

**Parent Training: Effectiveness of the Parents Plus Early Years  
Programme in Community Preschool Settings**

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## **Parent Training: Effectiveness of the Parents Plus Early Years Programme in Community Preschool Settings**

Evidenced based parent training (PT) programmes offer an important intervention strategy to improve early behavioural and emotional difficulties for young children. Initial research highlights the benefits of incorporating PT within local community services such as preschools. The present study aims to evaluate the effectiveness of the Parents Plus Early Years (PPEY) programme when delivered by preschool practitioners in their communities. Parents of 277 preschool children completed a 7 week PPEY programme, with outcome measures collected pre and post intervention. The results indicate parents completing the PPEY reported reduced parental stress and child difficulties as well as improved parenting satisfaction and parenting goal achievement. The results demonstrate the unique attributes and potential that preschool PPEY programmes can offer as a cost effective and sustainable resource for early intervention with young children and their families.

Keywords: Parent training, preschool, early intervention, Parents Plus, conduct disorders

## **Elternschule: Wirksamkeit des Elternprogramms "Parents Plus Early Years" in öffentlichen Kinderbetreuungseinrichtungen**

Programme zur evidenzbasierten Elternschulung bieten wichtige Interventionsstrategien zur Verbesserung von frühen Verhaltensauffälligkeiten und emotionalen Problemen bei Krippen- und Kindergartenkindern. Erste Forschungsergebnisse unterstreichen die Vorteile der Einführung von Elternschulung in öffentlichen Kinderbetreuungseinrichtungen. Die vorliegende Studie evaluiert die Wirksamkeit des Elternprogramms "Parents Plus Early Years" (PPEY), das von Pädagogen in öffentlichen Kinderbetreuungseinrichtungen angeboten wird. Die Eltern von 277 Kindern im Alter von 0-7 Jahren nahmen an einem 7-wöchigen PPEY-Programm teil, mit Ergebnismessung vor und nach der Schulung. Die Ergebnisse zeigen, dass Eltern, die das PPEY-Programm absolviert haben, weniger elterlichem Stress und Schwierigkeiten mit dem Kind ausgesetzt sind, sowie eine zufriedenerere Erfüllung der Elternrolle erleben und ihre Erziehungsziele besser erreichen

können. Das Ergebnis zeigt die einzigartigen Attribute und das Potenzial auf, welches die PPEY-Programme als kosteneffiziente und nachhaltige Quelle für frühe Intervention bei Krippen- und Kindergartenkindern und deren Familien darstellen.

Stichwörter: Elternschule, Vorschule, frühe Intervention, Parents Plus, Verhaltensstörungen

## **Formación para Padres: Efectividad del Programa Parents Plus Los Primeros Años en escuelas preescolares comunitarias.**

Los programas de formación de padres basados en la evidencia (PT) ofrecen una estrategia de intervención importante para mejorar las primeras dificultades conductuales y emocionales para los niños pequeños. La investigación inicial destaca los beneficios de la incorporación de PT dentro de los servicios locales de la comunidad, tales como los centros preescolares. El presente estudio tiene como objetivo evaluar la eficacia del programa Parents Plus Los Primeros años (PPEY) llevado a cabo en escuelas preescolares comunitarias. Los padres de 277 niños en edad preescolar completaron el programa PPEY en 7 semanas, con evaluaciones recogidas antes y después de la intervención. Los resultados indican que los padres que completaron el PPEY muestran una reducción de estrés y menores dificultades del niño, así como una mejora de la satisfacción de los padres y el logro de metas como educadores. Los resultados ponen de manifiesto las características específicas y el potencial que los programas preescolares PPEY pueden ofrecer como recurso para la intervención temprana de una manera rentable y sostenible con los niños pequeños y sus familias.

