Effectiveness of Occupational Performance Coaching in Improving Children’s and Mothers’ Performance and Mothers’ Self-Competence

Fiona Graham, Sylvia Rodger, Jenny Ziviani

OBJECTIVE. This study examined the effectiveness of occupational performance coaching in improving children’s and mothers’ occupational performance and mothers’ parenting self-competence.

METHOD. A one-group time-series design was used to evaluate changes in children’s (n = 29) and mothers’ (n = 8) occupational performance at four time points: (1) pre–wait list, (2) preintervention, (3) postintervention, and (4) follow-up.

RESULTS. Significant improvements in occupational performance occurred postintervention for children, \( F(1, 78) = 153.72, p < .001, \eta^2 = .86 \), and mothers, \( F(1, 78) = 153.72, p < .001, \eta^2 = .86 \), that were maintained 6 wk after intervention. Mothers’ self-competence in parenting also improved, \( F(1, 72) = 17.36, p < .001, \eta^2 = .42 \).

CONCLUSION. Findings provide preliminary evidence supporting the effectiveness of occupational performance coaching in improving children’s and mothers’ occupational performance and mothers’ parenting self-competence. Improvements were sustained and appeared to generalize to other areas of performance.


Family- and occupation-centered practices are now widely expected of contemporary occupational therapy, yet enacting these ideals can be challenging (Hanna & Rodger, 2002; Townsend & Polatajko, 2007). In the context of supporting children with occupational performance difficulties, family-centered practices such as maximizing parent choice and developing collaborative parent–therapist relationships are associated with greater parental self-efficacy, positive parent and child behaviors, and family well-being (Dunst, Trivette, & Hamby, 2007). Occupation-centered practice—that is, the enablement of occupation in everyday contexts—is heralded as core to occupational therapy (Law, Baum, & Baptiste, 2002) and is highly relevant to practice with children and families (Rodger, 2010). More broadly, societal expectations of engagement with therapists have shifted from remediation of impairments toward achieving outcomes that reflect clients’ enhanced capacity to participate in their communities (World Health Organization, 2001). Yet, although strong imperatives exist for occupational therapy practitioners to work in family- and occupation-centered ways, few evidence-based interventions explicitly guide this process of interaction with parents in their achievement of goals for their children.

Occupational performance coaching (OPC), a strengths-based approach for working with people affected by occupational performance challenges, is one such approach (see Graham & Rodger, 2010, and Graham, Rodger, & Ziviani, 2009, for a more detailed explanation of OPC as a strengths-based approach). This article examines the effectiveness of OPC for working with mothers who...
have concerns about their own or their child’s occupational performance and reports OPC’s effects on parental self-competence.

OPC focuses on goals of improved performance identified by the client. Goals may relate to the performance of the client (e.g., parent or caregiver), the client’s dependent (e.g., child), or the family. Coaching, in which a goal-focused conversational format is used to guide clients to examine their goals in detail and identify changes to the performance context that improve goal achievement, is a key element of OPC. The occupational therapist may also use modeling or hands-on trialing of strategies to facilitate clients’ identification of solutions.

During OPC, occupational therapists are guided by three enabling domains: emotional support, information exchange, and a structured process. Each domain is critical to the enablement of performance at various times during engagement with the client. Emotional support refers to verbal and nonverbal strategies a therapist can use to help clients move from an emotional or problem-focused view of the issues to one that is more solutions or enablement focused. Information exchange refers to elicitation of clients’ existing knowledge that can contribute to identifying solutions and the provision of information by therapists when a knowledge gap has become apparent. The structured process provides a temporal guide for sessions and a problem-solving format for clients to apply independently. The therapist’s exploration of goal-specific performance situations is further guided by a process called collaborative performance analysis, in which the therapist identifies clients’ perceptions of what happens during performance, clients’ preferred performance scenario, barriers and bridges to the preferred performance scenario, and clients’ needs in implementing changes expected to improve performance (Graham & Rodger, 2010).

