Randomised Controlled Trial Of An Intervention To Increase Attendance At Parent Training

Thesis submitted for the degree of Doctor of Clinical Psychology

University of Sheffield

By

Claire Halsey

BA (Hons), MSc

DECLARATION

This work has not been submitted to any other institution or for any other qualification

STRUCTURE AND WORD COUNTS

STRUCTURE

The Literature Review in this thesis has been written in accordance with guidelines for the structure of articles for the British Journal of Clinical Psychology.

The Research Report in this thesis has been written in accordance with guidelines for the structure of articles for the British Journal of Clinical Psychology.

WORD COUNTS

Literature Review: An Exploration Of The Literature On Attendance At Parent Training:

Excluding references	7,989
Including references	9,600

Research Report: Randomised Controlled Trial Of An Intervention To Increase Attendance At Parent Training

Excluding references	10,388
Including references	11,762

Critical Reflection On The Research Process:

Excluding references	2,195
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ABSTRACT

Literature Review: Factors affecting attendance at parent training are presented and consideration is given to theoretical models which might be applied to this field. It is revealed that single parents, those of lower socio-economic status, lower income and experiencing mental health difficulties are less likely to attend. Therapist characteristics including experience, warmth and empathy and the use of administrative strategies all predict increased attendance. Parental motivation and expectations do not have clear roles in affecting parent training attendance. Methodological issues such as inconsistent definitions of attendance and small sample sizes are discussed, as are cautions about generalising findings from specific samples. The health belief model and the theory of planned behaviour are reviewed and considered to have potential for further study concerning attendance at parent training.

Research Report: The investigation of a strategy to increase attendance at parent training is presented. One group of parents receive an experimental intervention to develop implementation intention's to overcome barriers to attendance, the control group do not. The two groups are compared on their attendance at parent training. Descriptive statistics indicate that parents in the experimental group do participate in more parent training sessions than the control group, however this trend failed to reach statistical significance. Parents with stronger intents to attend were statistically more likely to complete parent training. The development of implementation intentions prior to attendance was not found to enhance the clinical gains of parents attending parent training. Further research is recommended to explore the relevance of the theory of planned behaviour to parent training.

Critical Appraisal: The origins of the project, its organisation and implementation are described. Points of learning are discussed, dissemination plans detailed and areas for continuing professional development expressed.

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CONTENTS

An Exploration Of The Literature On Attendance At Parent Training

ABSTRACT

Purpose. The aim of this review was to consider the factors which affect attendance at parent training (PT). The impetus came from the persistently low rates of attendance that characterise PT and the need, from both clinical and research perspectives, to fully understand this issue.

Methods. Literature searches were conducted using PsychINFO, Web of Science and Medline online electronic databases. Keywords were 'child behaviour', 'conduct disorder', 'early intervention', 'parent training', 'parenting program', 'child therapy', 'group psychotherapy', 'parent involvement', 'parent participation', and 'attendance'. Hand searches were also performed. In total 64 articles were included.

Results. The literature was organised into two categories; papers concerning characteristics of attending and non-attending clients and secondly those examining interventions and other factors which influence attendance. In relation to the first category, it appeared that non-attending parents tended to be single, of lower socio-economic status (SES), lower income and experiencing mental health difficulties. In the second category, practical and organisational strategies to increase attendance appeared to be effective. Therapist variables of experience, warmth and empathy emerged as factors influencing PT attendance. Theoretical models were reviewed and the theory of planned behaviour was considered to have potential for further study in regard to PT attendance.

Conclusions. There is certainly an impetus at present to study PT attendance. Existing research has led to some clarity concerning the characteristics of non-attending clients and the identification of strategies that can increase attendance. However, more remains to be done to understand the theoretical models applicable to PT attendance and the mechanisms by which attendance can be maximised.

INTRODUCTION

Non-attendance for psychological interventions is a pervasive problem across most client groups and interventions (Nock & Kazdin, 2005) and has an impact on clinical outcomes, cost efficiency, training and research (Kazdin *et al.*, 1997). Clinically, there is evidence that non-attendance and early drop out from psychological interventions reduces the efficacy of therapy (e.g. Cahill *et al.*, 2003; Stiles *et al.*, 1998). In terms of cost-efficiency, non-attendance affects both financial and waiting list management. Examples include the cost implication when clinician time is under-utilised and the increasing treatment costs if conditions deteriorate through non-attendance (Morawska & Sanders, 2006). When non-attendance, or other factors mean conduct disorder is left untreated, there can be a significant resultant cost to society through anti-social behaviour and poor attainment in later years (e.g. Scott *et al.*, 2001). There is also a subtle effect of non-attendance upon training, as high attrition rates can interrupt the learning experiences of both trainee clinicians and researchers (Frankel & Simmons III, 1992). Finally, in relation to research, non-attendance can impact upon academic output and the development of the psychological evidence base, as the validity of research studies becomes impaired by sample attrition and sample bias (Dumka *et al.*, 1997; Kazdin *et al.*, 1997). All these factors make addressing non-attendance an important issue in clinical work, training and research.

The situation is further complicated when treating children and young people, as their attendance and compliance is highly dependent on parental involvement. This factor is particularly relevant where the intervention is parent training (PT), which requires parents to attend and to implement the intervention themselves. PT is a manualised, evidence based intervention for parents of children with mild to severe behavioural and emotional difficulties.

It requires parents to attend a specific number of individual or group sessions. The main theoretical underpinning of PT is social learning theory, but the approach also draws on attachment theory, developmental and community psychology and functional analysis (Mihalopoulos *et al.,* 2007; Sanders, 1999). Treatment outcome is heavily dependent on the attendance of parents and their adherence to intervention strategies (Nock & Ferriter, 2005). There are strong clinical reasons to increase attendance at PT, as it is identified as the intervention of choice for children under ten years of age who are experiencing conduct disorder (Wolpert *et al.,* 2006). The prevalence rates for conduct disorder are high, at 4-14% of the child population (Carr, 1999), and it is the most frequently cited reason for referral to child mental health services (Knapp *et al.,* 1999). Conduct disorder, if untreated, is known to be costly in terms of both children's wellbeing and community finances. It is estimated that a child diagnosed with conduct disorder has a cost to society of 10 times that of a child with no difficulties (Scott *et al.*, 2001). PT has a strong evidence base as an effective treatment (Wolpert *et al.,* 2006), however therapeutic outcomes are hampered by high rates of non-attendance, at around 50%, which reduce efficacy (Orrell-Valente *et al.,* 1999).

As a result of increasing evidence for the efficacy of PT and government initiatives to increase access to it (RESPECT Action Plan, 2006), there has been a rise in research interest in PT attendance (Morawska & Sanders, 2006). Particular attention has been paid to parental attendance at PT where children are at risk of exclusion and anti-social behaviour. For example the RESPECT Action Plan (2006) has promoted early access to PT and introduced the concept of compulsory attendance where families are resistant. It is timely therefore, to draw together and critically appraise the mounting research in this area. In light of the current issues, this literature review will focus upon attendance and non-attendance at PT for those parents with children experiencing conduct disorder. Literature concerning adult attendance

for health related services has been included in order to acknowledge that studies with adults can inform parenting and child research.