Palabras clave: formación de padres, preescolar, intervención temprana, Parents Plus, trastornos de conducta

## **Formation des parents: l'efficacité du programme de la petite enfance Parents Plus dans Paramètres préscolaires communautaires**

En témoigne la formation des parents sur la base (PT) programmes offrent une stratégie d'intervention important pour améliorer des troubles du comportement et affectifs précoces pour les jeunes enfants. La recherche initiale met en évidence les avantages de l'intégration PT au sein des services des collectivités locales telles que les écoles maternelles. La présente étude vise à évaluer l'efficacité des programmes (PPEY) lors de la livraison par les praticiens d'âge préscolaire dans leurs communautés Parents Plus petite enfance. Les parents de 277 enfants d'âge préscolaire ont suivi un programme de PPEY 7 semaines, avec des mesures de résultats recueillis avant et après intervention. Les résultats indiquent les parents remplissant le PPEY fait état de difficultés de stress et les enfants des parents réduits ainsi que l'amélioration de la satisfaction aux parents et la réalisation des objectifs de parent. Les résultats démontrent les attributs et le potentiel que les programmes de PPEY âge préscolaire peuvent offrir comme un coût efficace et durable des ressources de l'intervention précoce auprès des jeunes enfants et de leurs familles uniques.

Mots-clés: formation des parents, école maternelle, d'intervention précoce, les parents Plus, les troubles de comportement

## **Introduction**

Research evidence demonstrates that parenting behaviour that involves harsh and inconsistent discipline, punishment, ineffectual commands and little positive engagement with a child, can play a significant role in the development and maintenance of child behavioural and emotional difficulties (Hipwell et al., 2008). The shift from focusing on individual interventions targeted towards the child's undesirable behaviour to those that focus on changing parenting behaviour stems from this understanding that parents can act as agents to change their child's behaviour (Kaminski et al., 2008). Certainly, it is well documented that improving parenting skills can

significantly reduce the development and persistence of conduct, social and emotional problem for young children at risk(Kaminski et al., 2008,). Evidence based parent training (PT) programmes can therefore offer an important intervention strategy to improve early behavioural and emotional difficulties (Bor, Sanders and Markie-Dadds, 2002; Barlow, Smailagic, Ferriter, Bennett, & Jones, 2010; Griffin, Guerin, Sharry, & Drumm, 2010). Typically, these programmes include social learning theory frameworks, emphasising the use of positive behavioural strategies to promote prosocial behaviour and help parents to set limits to effectively reduce the challenging behaviour of their children (Bor, Sanders, & Markie-Dadds, 2002).

While the effectiveness of parent training is undisputed, Shriver and Allen (2008) point out that the context of the delivery of such PT programmes is an important consideration. Parent training programmes are commonly employed in mental health care settings (Carr, 1999) however emerging research has highlighted the benefit of incorporating this type of early intervention within local community services (Fox, Duffy, & Keller, 2006; Hutchings et al., 2007; McGilloway et al., 2012). Indeed, in a meta-analyses of parent training programmes, Reyno & McGrath (2006), found that parents attending PT in the community reported greater reductions in child behaviour problems, and argue that services offered in the community can have the potential to improve programme outcomes for families by reducing psychological and practical barriers to attendance.

Webster-Stratton and Reid (2010) argue that PT for families at risk are best delivered in school or preschool settings as a means of targeting more families in need. Certainly PT within school settings has the potential to access a more diverse range of families (Cunningham et al. 1995) and can help parents feel supported as they become

part of a close social network (French 2006). Moreover, Leung, Tsang and Dean (2012) point out that as preschool services aim to promote healthy child development, they are likely partners with PT programmes. They demonstrated that while PT is effective in both community settings and preschool services, significant differences were observed in post-intervention social support, favouring preschools, while higher rates of drop-out were noted amongst the participants attending PT within social services. Wilson and colleagues (Wilson, Havighurst, & Harley, 2012) too found positive outcomes for parents and children with a PT programme targeted towards parents of preschool children attending a government funded preschool year.

The success or failure of PT can also hinge on the delivery of the programme and the individual programme facilitators. Webster-Stratton and Reid (2010) note that well trained, motivated staff who can effectively interact and communicate with parents in the community are key PT candidates. It is vital that parental involvement is paramount within the agency to ensure that adequate resources and time are devoted to tailoring PT interventions for parents (Hayes, Siraj-Blatchfords, Keegan and Goulding, 2012). Childcare practitioners have the potential to fulfil such requirements. Indeed PT with local preschool practitioners may hold less stigmatisation for parents and help to foster consistency between home and preschool environments thus promoting lasting change in the children's behaviour as a result of the intervention.

