibly by a limited appreciation for the benefits of evaluation practices (when balanced against the perceived increase in staff workload).

This note describes the systematic and developmental evaluation of a group-based treatment of children with emotional and behavioural challenges implemented within an intensive children's mental health program. A developmental evaluation approach was chosen because it is particularly well suited to this program implementation emphasizing the integrated role of the evaluator to support data-based decisions for ongoing development, adaptation, and continuous quality improvement. Experiences gained through this evaluation are described with an analysis of challenges, lessons learned, and implications for future similar evaluations. Specific emphasis is placed on integrated clinical and evaluation practices designed to create a culture of evaluation and sustain the practice within the program.

DESCRIPTION OF CASE AND EVALUATION CONTEXT

Why was the evaluation conducted?

This project evaluated the effectiveness and viability of an evidence-based group treatment, Coping Power (Lochman & Wells, 2003, 2004), within the Connect Program (CONNECT)—a mental health program for children aged 8–13 years with serious emotional and behavioural difficulties. The overall objectives of the evaluation project were to (a) evaluate the impacts of an integrated Coping

Power-CONNECT program on parent and child behaviour and competencies; and (b) evaluate how Coping Power fit within the overall structure of CONNECT, specifically with respect to training, fidelity of implementation, and client and clinician participation and satisfaction.

Identification of the problem was the first step in the evaluation process. As is common in the children's mental health system, a highly resourced and financially costly program that had been in existence for many years (i.e., CONNECT) lacked a model of care and a clear framework to evaluate clinical outcomes. An implementation and evaluation team (IE team) was struck by agency leadership to begin to address these concerns, and a Knowledge-to-Action framework (see http://www.cihr-irsc.gc.ca/e/41929.html) was used to guide the implementation and developmental evaluation processes. The interdisciplinary IE team conducted a broad literature search to determine which available programs showed evidence of effectiveness for children with behaviour difficulties with associated mental health problems. Coping Power was selected because it had been tested with a similar client population, had a published treatment manual with clear guidelines for staff training and maintaining program fidelity, and demonstrated effectiveness. Moreover, therapeutic components of Coping Power appeared adaptable to a community-based mental health centre.

The integrated Coping Power-CONNECT program represented a novel and promising model of care with defined objectives that had not yet been evaluated. A developmental evaluation approach was used to monitor program implementation while simultaneously maintaining the capability to adapt to program-based changes. For the purpose of this project, a developmental evaluation as defined by Patton (1994) was used:

> evaluation processes and activities that support program, project, product, personnel and/or organizational development (usually the latter). The evaluator is part of a team whose members collaborate to conceptualize, design, and test new approaches in a long-term, on-going process of continuous improvement, adaptation, and intentional change. (p. 317)

Furthermore, as Fagen et al. (2011) articulate, "developmental evaluation is a complementary approach to traditional forms of evaluation where measuring program outcomes is conducted only after complex programmatic and contextual issues have been addressed" (p. 646). Taking this into consideration, a deliberate attempt was made to integrate evaluation and implementation processes to monitor internal and external validity of the program and to facilitate sustainability of the program post-implementation (Durlak & DuPre, 2008). As such, the evaluator was integrated within the implementation process and closely collaborated with program staff (Fagen et al., 2011; Patton, 1994, 2011). In keeping with traditional approaches to evaluation, however, aspects of a summative evaluation, with a focus on measuring program outcomes, were incorporated into the evaluation to test the effectiveness of the evidence-based program after modification for implementation in a community-based mental health organization.

What did we want to learn?

The evaluation addressed the following questions:

1. Would the integrated Coping Power-CONNECT program show positive client outcomes?
2. Would the integration of Coping Power and CONNECT be satisfactory to clinicians, parents, and children?
3. Would the integrated program enhance client attendance and clinician participation in CONNECT? Given the substantial commitment of agency and client resources to CONNECT, it was considered important to explore options to maximize client participation and motivation.
4. Would clinicians implement Coping Power, an evidence-based treatment, as intended (i.e., with fidelity)?

What resources (time, money, in-kind, etc.) were available for conducting the evaluation? Were they suitable for answering the evaluation questions?

Striking an acceptable balance between staff time allocated to client care and allocated to evaluation and quality improvement is an ongoing and significant impediment to successful program evaluation within children's mental health centres (Brown Urban & Trochim, 2009). As such, in order for this evaluation to be successful, a commitment from senior leadership and program management within the mental health centre was required to allocate staff to the implementation and evaluation processes. Temporary reduction in demands on their clinical time allowed the IE team to meet on a weekly basis for a four-month period to familiarize themselves with Coping Power and engage in discussion and inquiry. Working as a team throughout this process appeared to empower members to take ownership of the project. As such, shared decision-making and staff engagement provided a foundation for implementation and developmental evaluation (Durlak & DuPre, 2008).