SEARCH STRATEGY

Literature searches covering the years 1978 to 2007 were conducted using PsychINFO, Web of Science and Medline online electronic databases. This date range was selected as it spanned the time period from the starting point for considerable PT research, for example by Birkimer *et al.* (1978), Sanders and Glynn (1981) and Forehand and McMahon (1981), up to the present day. A range of keywords was used to access both the attendance literature and that on child and parent interventions. Keywords were limited to those in the English language and consisted of 'child behaviour', 'conduct disorder', 'early intervention', 'parent training', 'parenting program', 'child therapy', 'group psychotherapy' linked to 'parent involvement', 'parent participation', and 'attendance' to refine the search. Hand searches were also conducted, notably from the reference lists of relevant articles. Identification of unpublished literature occurred through hand searches of doctoral theses and abstracts.

A broad range of search terms were used to inform this review in order to capture adult and child literature and to take into account the range of terms used to refer to PT. Consequently, the following inclusion criteria were applied.

Inclusion criteria:

- Qualitative and quantitative research papers appearing in peer-reviewed and practice journals, government publications and unpublished literature which formed the source for published work. Of 230 articles identified, 178 papers were included on the basis of this criteria and were further refined as follows:

- Papers describing or defining the attendance patterns of adults of child-rearing age. 1 paper included.
- Papers describing or testing the application of theoretical models of attendance in clinical settings. 6 papers included.
- Papers concerning engagement and treatment variables known to affect attendance at adult and child clinical services including PT. 38 papers included.
- Papers regarding the epidemiology and treatment of conduct difficulties in childhood. 19 papers included.

No other exclusion or inclusion criteria were applied. Of 230 articles identified, 64 were included in this review.

The literature obtained fell into two categories: those that concerned client characteristics predictive of attendance and non-attendance and a second group which reported factors that were open to manipulation to increase attendance. A summary of key articles reviewed can be found in tables 1 and 2.

The definition of attendance and non-attendance varied across the literature. Some studies captured clients who did not attend PT at all (e.g. Calam *et al.*, 2002), who attended at least one appointment (e.g. Kazdin *et al.*, 1997) or who dropped out of treatment (e.g. Peters *et al.*, 2005). For the purposes of this review, attendance will be subdivided. 'Primary Non-Attendance' denotes those who did not attend for any appointment following referral or assessment. 'Secondary Non-Attendance' will refer to those who attended some appointments but did not complete the full number of sessions as prescribed by the relevant treatment manual. 'Completed Attendance' will be defined as attending all appointments as recommended by the appropriate treatment manual. Occasionally, therapist and client

negotiate early termination of treatment where therapeutic goals have been reached more quickly than anticipated (Frankel & Simmons III, 1992) in which case this can be classified as completed attendance rather than secondary non-attendance.

Consideration should be given to the use of the term 'engagement' in the attendance literature. The premise in much of the literature is that engagement is the underlying mechanism by which attendance is encouraged or discouraged (Prinz & Miller, 1996). Aubrey (2003) considers the use of the terms engagement versus attendance and concludes that the latter is preferable as it is both observable and measurable. To avoid confusion, this author will use the terms attendance and non-attendance throughout, unless quoting from specific work.

To examine attendance it is helpful to consider a range of sub-categories. Aubrey (2003) considers organisational, client-therapist and client factors whilst Morawska and Sanders (2006) provide a more extensive list of context, child, parent, therapist and intervention factors. For the purposes of this review, both these groupings will be considered below.

Table 1: Articles reviewed concerning characteristics of attending and non-attending clients

Author(s)	Participants	Design/Method	Outcome measure(s)	Results	Comments
Calam, R., Bolton, C. & Roberts, J. (2002).	Sample Type: Adults Size: 57 Gender: Female.	The characteristics of mothers of children referred for behavioural issues were measured against attendance at therapy.	Attendance at therapy appointments.	Predictors of non-attendance were depression and stress.	This study had a small sample size, which represented only 35.4% of those invited to participate in the research.
Centre for Innovation in Primary Care (1999).	Sample Type: Adults Size: 65,000 Gender: not reported overall.	Survey of nine GP surgeries over a three year period, data obtained from computer appointment systems.	Non-attendance at doctor and nurse appointments.	Non-attendance rates averaged 5.7%. Females aged 20-24 and living in areas of high deprivation were most likely to non-attend.	Relevant to PT attendance as adults with the highest non-attendance would tend to be those caring for young children and therefore a client group for PT.

Author(s)	Participants	Design/Method	Outcome measure(s)	Results	Comments
Frankel, F. & Simmons III, J.Q. (1992).	Sample Type: Adults Size: 172 Gender: not reported.	Post hoc review of intake questionnaire data using a split sample multivariate approach.	Attendance was coded at intake as either proceeded or not and at intervention as attending less or more than 6 sessions.	Higher socio-economic status (SES) predicted drop out at intake and lower SES and less therapist experience predicted drop out during intervention.	SES was obtained by combining parental education and occupational rank. This is not consistent with the method of other authors. Parents with higher SES were significantly more likely to drop out at intake. This effect was reversed once the intervention started, parents of lower SES being more likely to drop out during PT. Lack of discussion of the SES data made it difficult to explain this finding.

Author(s)	Participants	Design/Method	Outcome measure	Results	Comments
Morawska, A. & Sanders, M.R. (2006).	Not applicable.	Review article, comprehensive review of ninety five articles concerning parental engagement into parent training.	Not applicable.	A high degree of contradictory research was discussed in terms of socio-demographic predictors of attendance.	This paper identified modifiable variables of parent cognition, affect and motivation as those warranting emphasis in future research.
Peters, S.P., Calam, R. & Harrington, R. (2005).	Sample Type: Adults Size: 71 Gender: Female.	Characteristics of mothers referred for parent management training were measured against attendance at appointments.	Attendance was coded as completion (50% attendance or more) or non-attendance (less than 50%).	Significant predictors of non-attendance were lower SES and mothers of children who had received a clinical diagnosis.	The attendance measure was discrete rather than cumulative which varied from many of the other studies reviewed.