#### *Parents Plus Early Years Programme (PPEY)*

The PPEY is one of a suite of evidence-based Parents Plus Programmes targeting different age groups and specific issues with corresponding programmes for primary school children (Sharry & Fitzpatrick, 2008), adolescents (Sharry & Fitzpatrick, 2009) and separated parents (Sharry, Murphy, Keating, 2013). The PPEY programme (Sharry,

Hampson and Fanning, 2003) was developed as an early group intervention for parents of preschool children up to seven years old referred to mental health services with behavioural, emotional and developmental difficulties. Building upon parenting style research (Patterson, 1982; Serketich & Dumas, 1996), the programme invites parents to foster child-centred, positive interactions with their children. Specifically, parents are encouraged to attend to and reward their children for good behaviour, while largely not attending to misbehaviour. Parents attending the programme are supported in developing a cooperative, and assertive style of parenting using choices and consequences as a means of teaching children responsibility. The PPEY programme also builds on research into the parenting styles associated with language acquisition (Tannock & Girolametto, 1992) and teaches parents to develop a responsive interaction style that is sensitive to the child's developmental level and which maximizes the child's communication and overall learning. Central to the PPEY programme is a collaborative and strengths-based style of working with parents (Sharry, 2004). The emphasis is not on didactic teaching, but on building upon parents' strengths empowering them to find their own positive way of communicating to their children and to finding their own solutions to behavioural difficulties.

The PPEY programme utilises DVD footage of actual parent-child interactions developed with families in Ireland, in an effort to easily and effectively disseminate the programme principles. A programme manual accompanies the DVD and details up to 12 session plans, practise exercises and role-play, DVD footage discussion points, and parent homework tasks. In addition the parents receive a parent handbook that includes weekly hand-outs and homework tasks. The programme covers one positive parenting topic and one positive discipline topic at each session. Topics include child-centred play and communication, encouraging, praising and supporting children, as well as

encouraging co-operation, establishing routines and the positive management of misbehaviour and tantrums. The programme is structured to include 2 ½ - 3 hour sessions delivered over eight to 12 weeks, ideally with two trained co-facilitators.

Previous research attests to the effectiveness of the PPEY programme in reducing parental stress and perceived child difficulties while improving parenting satisfaction and child prosocial behaviour when delivered in clinical setting by mental health professionals (Sharry, Guerin, Griffin and Drumm, 2005; Griffin, Guerin, Sharry and Drumm, 2010). A shortened seven week community version of this programme was developed in 2009. This version employs the same principles and topics as the original programme, condensed into a structured seven week format, which is deemed more practical in a community setting (Kilroy et al. 2010). Similar to the full programme the community version covers two topics during weekly group sessions. Figure 1 details the course topics.



<p><b>SESSION 1</b></p> <ul style="list-style-type: none"> <li>• Introduction/Tuning into Children</li> <li>• Pressing the Pause Button</li> </ul> <p><b>SESSION 2</b></p> <ul style="list-style-type: none"> <li>• Child Centred Play and Communication</li> <li>• Teaching Children How to Behave Well</li> </ul> <p><b>SESSION 3</b></p> <ul style="list-style-type: none"> <li>• Encouraging and Supporting Children</li> <li>• The Power of Attention</li> </ul> <p><b>SESSION 4</b></p> <ul style="list-style-type: none"> <li>• Establishing Routine Using Rewards and Picture Charts</li> <li>• Gaining Co-Operation from Children</li> </ul> <p><b>SESSION 5</b></p> <ul style="list-style-type: none"> <li>• Helping Children Learn Through Play and Reading Books</li> <li>• Dealing with Misbehaviour Using Consequences</li> </ul> <p><b>SESSION 6</b></p> <ul style="list-style-type: none"> <li>• Creative Play Activities</li> <li>• Parents Caring for Themselves</li> </ul> <p><b>SESSION 7</b></p> <ul style="list-style-type: none"> <li>• Books and Reading with Children</li> <li>• Recap</li> </ul>
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**Figure 1.** PPEY programme session outline

Currently, two studies have been published evaluating the effectiveness of the community version of the Parents Plus Early Years (PPEY) programme. Kilroy and colleagues (Kilroy et al., 2010) found significant positive outcomes for parents that attended the PPEY in five community settings when facilitated by trained school liaison teachers and childcare practitioners. In a much larger study, Hayes and colleagues (Hayes et al., 2012) investigated the same PPEY programme as part of a suite of interventions to preschool child care services in a disadvantaged areas over several years. The PPEY programme was independently delivered by preschool practitioners and independently evaluated as part of a clustered randomised controlled trial.