OPC is consistent with family-centered practice ideals such as consideration of the needs of the whole family and empowerment of parents to feel competent in their roles. Raising a child with a disability has a profound impact on the wider family system, including maternal mental health (Hauser-Cram, Erickson-Warfield, Shonkoff, & Wyngaarden-Krauss, 2001), family routines (Marquenie, Rodger, Mangohig, & Cronin, 2011), and financial status (Emerson, 2003). Consideration of the long-term and familywide impact of parenting a child with a disability, as advocated in family-centered practices, is critical to the effectiveness of occupational therapy practitioners. Intervention protocols are needed that can guide practitioners in attending to these issues as they affect children’s and parents’ occupations and that can be replicated and tested.

OPC is also consistent with an occupation-centered approach. Despite considerable theoretical development of what is meant by occupation-centered practice (Townsend & Polatajko, 2007), the call for effective occupation-centered interventions continues (Bendixen & Kreider, 2011). Our study examined the effectiveness of OPC in improving children’s and parents’ occupational performance and parents’ self-competence. Specifically, the research questions were as follows:

1. Does OPC lead to improvements in children’s and parents’ occupational performance in areas identified as concerning by parents?
2. Does improvement also occur in areas of children’s or parents’ performance that are not addressed during intervention?
3. Does OPC lead to improvement in parents’ sense of competence in parenting?

Method

Research Design

A one-group time-series design was used to examine the effectiveness of OPC for children’s and parents’ occupational performance. Measures of change in occupational performance and parents’ sense of competence (dependent variables) were repeated at four time points: (1) 6–8 wk before intervention, (2) 1 wk before intervention, (3) 1 wk postintervention, and (4) 6 wk after intervention completion (see Table 1 for additional details about the study time frame). The intervention period lasted 3–8 wk—that is, until goals were achieved, up to a maximum of eight weekly sessions. A sample size of 30 was sought on the basis of power calculations from the existing normative data for the Parenting Sense of Competence Scale (PSOC; Johnston & Mash, 1989; d = 0.60) using α = .05 and power = .80; however, complete data for only 29 participants were obtained within the available time frame. Ethical approval for this study was granted by the relevant ethics committee at The University of Queensland (2006000953) and by Catholic Education (Brisbane; A11.071 GR).

Participants

Participants were sought who were parents of children ages 5–12 yr who had concerns with their children’s occupational performance in at least three areas as identified through the Canadian Occupational Performance Measure (COPM; Law et al., 2005). Although OPC has the potential to be applicable to children of a wider age range, for the purposes of this study, parents of children ages 5–12 yr were recruited to ensure that participants could meaningfully complete the intervention. A screening interview was conducted to identify participants’ eligibility and to provide an explanation of the study. Parents who met eligibility criteria were invited to participate in the study after providing written consent. A total of 30 participants were recruited from 2006 to 2008; an additional 29 participants were recruited from 2009 to 2010 to ensure sufficient power. Both groups were similar in terms of demographic characteristics and reported child and family needs. The sample was comprised of 23 mothers and 7 fathers, with a mean age of 37.4 yr (SD = 7.0). The majority of the sample were married (94%), and 77% were employed full time. The average child age was 7.9 yr (SD = 2.0), and 57% of the sample were boys. Participants reported a wide range of concerns, with a mean of 5.8 concerns per child (SD = 2.0), and a mean of 9.2 concerns per family (SD = 3.0). Concerns most commonly related to fine motor skills, self-care, and play and leisure activities. The sample was diverse in terms of cultural background, with 50% identifying as Caucasian, 23% as Aboriginal, 13% as Asian, 9% as other, and 5% not identifying a specific cultural background. The sample also included a variety of family structures, with 33% identifying as single parents, 33% as two-parent families, and 34% as other family structures. The sample was also diverse in terms of child functioning, with 40% scoring below the 10th percentile on the Griffiths Mental Development Scales at the time of recruitment. A power analysis conducted after the study was completed indicated that the sample size was adequate to detect a medium effect size (d = 0.5) with a power of 0.80 at the 5% significance level.
in middle childhood were sought to provide a more homogeneous developmental sample of children. We asked parents not to obtain services for their children elsewhere for the same issues while the study was taking place. Participants were recruited through a letter to those on a waiting list to attend a university student occupational therapy service and through local Catholic school newsletters (Catholic Education is the second-largest provider of primary school education in Queensland serving families of mixed socioeconomic status [McCollow & Assad, 2008] and, as such, afforded an accessible and representative sample of parents for this study). Parents made phone contact with Fiona Graham, the principal researcher and intervention therapist, who initiated screening and, when appropriate, study involvement.