Author(s)	Participants	Design/Method	Outcome measure	Results	Comments
Redmond C., Spoth, R., Shin, C. & Hill, G.J. (2004).	Sample Type: Adults Size: 1156 Gender: Female 73%, male 27%	Telephone survey. Examination of the relationship between socio-demographics and parental perceptions of the benefit of PT.	Perception of benefits from PT.	Single parent status and female gender was significantly correlated with perceptions of greater benefit from PT.	This study was limited as the population was specific, i.e. predominantly rural, Caucasian, two parent families of adolescents. The study focused specifically on substance misuse.
Spoth, R., Redmond. C. & Shin, C. (2000).	Sample Type: Adults Size: 635 Gender: Female 73%, male 27%	Random controlled trial of parental attendance at a family skills program. Testing of the health beliefs model.	Attendance was coded as completion of the pre-intervention assessment of a family skills program.	Significant predictors of non-attendance were parental education and number of children in the household (negative correlation).	Study generalisability was limited by the specificity of the sample, drawn from the same population as Redmond *et al.* (2004). The presentation of a theoretical model for family context as a mediator of attendance was an important addition to the literature.

Table 2: Articles reviewed concerning interventions and factors which influence attendance.

Author(s)	Participants	Experimental manipulation	Design/Method	Outcome measure	Results	Comments
Armstrong, H.A. (2003).	Sample Type: Parents Size: 95 Gender: Not specified.	Qualitative study of parents who had completed group PT.	Retrospective study.	Application of Yalom's Q sort to parents post-group feedback comments.	Negative group factors were disclosure to a group, differing problems and domination by members.	The population were parents of adolescents. No information from parents who did not attend was provided. No attendance data was presented.
Aubrey, R. (2003).	Sample Type: Adults, clinical group. Size: 139 Gender: not reported.	Subjects assigned to rehearsing an implementation intention or not prior to an adult appointment.	Randomised controlled trial.	Attendance at the first session of an adult mental health service.	Attendance rate was 26 % higher for the experimental group than the control.	Low response rate of 139 from 390 invited to participate. Some skewing of the two groups due to more positive attitudes and intentions in the experimental group.

Author(s)	Participants	Experimental manipulation	Design/Method	Outcome measure	Results	Comments
Heinrichs, N. (2006).	Sample Type: Parents Size: 197 Gender: not reported.	Parents were assigned to group or individual PT and to paid or unpaid attendance.	Randomised controlled trial, schools were allocated to one of four conditions.	Attendance was coded according to hours of intervention attended.	Payment significantly increased initial recruitment.	Parents did not prefer individual to group intervention. Possible generalisation issues to the UK as this was a German sample.
Kazdin, A.E., Holland, L. & Crowley, M. (1997).	Sample Type: Children – clinical group. Size: 242 Gender: 54 female, 188 male.	Study of family, parent and child characteristics and perceptions of barriers to child therapy and PT.	Prospective and retrospective methods.	Drop out was defined as non-attendance for three or more weeks and number of weeks in treatment.	Socio-demographics and greater perceptions of barriers to treatment predicted drop out.	This study involved a specific population – adolescents - and included both child therapy and PT of 7-10 months, compared to typical PT duration of 2-3 months. Data was collected retrospectively and therefore possibly subject to recall bias.

Author(s)	Participants	Experimental manipulation	Design/Method	Outcome measure	Results	Comments
Kazdin, A.E. & Whitley, M.K. (2006).	Sample Type: Children and families clinical group Size: 218 Gender: Children: 53 female, 165 male. Parents: 96.8 % female, 3.2% not specified.	Parent-therapist alliance was assessed prior to, during and after PT.	Longitudinal study of parent–therapist alliance in PT and acquisition of parenting skills.	Working Alliance Inventory, Family Environment Scale, Sense of Support Scale and Treatment Improvement Scale.	Poorer pre-treatment client-therapist alliance was significantly associated with higher drop out; stronger alliance was associated with greater improvements in parenting skills.	Drop out and completion were not defined. The sample was largely female with the remaining gender unspecified.

Author(s)	Participants	Experimental manipulation	Design/Method	Outcome measure	Results	Comments
Miller, G.E. & Prinz, R.J. (2003).	Sample Type: Parents of children aged 4-9 years, clinical group. Size: 124 Gender: 124 male children	Parents' pre-intervention cognitions and expectations were obtained.	Randomised controlled trial, clients were allocated to one of four treatment conditions.	Percentage attendance at sessions and percentage of late arrivals at sessions.	Parents' pre-intervention externalising attributions were significantly associated with premature drop out.	A complex design was utilised and the pre-intervention factors were obtained using only two open ended questions to parents. Intervention conditions differed in the number of appointments required.
Nock, M.K. & Kazdin, A.E. (2005).	Sample Type: Parents Size: 76 Gender: 71 female, 5 male.	Motivational interviewing at three points during one to one PT.	Randomised controlled trial.	Total number of sessions attended.	Significantly higher attendance by the experimental group was found after session 7.	Therapists were not blind to the treatment condition.

Author(s)	Participants	Experimental manipulation	Design/Method	Outcome measure	Results	Comments
Nock, M.K. & Photos, V. (2006).	Sample Type: Parents Size: 76 Gender: 93.7% female, 6.3% male or other relative.	Parental motivation and perceptions of barriers to treatment were measured.	Prospective and retrospective study.	Total number of sessions attended.	Parental motivation at some points in the intervention predicted their perception of barriers and attendance.	Perception of barriers data was collected retrospectively giving potential for recall bias. The intervention was one to one PT plus child therapy so its applicability to group PT needs further exploration.
O'Brien, G. & Lazebnik, R. (1998).	Sample Type: Parents Size: 453 Gender: 71% female, 29% male.	Reminder phone calls were made to parents one day prior to the child's appointment.	Randomised controlled trial.	Attendance at a single specified appointment.	Pre-appointment telephone reminders significantly increased attendance.	The study concerned single appointments at an outpatient adolescent clinic, generalisation of results to PT needs to take this into consideration.

Author(s)	Participants	Experimental manipulation	Design/Method	Outcome measure	Results	Comments
Snell-Johns, J., Mendez, J.L. & Smith, B.H. (2004).	Sample Type: 16 published empirical studies.	Not applicable.	Meta-analysis of empirical studies concerning access, attrition and change in family therapy including PT.	Not applicable.	Concluded that home based, group and self directed therapy had empirical evidence of efficacy.	A wide definition of 'Family Therapy' hampered applicability of conclusions as varied presenting problems and interventions were considered together within this review.
Spoth, R., Goldberg, C. & Redmond, C. (1999).	Sample Type: Children Size: 667 Gender: 53% female, 47% male.	Considered multiple factors including SES, and internalising and externalising problems.	Randomised controlled trial.	Attendance at first session.	The sole factor predictive of attrition was lower parental educational level.	Multiple strategies to engage families were used in the PT conditions meaning identification of which was most effective was impeded.

Author(s)	Participants	Experimental manipulation	Design/Method	Outcome measure	Results	Comments
White, C., Agnew, J. & Verduyn, C. (2002).	Sample Type: Parents Size: 56 Gender: 53 female, 3 male. No details of the characteristics of the control group were given.	Evaluation of a PT service, including non-clinical variables of access, location and convenience of service.	Quantitative and qualitative pre and post-test evaluation. Control group were non-attenders to the service.	Attendance was coded as complete if 4 or more sessions were attended. Psychometric testing and a satisfaction and convenience questionnaire were used.	79% attended more than 4 sessions. Significant improvement in child behaviour and parental mental health were reported post PT.	This study had a small sample size and excluded primary non-attenders. Multiple variables were examined so it was not possible to determine whether one or more, or an interaction effect was responsible for the attendance levels.