Significant positive effects were observed within the home learning environment for parents completing the PPEY programme.

The aim of the present study is to expand upon this early research and further evaluate the effectiveness of the PPEY community programme as delivered by frontline staff. It is hypothesised that similar gains can be expected when delivered on a large scale by trained childcare practitioners in local preschools.

## **Method**

### *Study Design*

The study followed a repeated-measures design to identify significant changes in parent and child well-being after attendance at the PPEY programme. The main independent variable was time, with assessment occurring before (Time 1) and after (Time 2) the PPEY programme. The dependent variables include measures of parent perceived child strengths and difficulties, parental stress, parental satisfaction, and goal achievement.

### *Participants*

Participants were parents and guardians of children attending the PPEY programme in preschools and early years services in the Fingal region of Dublin, Ireland. As part of a wider parenting initiative, the programme was open to all parents and guardians of children aged up to 7 years within this region. Importantly the programme did not operate on a referral basis. The PPEY programmes were advertised within participating early years and preschool services, at local primary schools and through social media and relevant childcare committee websites. Information sessions and workshops were organised to encourage engagement with the programme. All programmes were delivered in local preschools and community venues at times that best suited parents

(morning or evening groups). Childcare facilities were offered when available. No financial incentives were offered for taking part in the programme and full consent was sought from each participating parent or guardian prior to inclusion in programme

### *Measures*

**Strengths and Difficulties Questionnaire (SDQ).** The SDQ developed by Goodman (1997) is a standardised questionnaire containing 25 items that measure five aspects of a child's behaviour; emotional symptoms, conduct problems, hyperactivity, peer problems and prosocial behaviour. Each subscale contains five items with scores ranging from 0 to 10. Participants are required to indicate how true each statement was in relation to their child's behaviour over the past six months. Participants were required to fill out the questionnaires in relation to one child that they are most concerned about if they have more than one child. Items were reversed scored where appropriate. The measure yields subscale scores (0 – 10) and a total difficulties score (0-40) by combining all scores from all subscales excluding the prosocial subscale. The psychometric properties of the SDQ are well documented with high internal consistency and test-retest reliability (Goodman, 2001). The SDQ has strong criterion validity for predicting childhood and adolescent psychological disorders (Goodman, 2001). The alpha value for the current study was .79 for the total difficulties score with alpha scores ranging from .64 (Pro-social subscale) to .70 (Conduct Problems subscale) for the individual sub scales at Time 1.

**Parental Stress Scale.** The Parental Stress Scale (PSS: Berry & Jones, 1995) is a self-report measure consisting of 18 items that assess perceptions of the difficulties and stress experienced by parents. Each item is scored on a five point response format

(strongly agree to strongly disagree) which are summed to yield a total stress score ranging from 18 to 90. Berry and Jones (1995) report high internal reliability and good divergent validity for the scale. At Time 1 the PPS demonstrated an alpha level of .83 indicating acceptable internal reliability and therefore can be considered an accurate measure of parental stress.

**Kansas Parental Satisfaction Scale (KPS).** The KPS (James, Schumm, Kennedy et al., 1985) is a brief three item measure of personal satisfaction with oneself as a parent, the behaviour of one's children, and the relationship with one's children. Participants are required to indicate their agreement on a 7 point Likert scale ranging from strongly agree to strongly disagree. Scores are summed to yield a total satisfaction score ranging from 3 to 21 with higher scores indicative of higher satisfaction. Good internal consistency is reported for the KPS with alphas that range between .75 and .85 (Fischer & Corcoran, 1994). The current study demonstrates an alpha level of .77 at Time 1. The authors also report that the KPS demonstrates good concurrent validity, correlating significantly with marital satisfaction and self-esteem (Fischer & Corcoran, 1994).