Another common challenge within children's mental health is securing funding for evaluation activities. For this project it was decided that external funding would be required initially to launch formal evaluation activities. A proposal for a pilot study was written and accepted for funding by the Ontario Centre of Excellence for Child and Youth Mental Health. Funds supported the purchase of measures, data analysis software, and knowledge translation activities, and allowed us to include a research assistant on the team to support the evaluation processes. The written proposal required development of a logic model and evaluation plan that detailed the short-, mid-, and long-term outcomes of the project along with designated measurement tools. These processes were not familiar to many members of the IE team and were facilitated by the consulting psychologist. As such, this effortful stage in the process required much capacity building within the agency.

Given that outcome evaluation of Coping Power-CONNECT was a novel initiative, the team decided to maximize the breadth of measurement for the preliminary phase of the project and, following the initial evaluation period, reduce the number of measures based on their sensitivity and ease of administration. Measures were selected by the consulting psychologist in collaboration with other members of the IE team. Measures were selected primarily because each mapped onto a hypothesized near- or mid-term outcome. These included standardized questionnaires of child behaviour and emotional functioning, program fidelity, client satisfaction and attendance, and clinician satisfaction. In addition, given the relatively small budget available for the evaluation project, the financial cost of potential measures was carefully considered by the IE team.

Following the launch of Coping Power-CONNECT, weekly team meetings were coordinated by the clinical supervisor (who was part of the IE team) to provide ongoing consultation and support for implementation and evaluation processes. The importance of ongoing clinician mentoring has been shown to be essential for program fidelity (Lochman et al., 2009). Team meetings provided a forum for shadowing and mentoring of other staff. The belief was that this model of training, mentoring and shadowing would have a "multiplier effect," whereby knowledge of the program and the evaluation approach would be held widely and not by a select few, thus potentially contributing to sustainability of the project within the organization.

DESCRIPTION OF CHALLENGES AND HOW THEY IMPEDE THE EVALUATION PROCESS

What challenges did you face in conducting this evaluation? How did these challenges affect the implementation of the evaluation?

The IE team encountered several challenges and learned several lessons that will inform this and other program evaluations. A first challenge was securing ongoing financial support for the evaluation processes within the agency. The tremendous need for service within children's mental health programs puts a burden on resources that tend to be allocated to the provision of clinical care. Although the IE team was able to secure initial funding for the evaluation from the Ontario Centre of Excellence for Child and Youth Mental Health, the children's mental health agency provided in-kind support in the form of staff resources and infrastructure supports. Maintaining these commitments following the initial launch of the program has required adaptations to the original evaluation plan (i.e., reduction in scope), and ongoing advocacy and championing from multiple levels of staff within the agency. Championing is an ongoing process, given the cyclical and shifting funding realities for this children's mental health centre.

Determining balance between the breadth of evaluation (i.e., number and types of measures) and clinician and client burden was a second major challenge

for evaluation of this project. The IE team was thoughtful and deliberate in choosing measures that were sensitive and specific to the intended program outcomes (Coster, 2013). Moreover, the selection of measures needed to balance their cost, the amount of time these required to be completed (i.e., clinician and client burden), their demonstrated psychometric properties, and informant type (i.e., it was important to identify measures that could be completed by multiple informants including clients, caregivers, and school personnel). With these considerations in mind the IE team (that included a consulting psychologist) developed the evaluation plan. The process of measure selection was challenging and required discussion and consensus building.

Following the initial evaluation stage, feedback from clinical staff and clients indicated that the amount of time required to complete the package of measures was initially perceived as lengthy, challenging, and a burdensome addition to an already heavy workload. Further, the collection of measures required dedicated monitoring that was difficult to track. Although intended to support the clinicians' work, the important information provided by these clinical measures, and their potential to inform assessment of client behavioural and emotional needs, were not fully realized.

Building expertise though training and mentoring processes to establish a culture of evaluation to sustain evaluation capacity was a third general area of challenge encountered. Although deemed important, mentoring processes and the inclusion of multiple perspectives resulted in a longer timeline and more gradual implementation and evaluation processes. This approach, sometimes referred to as "scaffolding," was challenging in the present project. New processes that included meetings to discuss program modifications and evaluation methods were not familiar to staff, who showed reluctance to adopt these new practices and evaluation activities. In particular, program fidelity monitoring was a practice change that required ongoing staff engagement. The monitoring of program fidelity was conducted by clinical staff and members of the IE team after each group session. Monitoring fidelity was an important component of the developmental evaluation approach to ensure reliable implementation and to monitor program adaptations. Further, program fidelity monitoring enabled collaborative learning between program staff and the IE team, especially with regards to implementation success and challenges. The IE team continues to grapple with how best to motivate and support staff with this process.