CHARACTERISTICS OF ATTENDING AND NON-ATTENDING CLIENTS

CHARACTERISTIC: SOCIO-DEMOGRAPHIC VARIABLES

Considerable attention has been paid to socio-economic status (SES), family composition, parental earnings, education, employment and intelligence in predicting attendance at clinical services (e.g. Redmond *et al.,* 2004). Initial findings such as those from the Centre For Innovation In Primary Care (1999) revealed characteristics of non-attenders at general practitioner (GP) surgeries over a three year period. Their survey of 65,000 clients found that those least likely to attend were adults aged 20 – 24 years from geographical areas high on the Townsend Index of Deprivation (Townsend *et al.,* 1988). Clients with high non-attendance rates of five or more per year were twice as likely to be women. It is notable that the characteristics of GP non-attenders appear to match a key target population for PT, that is young women from areas of high deprivation (Sure Start, 2004). The advantage of this study was the large sample from which data was drawn over a substantial time period. However, use of this data to predict attendance at PT should be made with caution, recognising the possibility that characteristics of non-attenders at a GP surgery may differ from those at PT. Studying SES specifically in relation to PT Frankel and Simmons III (1992) did not find a simple relationship between SES and attendance. Their work considered both socio-demographic predictors and the therapist variable of experience. It was found that parents with higher SES were significantly more likely to drop out at intake (primary non-attendance) whilst parents of lower SES were more likely to drop out during PT (secondary non-attendance). The authors did not present any discussion of the SES data and it was therefore difficult to hypothesise why this finding had occurred. Spoth *et al.* (2000) did not find an association between SES and attendance, however their study was of a specific North

American rural community and, therefore, their findings may be limited to that particular population. In summary, the balance of evidence suggests that parents with lower SES are less likely to attend.

Family composition has been examined as a variable in attendance, with single parent family status emerging as a predictor of non-attendance (e.g. Kazdin *et al.,* 1997). There is a significant association between single parenthood and deprivation, with a higher percentage of single parents constrained in terms of employment, income and housing (Department for Work and Pensions, 2006). There may be some interactive effect of lower SES with single parenthood, meaning single parenthood in itself cannot be isolated as a predictive factor. Overall, researchers have presented socio-demographic characteristics related to drop out as purely descriptive factors (e.g. Prinz & Miller, 1996). Spoth *et al.* (1999) appear to have been unique in presenting a theoretical model with which to explain and understand these interacting variables. Using the health beliefs model (HBM), these authors hypothesised that the link between family demographics and PT attendance was mediated by perception of intervention benefits and barriers. Whilst this model has been well tested, there are limitations to generalisation of the work as the PT test population was highly specific: rural, Caucasian, predominantly two-parent families with adolescents in North America. Given that, for example, single parent status is linked to non-attendance (e.g. Morawska & Sanders, 2006) further testing of the HBM would be helpful prior to more systematic application.

The link between socio-demographics and attendance is complex and theoretical models have been sparse, lacking sufficient testing to provide clarity about the effects of these variables on attendance at PT. Several key predictive factors do, however, emerge from the research: single parents or those with low SES and living in areas of deprivation are at

elevated risk of non-attendance. It is not yet clear how these variables interact or compound and which, if any, have most predictive value.

CHARACTERISTIC: CHILD VARIABLES

Attention has been given in the literature to child factors in non-attendance, most specifically focussing on the severity of reported child difficulties, child age and gender (Morawska & Sanders, 2006). There have been inconsistent findings linking severity of reported difficulty and non-attendance. Kazdin *et al.* (1997) and Peters *et al.* (2005) found lower attendance where reported difficulties were more severe, whereas Spoth *et al.* (2000) found a minimal effect on attendance. The clinical intervention reported by Kazdin *et al.* (1997) involved additional individual sessions that placed an increased demand upon the research participants compared to PT alone. Generalising these results should take this into account. Whilst Spoth *et al.* (2000) found a minimal effect for problem severity, their subjects were adolescents so applicability with pre-teens was not established. Overall it appears that further research is needed to determine whether severity of child difficulties does affect non-attendance. In relation to child age and gender, the majority of authors have not found these variables to affect attendance (e.g. Kazdin & Wassell, 2000; Kendall & Sugarman, 1997). An exception concerned adolescents; Dakof *et al.* (2001) found that adolescent girls were less likely to drop out from treatment for drug abuse, the applicability of this study to parents of pre-teens attending PT is unclear.

In summary, the literature suggests that the gender and age of the referred child does not consistently predict non-attendance (Kazdin & Wassell, 2000). Research on attendance and the severity of presenting problems, is not definitive and may usefully be pursued in future research. The current literature therefore, presents few clear cut effects of child gender,

age or problem severity to assist services to predict non-attendance or target strategies to enhance attendance.

CHARACTERISTIC: PARENTAL MENTAL HEALTH

Parental mental health (PMH) has been cited as a factor affecting attendance at PT (Peters *et al.*, 2005). Specifically, higher levels of parental mental health difficulties, notably depression and stress, have been linked to lower attendance (Calam *et al.*, 2002). Whilst there have been some contradictory studies (e.g. Spoth *et al.*, 2000), overall it appears that poor PMH does have a negative effect on attendance. One factor affecting the interpretation and use of the PMH data has been that the majority of research subjects were female (e.g. Calam *et al.*, 2002). Conclusions about the effect of paternal PMH on attendance cannot yet be made. Whilst PMH is open to change, it is more often cited as a contextual predictive factor (Morawska & Sanders, 2006). The potential of PMH as a variable open to influence does not appear to have been addressed in the literature on pre-treatment strategies. This has possibly been due to the organisational separation of adult and child mental health services which make synchronising adult interventions with those targeted at children a future priority (National Institute for Mental Health in England, 2005).

CHARACTERISTIC: ORGANISATIONAL AND NON-CLINICAL VARIABLES

Overcoming organisational and non-clinical barriers to attendance has been the focus of service and government initiatives. Every Parent Matters (2007) specifies that services need to be delivered within a short distance of parents' homes or work places and at a time and on a day preferred by them. Psychologists aiming to increase attendance have employed non-

clinical strategies with some success, including pre-session reminder telephone calls to parents, provision of child-care, transport, refreshments, use of a pleasant venue and high quality teaching materials (White *et al.*, 2002). O'Brien and Lazebnik (1998) in a study of adolescent appointments found a pre-session reminder telephone call significantly reduced non-attendance; the control group attended 21% fewer appointments than the experimental group. As non-clinical strategies are commonly employed together, it is often not possible to determine whether it has been one, several or an interaction of strategies which produced the desired outcome (Snell-Johns *et al.*, 2004). It appears that flexible services which provide solutions to non-clinical barriers such as child-care and transport are increasingly expected as part of a service package (e.g. National Service Framework for Children, Young People and Maternity Services: Core Standards, 2004, p.96) although the crucial element or elements are as yet unclear.