**Parent and Child Defined Goals (DG).** At the beginning of each PPEY programme guardians detailed two goals for what they hoped to achieve from attending the programme in relation to their child (CDG) and in relation to themselves (PDG). Participants were encouraged to indicate a base-line score for how close they are from achieving these goals on a visual scale from 0 (not very close) to 10 (reached the goal). Participants were assigned a score from 0 to 10 for each visual scale. Attainment of the identified goals was assessed after completion of the PPEY community programme. In the current study the measure yielded an alpha co-efficient of .82 at Time 1.

### *Procedure*

**PPEY facilitator training.** In conjunction with the Fingal Parenting Initiative three day training workshops were offered to participating preschool and early years practitioners in the Fingal Childcare Committee catchment area. Practitioners attended the workshops with an accredited trainer and one of the programme developers. Training focused on the programme principles and group facilitation skills as well as practical activities including practise exercises, DVD discussion points, role plays and group discussions. Each participant received the programme manual with detailed 7 week session plans and the programme DVD. The practitioners were given information about the research protocol and information regarding the integrity of the programme at these workshops and at subsequent supervision meetings. Early years practitioners across 35 preschools participated in training and programme delivery.

**Intervention fidelity.** Implementation fidelity was monitored by a number of means. Firstly, facilitators were obliged to complete weekly self-evaluation checklists and weekly planning and review forms. These ensured that facilitators reflected upon their practise at each session, tuned in to the needs of the group as well as those of individual parents and confirmed that the appropriate content was covered at each session. These forms were sent back on a weekly basis to the project coordinator. In addition, all facilitators were required to attend regular supervision meetings with the project coordinator and one of the programme developers while completing a programme. The supervision meetings focused on group facilitation issues, adherence to the research protocols as well as group problem solving to ensure that the content of each individual session maintains the theoretical background and principles of the PPEY programme.

Furthermore facilitators were encouraged to produce two personal video clips of a group session with reflective notes about their own practice. Video clips were shown and reflected upon, with permission, at group supervision sessions (participating parents and guardians did not appear in the video clips and where not identified at supervision meetings).

**Programme delivery.** Forty five PPEY groups were delivered in various locations across the Fingal region. All participants attending the various PPEY programmes were invited to participate in the research. Each participant was given an information sheet outlining the purpose of the study and if they agreed to participate, to sign an informed consent form. Participants were then invited to complete the research measures at Time 1 (before or at the start of the first session of the programme) and again at Time 2 (after or at the end of the last session of the programmes). Attendance did not depend on participation in the research evaluation.

## **Results**

The Statistical Package for Social Sciences (SPSS, V20) was used to analyse the data. In total 277 guardians completed measures at Time 1 (84.8 % mothers, 13.7 % fathers and 1.4% grandparents) with an average age 35.12 years. The guardians completed outcome measures for 277 children (60.6% boys and 39.4% girls) aged between 6 months and 7 years, with a mean age of 3.5 years (SD = 1.45). Of the 277 participants, 212 had sufficient data at Time 2 to be included in the analyses. Participants that did not complete data at Time 2 and/or attended less than 3 group sessions were excluded from the final analyses, representing a drop-out value of 23%. There was no significant

difference between the incomplete data sets and complete data sets in terms of pre-intervention parent and child outcome measures.

**Table 1.** Mean pre and post intervention scores with mean difference and eta square effect size values

	<b>Mean Score Time 1 (SD)</b>	<b>Mean Score Time 2 (SD)</b>	<b>Mean Difference</b>	<b>Eta Square</b>
Parent Stress Scale	41.66 (8.95)	36.00 (8.35)	5.65*	.40
Kansas Parenting Satisfaction	14.43(3.01)	16.71 (2.66)	-2.27*	.37
Emotional Symptoms Scale	2.60 (2.14)	1.97 (1.99)	0.64*	.11
Conduct Problems Scale	3.44 (2.11)	2.50 (1.91)	0.94*	.25
Hyperactivity Scale	4.40 (2.48)	3.66 (2.37)	0.74*	.15
Peer Problems Scale	2.20 (1.87)	1.64 (1.62)	0.57*	.11
Prosocial Scale	6.80 (2.11)	7.46 (2.16)	-0.66*	.09
SDQ Total Difficulties	12.63 (5.85)	9.77 (5.63)	2.86*	.23
Child Goal Rating	3.62 (1.82)	7.51 (1.58)	-3.89*	.79
Parent Goal Rating	3.54 (1.77)	7.61 (1.53)	-4.06*	.81