**Instruments**

The timing of application of each instrument is given in Table 1. Occupational performance for both parents and children was measured using the COPM (Law et al., 2005) and goal attainment scaling (GAS; Kiresuk & Sherman, 1968). The COPM is a criterion-based measure of occupational performance in which clients rate the level of importance of, performance of, and satisfaction with goals in self-care, productivity, and leisure on a 10-point scale. Goals are identified as being of concern during a semistructured interview. A change of 2 or more points in the mean score on the COPM has been reported to indicate clinically significant change (Law et al., 2005). Cusick, Lannin, and Lowe (2006) added an additional category at the extreme ends of the scale to allow either for regression from baseline or for improvement beyond the best possible outcome documented. Using this approach, Cusick et al. found GAS to be more sensitive to clinically relevant change ($d = 1.96$, $p < .0001$). The middle step in GAS scales (expected outcome) was determined by parents’ expectation of improvement after OPC intervention. In the current study, parents rated their child’s performance and their own using both the COPM and GAS.

The COPM is well supported through its theoretical links to the Canadian Model of Occupational Performance (Law et al., 2005) and as evidenced by its extensive use as the gold standard against which other measures of client-valued performance are evaluated (Carswell et al., 2004).

GAS is an individualized, criterion-based measure of goal attainment in which goals are determined through interview with clients. Goals are mapped against a 5-point scale in which each step of the scale indicates improvement ranging from current performance to beyond expected performance. The reliability and validity of GAS are highly dependent on how scales are constructed and scored. In this study, all scales reflected parent-identified goals describing performance of occupations; hence, the construct being measured was occupational performance. We followed steps recommended to enhance GAS content validity proposed by King, McDougall, Palisano, Gritzran, and Tucker (1999), including peer review of scales and parent assessment of the accuracy and meaningfulness of scales.

For the current study, GAS scoring was modified from the original 5-point scale to a 7-point scale consistent with the recommendation by Cusick, McIntyre, Novak, Lannin, and Lowe (2006) to add an additional category at the extreme ends of the scale to allow either for regression from baseline or for improvement beyond the best possible outcome documented. Using this approach, Cusick et al. found GAS to be more sensitive to clinically relevant change ($d = 1.96$, $p < .0001$). The middle step in GAS scales (expected outcome) was determined by parents’ expectation of improvement after OPC intervention. In the current study, parents rated their child’s performance and their own using both the COPM and GAS.

The PSOC was used to identify changes in parenting competence after OPC. The PSOC measures feelings of competence in the parental role in the two dimensions of...
efficacy and satisfaction. It is a 16-item self-report questionnaire with responses indicated on a 6-point Likert scale; higher scores indicate greater parenting self-competence. Average scores for nonclinical samples of mothers of boys ages 7–9 yr were 37.69 (Satisfaction), 24.79 (Efficacy), and 62.48 (total score; Johnston & Mash, 1989). Factor analysis of PSOC items supports the original distinction between the two subscales, Satisfaction and Efficacy (Johnston & Mash, 1989; Ohan, Leung, & Johnston, 2000).

The Adaptive Behavior Assessment System II–Parent Form (ABAS II; Harrison & Oakland, 2003) provided norm-referenced descriptive information about the adaptive skills of children at Time 1 (pre–wait list). The ABAS II is a 232-item self-administered questionnaire. Internal consistency of ABAS II for each skill area is high (all $\alpha > .75$; Harrison & Oakland, 2003).

**Intervention Procedure**

The intervention therapist (Fiona Graham) coached mothers to identify ways of facilitating their child’s occupational performance to support goal achievement. At the time of the study, the intervention therapist, an occupational therapist, had 10 yr of clinical experience, including 6 yr working with children and families. Consistent with OPC, as described in Graham, Rodger, and Ziviani (2009) and Graham and Rodger (2010), the therapist drew on the three enabling domains of OPC (emotional support, information exchange, and a structured process) and applied the techniques of collaborative performance analysis, questioning, listening, observing, modeling, explaining, and in vivo coaching to assist mothers in identifying strategies that supported their child’s performance. Fidelity in the application of OPC was verified through content analysis of video footage and transcripts (Graham, Rodger, & Bauer, 2009).