SUMMARY OF CHARACTERISTICS IMPACTING ON ATTENDANCE

Client characteristics impacting on attendance have been widely considered in the literature in studies ranging from the extensive (e.g. Centre For Innovation In Primary Care, 1999) to the highly specific (e.g. Spoth *et al.*, 2000). Some interesting, clinically helpful and occasionally conflicting results emerged. This body of research does, however, suffer from an overall lack of well-developed theoretical models and variability caused by sample size and specificity. There is evidence, although not supported by all studies, that parents of lower SES, single parents, those with mental health difficulties and lower income are less likely to attend PT. That this is not universally found indicates the complexity of the variables that affect attendance. Child characteristics do not seem to offer a consistent link to attendance and further research is warranted. At present it seems there is little theoretical underpinning to

assist in determining why contextual factors affect the attendance of some parents and not others. These variables are essentially not open to change from a child clinical perspective. It is productive, therefore, to move on to variables which can be influenced, and consider studies elucidating factors which may be amenable to change.

INTERVENTIONS AND FACTORS WHICH INFLUENCE ATTENDANCE

THERAPIST VARIABLES

It is well researched that clinical outcomes are influenced by therapist variables such as experience, warmth, accurate empathy, genuineness and by therapeutic alliance (e.g. Brabender *et al.,* 2004, pp.54-55). The literature is clear that these can be mediators of both clinical efficacy (Miller & Rollnick, 2002) and attendance (Mohl *et al.,* 1991). Challenges in this body of work include the diversity of methods of measurement, from observer ratings of warmth and empathy from audio or video tapes (e.g. DeRubeis & Feeley, 1990) to client and therapist self-report questionnaires including the Agnew Relationship Measure (Agnew-Davies *et al.,* 1998) and Working Alliance Inventory (Horvath & Greenberg, 1989). The majority of these studies concern individual therapy only, rather than group work. Another issue concerns whether measures of positive therapeutic alliance indicate early outcome, in that they are assessing both clinical change and a treatment factor (Stiles *et al.*, 1998). If so, studies of therapeutic alliance could be confounded by early drop out. This issue has not been addressed in the PT literature with the exception of Kazdin and Whitley (2006) who touch upon it within their discussion.

Given the research issues in the adult literature the limited studies specifically concerning therapist variables in PT are useful to inform generalisation of findings (Morawska & Sanders, 2006). Some studies have been conducted to consider therapist characteristics in PT. For example, Birkimer *et al.* (1978) found therapist praise increased parents' responses to PT. This study had limitations, such as a small sample size (n = 45), although the use of video-taping enabled detailed examination of in-session behaviour. Patterson and Forgatch (1985) identified that therapist behaviours of confrontation and teaching increased parental resistance, compared to supportive behaviours which reduced non-compliance. These results present a challenge to PT as teaching is central to the content of this intervention. This research led to the use of more diverse teaching methods currently employed in PT (Triple P, 2001). Capage (2001) manipulated PT therapist communication delivering positive, neutral and negative styles. The latter resulted in the highest rate of parental use of positive parenting skills. This study found maternal satisfaction with the intervention and therapist did not vary regardless of style used, an outcome difficult to reconcile with other literature on warmth and empathy (e.g. Richardson & Joughin, 2002). Generalising from this study should take into account the small sample size (n=45), which renders the result less robust. In a study specifically measuring therapist variables and PT attendance, Frankel and Simmons III (1992) compared drop out rates when trainee versus trained staff were used and found a significant negative effect on attendance for trainee led PT. These authors recommend studies exploring therapist characteristics such as warmth and confidence. Spoth *et al.* (2000) specify high levels of therapist interpersonal skills as necessary to encourage attendance but do not test this assumption within their research. Kazdin and Whitley (2006) found that stronger therapeutic alliance was significantly predictive of greater improvements in parenting practices and lower drop out.

Overall, whilst therapist variables have been studied extensively in the adult literature this work has only recently extended to the field of PT (Nock & Ferriter, 2005) and studies in PT using attendance as an outcome measure are few. Warmth, empathy and genuineness are valued in the broader therapy literature (e.g. Brabender *et al.*, 2004), yet there is contradictory evidence from Capage (2001) suggesting positive results from a negative communication style in PT. This is difficult to reconcile with the opinion of authors such as Richardson and Joughin (2002) who identify the positive therapeutic relationship as crucial to success. Much of the literature on therapist variables examines them in relation to clinical outcomes rather than attendance; reports on individual rather than group work and does not address the potential confound of alliance and early outcome. Whilst it appears that therapist variables impact upon PT similarly to adult therapy, systematic exploration of therapist qualities and PT attendance would be helpful to clarify the relationship between these variables.

PARENTAL EXPECTATIONS

The congruence between client expectations of therapy, clinical outcomes and attendance has been the subject of research primarily concerning therapeutic outcomes in adult mental health (AMH) (e.g. Benbenishty & Yaacov, 1987; Pekarik & Finney-Owen, 1987). Findings have been clear that matching of client and therapist expectation for therapy is associated with improved adult clinical outcomes (Orlinsky *et al.*, 2004). The issue of expectations has additional complexity in the PT literature, as attributions concerning the cause of children's conduct difficulty can influence parental expectations of the therapeutic process. For example, a parent attributing the difficulty to a disorder located within the child may experience dissonance when the intervention requires changes in parental rather than child behaviour (Peters *et al.*, 2005). These authors, however, did not find child-centred attributions to be

significantly associated with lower attendance at PT. Their work suggested adults attending PT tolerated some incongruence between their expectations and the intervention. This finding places an onus on researchers to replicate effective adult attendance strategies with PT clients and avoid assumptions that approaches will have similar results in both realms.

PARENTAL MOTIVATION AND PERCEPTION OF BARRIERS TO TREATMENT

Motivation to change has been well researched in the adult mental health literature and been linked to both attendance rates and clinical outcomes (Humfress *et al.*, 2002; Zweben & Zuckoff, 2002). It is pertinent, therefore, to consider how adult motivation can be explored within the PT field. Frankel and Simmons III (1992) investigated parental factors such as resistance and denial which could affect motivation prior to attendance at PT, but did not find them predictive of drop out. Nock and Photos (2006) also found that parental motivation had no direct effect on attendance at PT. They did, however, conclude that their research provided partial support for a mediational model. Their premise was that lowered motivation led to greater perception of barriers to attendance, which in turn predicted lower attendance. These findings were presented tentatively with a suggestion that substantial further work was needed.