\*  $p < .001$  (two-tailed)

A series of paired sample t-tests were conducted to assess any differences in parent and child outcome measures pre and post intervention. The means (standard deviations), mean difference and eta square effect size values for each variable is displayed in table 1. Higher scores indicate more difficulties for all measures, excluding the Kansas Parenting Satisfaction, Prosocial and Goal Rating scores where higher scores indicate less difficulties. The results demonstrate a statistically significant decrease in parental stress scores ( $t(208)=11.63, p<.001$ ) and child difficulties ( $t(202)=9.237, p<.001$ ) while significant increases were found for parental satisfaction ( $t(202) = -10.99, p<.001$ ), gains made towards goals for the child ( $t(189) = -26.63, p<.001$ ) and gains made towards parent goals ( $t(189) = -28.55, p<.001$ ). Significant reductions in difficulties were noted for the SDQ subscales, Emotional Symptoms ( $t(202) = 5.07, p<.001$ ), Conduct Problems ( $t(201) = 8.30, p<.001$ ), Hyperactivity ( $t(203) = 5.95, p<.001$ ) and Peer Problems ( $t(202) = 5.10, p<.001$ ) while significant

increases were found for Prosocial Behaviour ( $t(202) = -4.36, p < .001$ ). Large effect sizes were observed for all variables, with the exception of the Peer Problem and Prosocial Behaviour scales where moderate effect sizes were found.

**Table 2.** Mean pre and post intervention scores with mean difference and eta square effect size values for participants in the borderline or clinical range on SDQ

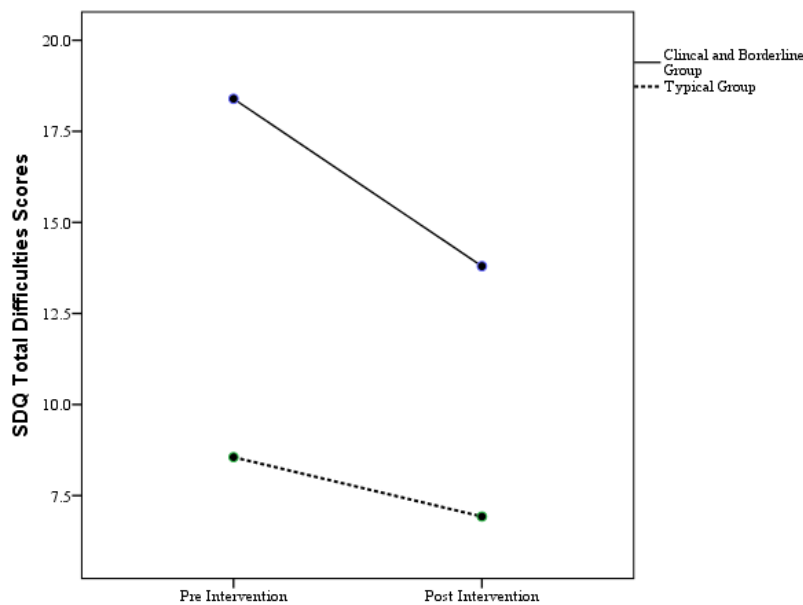
	<b>Mean Score Time 1 (SD)</b>	<b>Mean Score Time 2 (SD)</b>	<b>Mean Difference</b>	<b>Eta Square</b>
Parent Stress Scale	46.02 (8.84)	37.90 (9.13)	8.12*	.52
Kansas Parenting Satisfaction	12.96(2.90)	15.67 (3.17)	-2.70*	.34
Emotional Symptoms Scale	4.07 (2.18)	3.02 (2.37)	1.05*	.17
Conduct Problems Scale	4.94 (1.94)	3.54 (2.12)	1.39*	.34
Hyperactivity Scale	6.31 (2.20)	4.98 (2.50)	1.33*	.32
Peer Problems Scale	3.15 (1.76)	2.24 (1.87)	0.91*	.25
Prosocial Scale	6.45 (2.12)	7.26 (1.92)	-0.81*	.16
SDQ Total Difficulties	18.39 (3.65)	13.80 (5.80)	4.60*	.42
Child Goal Rating	3.18 (1.61)	7.31 (1.59)	-4.14 *	.81
Parent Goal Rating	3.15 (1.69)	7.51 (1.54)	-4.37*	.82