Children’s attendance at OPC sessions was at the discretion of parents. Consequently, approximately half of the children (54%) attended between one and eight sessions ($Mdn = 2$, range $= 1–3$) over a maximum of 8 wk. The remaining 46% of children did not attend any intervention sessions. Sessions concluded when parents had achieved the goals they wished to focus on. Parents completed a median of five sessions (range $= 3–8$).

**Data Collection**

COPM and GAS data were initially collected in a face-to-face interview in university-based clinic rooms by the intervention therapist, who was not blinded to the study phase, at Time 1. All parents were invited to select goals related to their child’s or their own performance. Subsequently, a total of 135 goals relating to children’s performance were identified. Eight parents identified a total of 16 goals related to their own parenting performance. All other paper-based measures were sent by mail to parents for completion before the initial interview. Parents attended weekly OPC sessions of approximately 1 hr in the same rooms during the intervention phase. At post-intervention (Time 3), the intervention therapist again gathered COPM and GAS data at a face-to-face interview. All other measures at all other time points (see Table 1) were completed by parents independently and e-mailed or returned by mail to the intervention therapist.

**Analysis**

Several goals were not addressed during intervention because parents were encouraged to report on the full scope of occupational performance issues at the Time 1 (pre–wait list) interview (Table 1). All potential goals were drafted into goal statements using the GAS and COPM. As intervention commenced, parents prioritized the potential goals they wanted to address during intervention sessions. Data on goals that were not addressed continued to be collected throughout the study. The goals parents selected to address are referred to as “goals addressed.” Goals mothers chose not to address during intervention are referred to as “goals not addressed.”

Consequently, we analyzed COPM and GAS scores separately for four goal types relating to (1) children’s performance on and satisfaction with goals addressed, (2) children’s performance on and satisfaction with goals not addressed, (3) parents’ performance on and satisfaction with goals addressed, and (4) parents’ performance on and satisfaction with goals not addressed. All data were analyzed using SPSS Version 17.0 (SPSS, Inc., Chicago).

We examined data for normality using histograms, Q-Q plots, and skewness and kurtosis tests. A skewness or kurtosis $X^2$ probability exceeding $\alpha = .05$ along with supporting information from graphs was considered sufficient evidence of normality to use parametric statistics for analysis. Parametric statistics (analysis of variance followed by post hoc analyses using the Wald test with the Bonferroni adjustment) were used when data were normally distributed. Data that were not normally distributed were analyzed using the Wilcoxon signed-rank test. When the sample was very small ($n = 2$), results are reported descriptively. The criterion for significance of findings was set at $\alpha < .05$.

**Results**

Thirty-nine parents (all mothers) contacted the principal researcher to be involved in the study. Two of the mothers...
were excluded because they did not meet the inclusion criterion of having developmentally appropriate occupational goals for their children. Time 1 (pre–wait list) instruments were completed by 37 mothers. Five of the 37 mothers declined or did not respond to invitations to continue with the study at Time 2 (preintervention). A further 2 mothers began sessions but discontinued attendance, one because of work commitments, the other without explanation. Time 3 (postintervention) data were obtained for 28 mothers. An additional 2 mothers completed intervention sessions until goals were achieved but did not return Time 3 paper instruments. One of the 2 mothers had completed the GAS and COPM (instruments with an interview format). Twenty-five mothers completed instruments sent by e-mail at Time 4 (follow-up). For these reasons, the sample size varies between measures and between time points of the study (Table 1).

**Participant Demographics**

All mothers (n = 29) were aged 31–45 yr and had between one and five (Mdn = 2) children at home. Most families (approximately 80%) were dual-parent families. Family income spanned low-, middle-, and high-income brackets for Queensland, Australia (Australian Bureau of Statistics, 2006). Mothers’ education level was generally high, with 52% (n = 15) having completed postgraduate study.