Perception of barriers to treatment were explored specifically in relation to primary and secondary non-attendance by Kazdin *et al.* (1997). This research found higher perceptions of barriers to attendance predicted secondary but not primary non-attendance. Limitations of the study include specificity of population, as the sample consisted of the parents of adolescents only. A further complicating factor in translating these results to the PT literature

was that, in this instance, both PT and child therapy were delivered and attendance was measured at both. The intervention period was also extended, 7 to 10 months, compared to a typical PT of 2 to 3 months (Sanders, 1999). Finally, perceptions of barriers to intervention were collected retrospectively and, given the long intervention period, this reporting may have been subject to recall bias. Nevertheless, parental perceptions of barriers represents an interesting area of research linked to motivation, and warrants further examination. Nock and Kazdin (2005) did find that a specific, brief and repeated intervention to increase motivation led to greater PT attendance. This study concerned one to one PT which would make individual motivational sessions easier to integrate into the service. In contrast, a group PT process would entail scheduling of additional individual sessions and may lack cost-effectiveness, hence a replication of this study with group PT would greatly assist in exploring its applicability and the cost-benefit ratio.

Motivation can also be affected by external rewards or sanctions. Financial rewards are seen as motivators for much human behaviour (Vohs *et al.*, 2006) and Heinrichs (2006) effectively used monetary payment to increase attendance at PT. She found 20% more families agreed to attend PT with a monetary payment but that attendance once the intervention had commenced did not differ between paid and unpaid parents. This study did have some limitations; of particular note was that only 31% of the approached families opted into the research, suggesting that the sample may have been skewed towards those families already experiencing some motivation to attend. In terms of implementing the results in clinical settings, as Heinrichs acknowledged, there may be a limit to the applicability due to financial constraints on organisations.

In summary, research on motivation to change has not shown a consistent effect on attendance at PT in the majority of studies to date. Studies have, however, been few and initial results from research on individual PT and concerning the use of monetary rewards may guide future studies. A priority therefore, is to more fully understand motivation to attend PT.

INTERVENTION MODALITY

The provision of PT on a one to one versus group basis has been debated on both therapeutic and cost-benefit grounds (Richardson & Joughin, 2002). Early work by Webster-Stratton (1984) evaluated the outcomes of individual compared to group PT and found that outcomes did not differ significantly, but the cost-benefit ratio favoured group delivery. Group delivery may however, have negative implications for attendance. Prinz and Miller (1996) cite both the benefits and disadvantages of parenting group work. The disadvantages, compared to individual interventions, were described as the effect of the widely varying views of participating parents on issues such as discipline and aggression, and differences in the severity of the child's presenting problems. They describe problematic group dynamics, including domination by one or more individual or interpersonal intimidation. These authors did not provide research evidence to support their contentions. However, Armstrong (2003) did find all of these factors present in his study of group PT and a further factor of parental reluctance to expose personal problems within a group. Whilst this study included data only from those completing PT the findings were consistent with and extended the reports of other authors (Prinz & Miller, 1996; Snell-Johns *et al.*, 2004). It appears, from a limited literature, that group PT does present additional intrinsic challenges, which have not, as yet, been thoroughly explored in the research on increasing attendance.

IMPLEMENTATION INTENTIONS AND THE THEORY OF PLANNED BEHAVIOUR

The theory of planned behaviour (TPB) has been used within the field of health psychology to increase attendance rates (Sheeran & Orbell, 2000) and shows relevance to adult mental health services (e.g. Aubrey, 2003). This model, similar to that of HBM, is based on the premise that social and cognitive factors are determinants of health behaviours in industrialised countries (Gollwitzer, 1999). TPB proposes that it is a person's intention to act which is the predictor of action and that this intention is based upon the constructs of attitudes, subjective norms and perception of behavioural control (Aubrey, 2003). Here, attitudes can be described as a person's assessment of the points in favour of and against a certain action (e.g. "Attending my group session would make me feel relieved/ashamed"). Subjective norms concern a person's view of whether people important to them would approve or disapprove of a certain action (e.g. "People who are important to me think I should attend the group session"). Perception of behavioural control refers to a person's view of whether they can perform a specified action (e.g. "I am confident I will be able to attend the group session"). A range of studies have utilised this theoretical basis to influence health behaviours and attendance (Milne *et al.*, 2002; Sheeran & Orbell, 2000). Aubrey (2003) extended the range of the model by applying it to an adult mental health service. This study utilised implementation intentions to increase attendance and resulted in an attendance rate of 83% in the experimental group compared to a rate of 57% for the controls. The limitations of this study included a low response rate and some skewing of the sample, nevertheless, there appeared to be a clinically worthwhile effect on attendance for a small investment of time and money.

TPB and implementation intentions have been most commonly applied to health promotion and disease prevention (Gollwitzer, 1999) however the work of Aubrey (2003), suggests a productive extension of this work into the mental health field which could have implications for PT.

SUMMARY OF INTERVENTIONS AND FACTORS WHICH INFLUENCE ATTENDANCE

There is a range of interventions and factors which have the potential to increase attendance and can be actively influenced in research and clinical practice. Therapist variables of experience, warmth, empathy and alliance emerged as factors that affected outcomes in adult mental health (e.g. Humfress *et al.,* 2002) and a small evidence base is developing to support the applicability of these findings in PT (e.g. Kazdin & Whitley, 2006). Client expectations of therapy have only recently been researched in respect of PT. The limited work available suggests congruence is less influential in PT than has been found in adult clinical services (Peters *et al.,* 2005). These results need further exploration to determine if they are robust and whether congruence can be manipulated to increase attendance. Whilst motivational interviewing has had a significant influence in AMH services (e.g. Miller & Rollnick, 2002), parental motivation has not had a consistent effect on attendance in PT. Investigation of perceptions of barriers to PT attendance may be a fruitful extension of the motivation research (Kazdin *et al.,* 1997). Further exploration is required to establish a working theoretical model of motivation and PT attendance (Nock & Photos, 2006). Theoretical models which could apply to PT include HBM and TPB both of which have a sound research basis in influencing health behaviours (e.g. Gollwitzer, 1999). HBM has been reported in the PT literature (e.g. Redmond *et al.,* 2004) but experimental manipulations, using it as a basis to increase

attendance, have not occurred. Research supports the role of TPB in increasing attendance (Aubrey, 2003) and, whilst it has not been applied to PT, there is potential to investigate whether the effects on AMH attendance are transferable. Finally, in considering factors impacting on attendance, the literature on intervention modality was considered. Authors seem in no doubt that group PT is the preferable mode of delivery, whilst acknowledging the additional challenge to attendance that this poses (Prinz & Miller, 1996; Richardson & Joughin, 2002). In considering these variables all appear in need of further exploration in relation to PT attendance and most would benefit from greater understanding of their theoretical underpinnings.