\*  $p < .001$  (two-tailed)

It was noted that 39.7% of participants reported that their children have difficulties within the clinical or borderline range according to the SDQ Total Difficulties score pre intervention (i.e. scores equal to or higher than 14). In order to further investigate the effects of the PPEY intervention with participants with greater concerns, t-test analyses were performed with this subsample to analyse difficulties and strengths before and after the programme. Table 2 details mean outcome scores, significance values and effect size scores for this sample. The results demonstrate that the PPEY intervention significantly reduced parents stress scores ( $t(82) = 9.45, p < .001$ ), child difficulties scores ( $t(83) = 7.75, p < .001$ ) while increasing parenting satisfaction ( $t(80) = -6.59, p < .001$ ), gains made towards goals for the child ( $t(73) = -17.64, p < .001$ ) and gains made towards parent goals ( $t(73) = -18.19, p < .001$ ). Significant reductions in difficulties were noted for the SDQ subscales, Emotional



Symptoms ( $t(82) = 4.12, p < .001$ ), Conduct Problems ( $t(82) = 6.55, p < .001$ ), Hyperactivity ( $t(83) = 6.18, p < .001$ ) and Peer Problems ( $t(83) = 5.33, p < .001$ ) while significant increases were found for Prosocial Behaviour ( $t(83) = -3.99, p < .001$ ). Large effect sizes were observed for all variables. With the exception of parenting satisfaction, the effect sizes for all variables and subscales were moderately to significantly larger than those found for the entire samples indicating the effectiveness of the intervention for this 'clinical' group in particular. Figure 2 depicts the relationship between those within the clinical range or borderline range and those scoring in the typical range on the SDQ Total difficulties for total SDQ scores pre and post intervention. While the 'clinical' group reported more difficulties at Time 1 and Time 2 when compared to the 'typical group', a sharper decline in difficulties for the clinical group is noted. Post intervention, 20.6% of participants remained within the clinical or borderline range for SDQ total difficulties compared to 39.7% pre-intervention.



**Figure 2.** Clinical and border line group and typical group SDQ scores pre and post intervention.

## **Discussion**

The study aimed to investigate the effectiveness of the PPEY intervention when delivered by preschool teachers within their communities. It was predicted that the intervention would produce similar results to those found when the programme is delivered in mental health care settings. The results support this prediction demonstrating that parents attending the PPEY programme within local preschools reported significant improvements in their children's behaviour, less stress and greater parental satisfaction following the programme. Parents also reported significant gains made towards their goals set out for their children, as well as their parenting goals. The average reduction in SDQ total difficulties scores pre-intervention to post intervention were similar to those found in a controlled clinical evaluation of the programme (Griffin et al., 2010). Moreover, parents attending the community intervention reported significant improvements on all subscales of the SDQ, a result not found in the clinical study (Griffin et al. 2010). In addition, large effect sizes, which point towards the practical significance of the programme were found across all variables, highlighting the magnitude of the difference between pre and post intervention scores. These results indicate that the programme can be accurately transferred from delivery by mental health professionals in clinical settings to delivery by frontline staff within the community, while maintaining positive outcomes for parents and children.

The success of the PPEY delivered within childcare settings can be attributed to a number of factors. Indeed the familiarity of the settings and childcare practitioners delivering the programmes, as well as the convenience of attending within the community are pertinent facilitating factors. It is important to note that the drop-out rate for the programme was 23%, however this is not uncommon in PT research (Leung et

al. 2012, Gross and Grady, 2002), and remains slightly less than the drop-out rates found in previous PPEY programme clinical (Griffin et al., 2010) and community (Kilroy et al., 2010) studies. It would be interesting to directly compare engagement and drop-out rates for the programme when delivered in social/mental health services and preschools. Certainly Leung, Tsang and Dean (2012) found that drop-out rates were lower for preschool PT groups when compared to groups delivered at social service centres, highlighting the benefits and convenience of preschool delivery.