The children for whom mothers set goals ranged in age from 5 to 11 yr (M = 7 yr, 4 mo; SD = 1.6) and were mainly boys (83%, n = 24). Most children did not have a formal medical diagnosis as reported by their mothers. The 17% (n = 5) who did have a medical diagnosis had an intellectual disability (7%, n = 2) or Asperger syndrome (10%, n = 3). Children’s adaptive skills measured using the ABAS II were generally below population means in the 10 skill areas, half of which were in excess of 1 standard deviation below the mean. From mothers’ report, approximately three-quarters of children had previously received interventions from specialist teachers, occupational therapists, physical therapists, or speech pathologists using a variety of approaches for issues related to their currently identified goals.

The skill areas for which goals were identified for children included self-care (45%, n = 61), productivity (e.g., homework, chores; 27%, n = 37), play (13%, n = 17), and social communication (15%, n = 20). Goals relating to mothers’ performance accounted for 7% (n = 16) of all goals. The most common goals relating to mothers were maintaining a calm state while supporting their child with goal tasks or obtaining specific skills or knowledge to better assist their child.

**Children’s Performance on and Satisfaction With Goals Addressed**

Children’s performance differed significantly before and after OPC sessions, as did mothers’ satisfaction with their child’s performance (Table 2). Post hoc analysis of COPM scores at each phase of the study revealed that significant improvement in children’s performance occurred over the intervention phase (p < .001), with a large effect size (d = 2.53), but not over the wait or maintenance phases. Improvements in children’s performance were maintained at follow-up. Mothers’ satisfaction with their child’s performance on the goals addressed during OPC sessions improved significantly over the wait phase as well as during the intervention phase.

GAS scores at pre–wait list, preintervention, and postintervention also showed significant differences in children’s performance of goals that were addressed in intervention, F(1, 54) = 370.93, p < .001. Post hoc analysis indicated that children’s performance improved significantly over the intervention phase (M = 5.14, SD = 0.77, p < .001), consistent with COPM findings, but also indicated significant improvement over the wait phase (M = 2.35, SD = 0.49, p < .002). However, the effect size was largest over the intervention phase (d = 3.35).

### Table 2. Analysis of Variance Results for Children’s Occupational Performance Scores

<table>
<thead>
<tr>
<th>Goal Type</th>
<th>COPM Scores, M (SD)</th>
<th>ANOVA (Lower-Bound)</th>
<th>Post Hoc Analysis (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
<td>Time 3</td>
</tr>
<tr>
<td>Goals addressed:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance (n = 27)</td>
<td>3.20 (.99)</td>
<td>3.60 (1.17)</td>
<td>7.58 (0.86)</td>
</tr>
<tr>
<td>Goals addressed:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction (n = 27)</td>
<td>2.64 (.94)</td>
<td>3.54 (1.24)</td>
<td>8.04 (1.23)</td>
</tr>
<tr>
<td>Goals not addressed:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance (n = 16)</td>
<td>2.93 (1.06)</td>
<td>4.19 (1.66)</td>
<td>6.55 (1.85)</td>
</tr>
<tr>
<td>Goals not addressed:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction (n = 14)</td>
<td>2.60 (.94)</td>
<td>3.93 (1.75)</td>
<td>6.34 (1.40)</td>
</tr>
</tbody>
</table>

Note. Time 1–2 = wait phase; Time 2–3 = intervention phase; Time 3–4 = maintenance phase. ANOVA = analysis of variance; COPM = Canadian Occupational Performance Measure; M = mean; SD = standard deviation.

*p < .05, two-tailed. **p < .001, two-tailed.
**Children’s Performance on and Satisfaction With Goals Not Addressed**

Children’s performance on goal activities that were not addressed during OPC sessions also differed significantly after OPC sessions (see Table 2). COPM scores indicated that children’s performance improved significantly over the intervention phase \((p < .001, d = 1.08)\) but not over the wait or maintenance phases. Additionally, GAS scores indicated that significant improvement occurred in children’s performance of goals that were not addressed over both the wait and the intervention phases.

Improvements in mothers’ satisfaction with their child’s performance on tasks that were not addressed were also significant during the intervention phase \((p = .002, d = 0.91)\) but not over the wait or maintenance phases. Improvements in mothers’ satisfaction were maintained over the maintenance phase.