CONCLUSION

The literature exploring attendance at psychological interventions, and at PT in particular, presents a fascinating, albeit challenging, picture to both researchers and clinicians. Substantial research has been undertaken in the adult and, to a lesser extent, child and parent field concerning attendance (Morawska & Sanders, 2006). There have, however, been some limitations to this field of study due to methodological issues, a paucity of robustly tested theoretical models and difficulties generalising results from the adult field to that of PT. Other challenges to the interpretation of results have concerned sample populations. There has been great variability in sample size, with some conclusions drawn from relatively small numbers (e.g. n = 57; Calam *et al.*, 2002). The gender of samples has been predominantly female and in some cases the sample represented a very specific population (e.g. Spoth *et al.*, 2000). These limit the robustness and generalisability of the findings.

Unfortunately theoretical underpinnings are absent or tentative in much of the literature on PT attendance, meaning that the mechanisms by which experimental interventions facilitated change were not fully explored and exceptions were difficult to interpret. For example, the theoretical work of Spoth *et al.* (2000) requires further work to take into account exceptions and generalising from the studies of this author and his colleagues is hampered by the very specific nature of their sample population. There are also issues of measurement, in that studies varied considerably in their definitions of attendance and non-attendance. For some, attendance was defined as presenting for assessment (e.g. Spoth *et al.,* 2000), for other researchers it was a simple calculation of numbers of sessions attended (e.g. Nock & Kazdin, 2005). Yet others created a cut off number of sessions at which non-completion was deemed to have occurred (e.g. Frankel & Simmons III, 1992). This variation is not insurmountable in terms of understanding the research effects but overcomplicates replication and the applicability of results. Overall this literature has its challenges, however these do not undermine the results which have been achieved and can now be extended and replicated to reach firmer conclusions to inform PT practice. Bearing in mind the cautions described above, it is pertinent to conclude by reflecting on directions for future study concerning the characteristics of non-attending clients and the interventions and factors which influence attendance.

In reviewing the research on characteristics of attending and non-attending clients, there were some clear conclusions to be drawn in terms of socio-demographics. The findings were that adults of lower SES, single parents, those with mental health difficulties and lower income were less likely to attend PT. These results are helpful from a clinical perspective as they indicate those populations for whom targeted strategies to assist attendance would be most beneficial. In terms of research, they suggest that certain socio-demographic

characteristics need to be taken into consideration when sample populations are selected. In exploring the literature concerning organisational and non-clinical variables there appear to be some practical measures which impact positively on attendance. These include reminder telephone calls prior to sessions and provision of childcare and transport (O'Brien & Lazebnik, 1998; White *et al.,* 2002). There is an expectation by Government that inclusion of these strategies as an element of PT provision is now standard practice (Every Parent Matters, 2007), although it is as yet uncertain which of the approaches, or which combination are most effective.

The literature pertaining to factors which influence attendance offered some useful areas for consideration. Of these, therapist variables, client expectations and motivation have been extensively explored within AMH, however this review found some contradictory results in the parenting arena. This highlights the need for caution in extrapolating research concerning adult services to the child and parenting field. The literature does not present a theoretical explanation as to why outcomes varied between adult and PT client groups. It is possible that the difference is a result of the indirect nature of the intervention, that is, a child difficulty being treated through intervening with parents (Calam *et al.,* 2002) or more specifically to parental attributions concerning the cause of the difficulty (Peters *et al.,* 2005). This is certainly an area for further exploration in order that the learning from adult services can be appropriately applied in PT. A further area of interest was the delivery mode of group versus individual intervention. It was acknowledged that group interventions, compared to one to one delivery, presented additional challenges (Prinz & Miller, 1996). However there was consensus that PT should primarily be delivered in this manner for reasons such as cost-effectiveness (Richardson & Joughin, 2002). This places an obligation on PT clinicians and

researchers to concentrate on investigating the specific factors which could enhance attendance at groups.

Lastly, the need to gain an understanding of the theoretical basis for PT attendance has been considered. HBM has provided a useful contribution to understanding PT attendance (Spoth *et al.*, 2000) however generalising from this research will be challenging. Studies of TPB (Gollwitzer, 1999) have also provided an interesting theoretical perspective on attendance. TPB has a clear and well documented theoretical and research basis explored within the health behaviours literature. It does not, however, appear to have been applied to PT. Given the need for greater theoretical understanding of attendance in the PT literature the transferability of such a model may prove useful.

In conclusion, the impetus to extend our knowledge concerning the characteristics and factors that influence attendance is present, and research is clearly underway. The existing literature provides the springboard for a range of studies to explore both the cognitive and behavioural aspects of attendance, investigate the applicability of findings from AMH, and develop a robust theoretical model underpinning attendance.

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Randomised Controlled Trial Of An Intervention To Increase Attendance At Parent Training

ABSTRACT

Objectives. Improving parenting skills has been identified as a critical issue in preventing conduct difficulties and anti-social behaviour in children. To address this problem, research clearly identifies parent training (PT) as the intervention of choice; however this approach is characterised by low attendance rates which have a negative effect on outcomes. The objective of this study therefore, was to determine whether priming parents to overcome barriers to attendance affected attendance at parent training.

Design and method. A randomised controlled design was used. The experimental and control groups received initial assessment home visits followed by manualised group parent training. During one home visit, the experimental group received a ten-minute problem solving intervention to develop implementation intentions to overcome potential barriers to attendance; the control group received a ten minute unstructured parent–child observation.

Participants. Parents of children aged three to eleven referred to Triple P Positive Parenting Program groups were the subjects of this study. Eighty-one parents agreed to participate and three were excluded following initial assessment.

Outcome measures. The main outcome measure was the number of PT sessions attended out of a possible eight in total. A psychometric assessment battery was also carried out pre and post the PT group.

Results. Participants in the experimental group attended more sessions than the control group, however this did not reach statistical significance, $p = .086$. Participants made statistically significant changes on most pre to post-test clinical outcome measures but no difference was found between the experimental and control groups on these measures. Participants with a higher intention to attend were significantly more likely to complete PT, $p=.003$.

Conclusion. A brief intervention at the assessment phase of parent training has a mild but not statistically significant effect on attendance.

INTRODUCTION

Interest is growing in the field of children's conduct disorder as strategies to overcome the problem receive widespread funding (Department for Children, Schools and Families, 2006). Conduct disorder has well researched negative social and emotional outcomes for children (Cairns & Cairns, 1994) and is a predictive factor for later anti-social behaviour with associated financial costs to society (Scott *et al.*, 2001). The scale of the problem, at rates of 4-14% of the child population (Carr, 1999), adds weight to the need for a concerted treatment effort. Recent clinical and government initiatives have prioritised parent training (PT) as the intervention of choice where conduct disorder is identified (Every Parent Matters, 2007; National Institute for Health and Clinical Excellence, 2006; Wolpert *et al.*, 2006).