Beyond the physical environment, supportive administration and motivating and encouraging staff can determine the success of the programme (Gross and Grady, 2006) It is vital that the PT is located in a setting that agrees with the ethos of the intervention and where staff are encouraged to make the intervention successful, by creating effective partnerships with parents. ‘Partnership’ as a model of involvement in early childhood care and education has, in recent years, been strongly advocated by researchers, policy-makers and practitioners (NCCA, 2009; DFEE, 2001; DFES, 2003). Certainly, there is now strong research evidence that demonstrates that involvement of parents in early childhood care and education and early intervention services has positive effects on children’s accomplishments (McCutchen 2002; Sand and Skoug 2002). It appears that delivering the PPEY programme within preschools may help to facilitate such partnerships, strengthening home-school co-operation, and improving communication with parents, which may ultimately enhance the delivery of the preschool service. If the delivery of the programme is successful in this regard, the PT programme may become part of the preschool service on an ongoing basis which will provide invaluable sustained community support for young families.

Gross and Grady (2006) argue that the success of PT can be determined by resources such as access to a wide range of families. In Ireland, the government

provides one year of funded, non-compulsory early childhood care and education to children between the ages of 3 and 5 years, typically in the year prior to formal schooling. Approximately 65,000 children, which constitute 95% of the eligible cohort of children, are availing of this free pre-school year (Burke, Morris and McGarrigle, 2012). Clearly the delivery of PT within preschools is an effective means of disseminating evidence based parenting programmes within easy reach of a wide range of families. Certainly, initial pre-intervention analysis revealed that 39.7% of the sample scored within the clinical or borderline range for total difficulties on the SDQ, suggesting that the preschool services were successful in engaging a variety of parents, including those experiencing substantive difficulties. It is estimated that 3 -15% of preschool children experience psychological problems at any given time (Wichstrøm et al., 2012; Keenan et.al. 1997). In Ireland recent research reflects these prevalence rates with 15% of Irish children experiencing considerable socio-emotional and behavioural difficulties (Williams et al., 2009). Given that child and adolescent mental health services (CAMHS) in Ireland are under resourced receiving only 7% of mental health expenditure and waiting times for initial appointments, on average, exceed 12 months (Department for Health and Children, 2006) the need for cost effective, innovative early intervention programmes is crucial. The high percentage of families in this study that fall within the 'clinical' range for behavioural difficulties, demonstrates the need for more accessible community based early interventions such as preschool based PT. The present results demonstrate that the programme was as effective, if not more, for families that fall within this clinical range, and post intervention, the amount of families still within this clinical range was almost halved. These results are promising demonstrating that such community preventative PT programmes delivered within preschool settings over short periods of time by frontline practitioners requiring

relatively minimal training, can effectively improve outcomes for families, particularly those with considerable difficulties, thereby decreasing the need for CAMHS referrals, and essentially reducing the likelihood of mental health concerns later in life. It is important to note that families were encouraged to seek further assistance from primary care services if difficulties persisted following completion of the PPEY programme.

A number of research limitations should be considered when reviewing these findings. Indeed, this study would benefit from replication with a control group in order for the results to be conclusively attributed to the PPEY programme and not attendance at preschool services. Certainly attending a preschool service will most certainly produce positive outcomes for the majority of families in its own right. A design that incorporates a 7 week waiting time before commencing a PPEY programme, thereby allowing participants to act as their own controls, would help to tease out the positive effects of the PPEY programme alone. In addition, resource limitations allowed for only 2 collection times. Although the long term effectiveness of the PPEY programme is documented (Griffin et al, 2010), it would be noteworthy to gather follow-up data to evaluate the long term effectiveness of the PPEY programme when delivered in the community. Further statistical analyses of the difference in outcomes for those that score within the clinical and borderline range is also warranted. This would further elucidate the practical benefits and implications of the programme. Finally, there was no independent statistical evaluation of treatment fidelity, however detailed programme manuals, staff training, session plans and quality checklists and regular facilitator supervision were integral parts of the research design. A comparison of PPEY outcomes between preschool delivery and other community social service delivery would be valuable. From a financial and practical point of view it would be interesting to

investigate whether similar results can be achieved with trained preschool practitioners as with other community professionals, such as public health nurses and social workers.

The findings presented here highlight the strengths of PT in the community, and the PPEY programme delivered in preschools in particular, which should be noted and utilised in service planning and provision. It demonstrates the unique attributes and potential that preschool PPEY programmes can offer as a cost effective and sustainable resource for early intervention with young children and their families.

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