**Mothers’ Performance on and Satisfaction With Goals Addressed**

Mothers’ performance in areas that were addressed during OPC sessions and their satisfaction with performance also improved significantly according to COPM scores (Table 3) and GAS scores, \(X^2(2, n = 11) = 20.97, p < .001\). Post hoc analysis of both COPM and GAS scores indicated that mothers’ performance improved significantly over the intervention phase but not over the wait or maintenance phases. Mothers’ satisfaction with their performance improved significantly over the wait and intervention phases.

**Mothers’ Performance on and Satisfaction With Goals Not Addressed**

Only two goals relating to mothers’ performance were not addressed during intervention. A clinically significant mean improvement \((≥ 2 \text{ points}; \text{Law et al., 2005})\) occurred in these goals over the wait phase (Time 1 to Time 2) in both performance (mean increase of 3 points) and satisfaction (mean increase of 5 points). Changes over the intervention and maintenance phases were not significant.

**Self-Competence in the Parental Role**

The internal consistency of the PSOC for this group of mothers was low (item-to-item correlations ranged from \(r = .58, p < .001\), to \(r = -.01, p = .97\)), prompting caution in the interpretation of results relating to this measure. Mothers’ overall self-competence in the parenting role improved significantly after OPC (Table 4). Post hoc analyses revealed that improvement in mothers’ total self-competence over the intervention phase was significant \((p = .003, d = 0.65)\) and was maintained at follow-up. Mothers’ satisfaction with the parenting role did not improve significantly in any phase of the study. Mothers’ sense of efficacy improved significantly over the intervention phase \((p < .001, d = 0.65)\) but not over the wait or maintenance phases.

**Discussion**

Improvements in all goals (both related to mothers’ or children’s performance and addressed or not addressed during intervention) were clinically significant after OPC intervention and were maintained at 6-wk follow-up. The focus of OPC on both mothers’ and children’s performance is uncommon in interventions provided by pediatric occupational therapists. Given the emphasis in family-centered practice on the needs of the wider family in supporting children with disabilities (King, Teplicky, King, & Rosenbaum, 2004), the applicability of OPC to both parents’ and children’s performance is pertinent to clinical practice. Through use of OPC, occupational therapy practitioners can facilitate occupational engagement beyond

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**Table 3. Analysis of Variance Results for Mothers’ Occupational Performance Scores**

<table>
<thead>
<tr>
<th>Goal Type</th>
<th>Median COPM Scores</th>
<th>Friedman’s ANOVA</th>
<th>Post Hoc Analysis (Wilcoxon)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
<td>Time 3</td>
</tr>
<tr>
<td>Goals addressed:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance ((n = 7,) Time 1–3; (n = 6,) Time 4)</td>
<td>3.75</td>
<td>4.50</td>
<td>8.50</td>
</tr>
<tr>
<td>Goals addressed:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction ((n = 7,) Time 1–3; (n = 5,) Time 4)</td>
<td>2.00</td>
<td>4.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Goals not addressed:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance ((n = 2))</td>
<td>4.50</td>
<td>7.50</td>
<td>7.50</td>
</tr>
<tr>
<td>Goals not addressed:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction ((n = 2))</td>
<td>2.00</td>
<td>7.00</td>
<td>7.50</td>
</tr>
</tbody>
</table>

*Note. — = not applicable. Time 1–2 = wait phase; Time 2–3 = intervention phase; Time 3–4 = maintenance phase. ANOVA = analysis of variance; COPM = Canadian Occupational Performance Measure.  
*p < .05, two-tailed.*
the immediate issues affecting the child to wider occupational limitations affecting the parents and families of children with occupational challenges.

Generalization of improvements to tasks other than those addressed during intervention may also have occurred. Although improvement in GAS goals that were not addressed during intervention could indicate that goals overlapped (Brown, Effgen, & Palisano, 1998), mothers’ comments in another study that examined their experience of OPC (Graham, 2011) indicated their perception that generalization did occur. Within OPC, generalization is encouraged by, for example, explicit discussion about other areas of performance to which successful strategies might apply.