DESCRIPTION OF HOW CHALLENGES WERE ADDRESSED

How did you address each of these challenges?

From the onset of this project, the IE team considered integrated knowledge translation through staff engagement and collaboration to be key drivers of sustained practice change (Durlak & DuPre, 2008). Through a process of staff engagement we attempted to ensure that the project was understood by clinical staff and a culture created that would be receptive to and supportive of the changes to process

over the long term. Beyond contribution to the development of the implementation and evaluation framework, members of the team participated in many knowledge transfer activities through presentations, trainings, team meetings, and newsletters. We believe that these integrated knowledge translation activities influenced staff involvement in processes that the IE team hopes will sustain the novel model of care and embedded evaluation framework.

To incorporate multiple perspectives, team meetings were used to establish a forum to transfer knowledge to clinical staff and support mentoring/coaching for evaluation activities (Kaufman, 2003). In addition, ongoing updates and information were provided through periodic e-mails to clinical staff involved in the evaluation project. In addition, the CONNECT supervisor communicated widely about the program, sending out e-mails four times a year to all staff to promote the program more broadly within the agency. The Coping Power-CONNECT evaluation project was featured within the agency's newsletter that is circulated to the centre's board of directors and all staff. This validated the importance of implementation and evaluation processes and highlighted the agency's appreciation of the staff time and contribution to the project. Each of these activities was deemed important for the success of the evaluation but required additional work by the program supervisor who was part of the IE team. Since the initial evaluation stage, the program supervisor, the designated "champion" within the agency, has continued to work hard to bolster the continued use of evaluation practices.

With regards to measurement tools, the program supervisor spent a great deal of time urging clinical staff to collect measures and use these tools to support program fidelity monitoring. Although a continued challenge, staff concerns with data collection appeared to gradually lessen when they were provided with ongoing support and training on the evidence-based practice and the evaluation protocol. Furthermore, staff were provided with client outcome data as the study progressed. We wonder whether this information, which concretely quantified therapeutic success and client satisfaction, bolstered clinicians' sense of efficacy and led to greater commitment to the Coping Power-CONNECT program. Following the initial evaluation period, clinician feedback resulted in a smaller (and possibly more feasible) set of measures. This reduced set of measures also diminished the time required by the dedicated research assistant, whose time could then be shifted to other agency responsibilities.

Finally, although the initial evaluation had many successes, sustaining a stable culture of evaluation within the agency is an ongoing challenge. With continued integration of program fidelity monitoring within team meetings, there has been a noticeable change in clinician engagement and sense of program ownership. As a further step to support an evaluation culture, the IE team initiated a periodic "community of practice" teleconference to discuss practice issues and ongoing implementation efforts. The community of practice provides another mechanism to sustain knowledge use, mentor staff, discuss program changes in a forum, build opportunities to collaborate with other organizations on future evaluation projects, and focus on continuous quality improvement.

What should evaluators do to avoid these challenges? What would you recommend for others faced with similar challenges?

Although the IE team attempted to engage clinical staff early in the evaluation process, we wonder whether conducting more focused meetings to receive specific feedback regarding potential concerns about measure selection and the impacts of evaluation on clinical process and workload would have facilitated earlier clinician "buy-in" to the evaluation process. Future evaluation projects may be improved by increasing the transparency of these processes and identifying potential challenges at the onset to help clinicians feel more connected to the decisions made and to the novel processes.

In a similar way, the IE team chose to evaluate a range of near-, mid-, and long-term outcomes using several clinical measures for several respondents (i.e., client, caregiver, and school staff). Although this approach maximized the scope of the evaluation, we wonder whether a step-wise implementation of measures, which gradually built capacity for clinicians, would have been more acceptable and feasible. Future integrated and developmental implementation-evaluation projects may be strengthened by first building clinicians' knowledge and comfort with a limited set of measures and then expanding the scope of measurement once the rationale for measurement and comfort has been established.

A final and key consideration learned through this process is that the evaluator should acknowledge that children's mental health centres, and the clinical staff who provide these much-needed services, are typically underresourced and overburdened. An approach to evaluation that takes these realities into account and incorporates a thoughtful and developmental process may be most acceptable for clinicians and most sustainable within the agency.

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