Unexpectedly, significant improvements in children’s performance (as measured by GAS) and mothers’ satisfaction with their child’s performance on goals that were later addressed occurred after goal setting but before the commencement of OPC intervention (from Time 1 to Time 2). Although children’s maturation may in part explain this improvement, an intervention effect after goal setting may have occurred, as has been observed elsewhere (Locke & Latham, 2002; Neubert, 1998). Goal setting is known to influence attention, persistence, and application of knowledge in relation to the performance of tasks, which may in turn influence performance (Locke & Latham, 2002). Additionally, when goals are highly meaningful to clients (Fan, Meng, Billings, Litchfield, & Kaplan, 2008), the intervention effects of goal setting are heightened. Further exploration of the effect of goal setting within OPC is warranted.

Improvements in mothers’ self-competence, particularly their sense of efficacy in parenting, were significant after OPC; however, the clinical significance of this improvement is unclear. Although the effect sizes of improvements were medium to large, the mean improvement was less than that reported in other studies with similar populations (Odom, 1996; Pisterman et al., 1992). The low internal consistency of the PSOC for this sample also prompts caution in the interpretation of these results.

Limitations and Future Research

Limitations of this study include the absence of a control group, lack of blinding of the intervention therapist or assessor, the high education level of mothers, the predominantly undiagnosed sample of children, and the short length of time to follow-up. Future research with designs that control for bias more adequately, such as a randomized controlled trial, are warranted. Additionally, studies that focus on mothers and children with specific health conditions and those with lower levels of education would extend the understanding of OPC’s effectiveness. OPC also needs to be further researched when undertaken by other occupational therapy practitioners to ensure that others can be trained to implement this intervention effectively and with fidelity.

Implications for Occupational Therapy Practice

The key practice implications from these findings are as follows:

- There is preliminary support for the use of OPC when working with mothers toward goals for their children and themselves.
- OPC may lead to generalized improvements in children’s performance to other occupations beyond the specific activities or goals addressed during intervention.
- The effect of setting goals, as it was used in OPC, should not be underestimated, because the process itself may lead to significant improvements in children’s and parents’ perceived performance.

Conclusion

OPC holds promise as an effective intervention for occupational therapy practitioners attempting to meet the demands of contemporary practice expectations. Findings from this study of the use of OPC with mothers of children with occupational performance issues offer preliminary support for its effectiveness with this population and indicate that OPC may lead to generalized and enduring performance improvement.

Table 4. Analysis of Variance Results for Parental Self-Competence

<table>
<thead>
<tr>
<th>PSOC Scale</th>
<th>Time 1 (n = 29)</th>
<th>Time 2 (n = 29)</th>
<th>Time 3 (n = 28)</th>
<th>Time 4 (n = 25)</th>
<th>ANOVA Time 1–2</th>
<th>Time 2–3</th>
<th>Time 3–4</th>
<th>Post Hoc Analysis (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>35.08 (7.51)</td>
<td>35.28 (7.83)</td>
<td>39.52 (6.76)</td>
<td>41.20 (4.03)</td>
<td>F(1, 72) = 8.09, p &lt; .009*</td>
<td>1.00</td>
<td>&lt;.18</td>
<td>1.00</td>
</tr>
<tr>
<td>Efficacy</td>
<td>25.80 (5.85)</td>
<td>25.04 (5.52)</td>
<td>30.88 (5.51)</td>
<td>30.04 (4.94)</td>
<td>F(1, 72) = 16.29, p &lt; .001**</td>
<td>1.00</td>
<td>&lt;.001**</td>
<td>1.00</td>
</tr>
<tr>
<td>Total score</td>
<td>60.88 (9.82)</td>
<td>60.32 (10.38)</td>
<td>70.40 (10.97)</td>
<td>71.24 (7.34)</td>
<td>F(1, 72) = 17.38, p &lt; .001**</td>
<td>1.00</td>
<td>.003*</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note. Time 1–2 = wait phase; Time 2–3 = intervention phase; Time 3–4 = maintenance phase. ANOVA = analysis of variance; M = mean; PSOC = Parenting Sense of Competence Scale; SD = standard deviation. ANOVA probabilities reported refer to Box’s conservative ε (adjusted probability for repeated-measures ANOVA).

*p < .05, two-tailed. **p < .001, two-tailed.
Acknowledgments

We acknowledge the generosity and commitment of the parents and children who took part in this study. Thanks are also given to the two statisticians who provided advice on this study, Asad Khan from the University of Queensland and Elisabeth Wells from the University of Otago.

References