PT is a manualised intervention for parents of children with mild to severe behavioural and emotional difficulties; it has a well-established evidence base and the most effective interventions are clearly defined (Spoth *et al.*, 2007). The theoretical underpinning of PT is social learning theory although the approach draws on attachment theory, functional analysis principles as well as developmental and community psychology (Mihalopoulos *et al.*, 2007). The National Institute for Health and Clinical Excellence (2006) technology appraisal of parent-training/education programmes* identified seven essential elements of successful PT. It specified two programmes which matched these elements: 'the Webster-Stratton Incredible Years Programme and the Triple P – Positive Parenting Programme [sic] are examples that demonstrate these essential characteristics and are sufficiently effective with regard to cost.' (National Institute for Health and Clinical Excellence, 2006, p.28).

* progamme will be the preferred term used to apply to 'parenting programme' in this report, however it should be noted that the official title of Triple P uses the spelling 'program' and this will be adhered to when specifically referring to Triple P.

There is no doubt as to the evidence base for PT, yet some inadequacies in the literature remain (Richardson & Joughin, 2002). Studies concerning PT, and indeed other psychological approaches such as psychotherapy, have experienced difficulties of definition and interpretation. For example population definition, measurement variation and queries concerning the statistical compared to clinical significance of results have all been debated (e.g. Jacobson & Truax, 1991; Kazdin, 1999; Richardson & Joughin, 2002). It is in this challenging environment that research on PT is extending to further explore theoretical and practice issues.

Evidence based PT, such as Webster-Stratton and Triple P, are effective interventions (Mihalopoulos *et al.,* 2007; Webster-Stratton, 1984); yet they are plagued by levels of non-attendance as high as 40-60% (Miller & Prinz, 2003). Lower attendance is associated with a negative impact on clinical outcomes, cost efficiency, training and research (e.g. Cahill *et al.,* 2003; Kazdin *et al.*, 1997; Stiles *et al.,* 1998). Attendance research is beset by challenges concerning definitions; with some studies concerned with those who attend no appointments, whilst others concentrate on non-completion of treatment or do not define treatment dose (Pekarick, 1991; Phillips, 1995). It is also known that non-attending parents are more likely to be parenting harshly and have mental health difficulties that could compound family problems (Calam *et al.*, 2002). On the basis of this research it could be argued that those who, following referral, do not attend PT are the families with the highest level of need for it, further emphasising the importance of resolving this issue.

Significant attention has been paid to implementing practical and administrative strategies to increase PT attendance (Peters *et al.,* 2005). Approaches include provision of PT in settings local to parents' homes, at times and days requested by parents and in venues

which are of good quality (Every Parent Matters, 2007). Administrative prompts such as reminder letters, telephone calls and transport are also used routinely to increase attendance (e.g. White *et al.*, 2002). These engagement initiatives are encapsulated in government directives such as Choosing Health (Department of Health, 2004) and many are now standard practice. Despite these efforts low attendance rates persist creating an impetus to explore psychological methods to address the issue within PT (Spoth *et al.*, 2007).

The use of theoretical models to guide practitioners has been identified as a priority for exploration (Heinrichs *et al.*, 2005; Kazdin, 1999; Morawska & Sanders, 2006; Snell-Johns *et al.*, 2004). Of the limited number of theoretical models applied to attendance at PT, the health belief model (HBM) has appeared most frequently in the literature (e.g. Redmond *et al.*, 2004). HBM was developed to predict attendance at physical health services and selected constructs have been researched for applicability to PT (Spoth & Redmond, 1995). Spoth *et al.*, (2000) described the four relevant constructs in HBM as 'perceived severity of a health hazard or problem, perceived susceptibility to such a health hazard or problem, perceived barriers to health-protective actions and perceived benefits of this type of action' (p.214). Findings from the application of HBM to PT have been promising, suggesting the four HBM constructs do relate to PT attendance (Spoth *et al.*, 2000). However, this research has not included attempts to influence health beliefs to increase PT attendance, meaning the openness of these factors to change has not been tested (Redmond *et al.*, 2004). There are further cautions to the application of this research to PT in general as the participants in the studies mentioned had specific demographics and difficulties, namely, rural North Americans parenting adolescents at risk of substance misuse. Further extension of the work is needed to test the relevance of HBM to parents of younger children experiencing conduct disorder.

An interesting extension of HBM was made by Spoth *et al.* (2000) when they included parents' inclination to enrol in PT as a factor. The concept of inclination bore significant similarities to intention, which is thoroughly explored in an alternative model, the theory of planned behaviour (TPB) (Gollwitzer, 1999). Given the limitations of the research concerning HBM and PT, an exploration of TPB and its relevance to PT is warranted. TPB posits that a person's intention to act is a strong predictor of taking that action. The intention to act is determined by constructs including the person's evaluation of the advantages and disadvantages of a particular action, subjective norms which comprise the person's perception of how others would view the action and their own behavioural control over the action (Aubrey, 2003). An underpinning of TPB is that people's actions are strongly predicted by their implementation intentions (Sheeran & Orbell, 2000). Implementation intentions are the thoughts or plans each person creates to prepare them for action (Ajzen, 1991). For example, an implementation intention to attend PT might be "I will get up at 8.30 a.m. then I will go to catch the 9.30 a.m. bus to get to my parent training group on time." Implementation intentions can be prompted and refined, making them a potentially useful tool for creating change in attendance (e.g. Milne *et al.*, 2002). There are no currently published examples of the use of TPB in PT. However, in a related field, Aubrey's (2003) randomised controlled trial found that implementation intentions resulted in a significant increase in attendance at the initial appointment of an AMH outpatient service. Although there were some limitations to this study, it suggested the relevance of TPB to a clinical setting and provided an impetus to explore this model in relation to PT.

TPB has wider applicability than attendance, notably through its impact upon behaviour change in general. Aubrey (2003) stated 'The practical utility of implementation intentions extends beyond just increasing attendance, however. [sic] These cognitive

strategies are successful in promoting the performance of any behaviour' (p.89). In this context TPB has potential to influence client behaviour and play an integral part in creating clinical change. Parental behaviour change is, for example, an expressed aim of PT (Sanders, 1999) and a clients' ability to utilise implementation intentions within treatment could therefore be of considerable clinical importance. For example, if the strategy of forming implementation intentions to increase attendance generalised to increasing positive parenting behaviours then clinical outcomes in PT would be enhanced.

The applicability of TPB specifically to PT content is illustrated by Gollwitzers (1999) description of the formation of implementations as a self-regulatory strategy. Parental use of a self-regulatory framework is also a central principle of PT (Turner *et al.,* 2000). This common underpinning strengthens the concept that parents practiced in using implementation intentions to increase attendance possess a generalisable skill applicable to the content of PT. In light of the wide ranging potential impact of TPB and implementation intentions (Aubrey, 2003) it is pertinent to inquire whether clients practiced in the use of this strategy for attendance purposes can generalise the skill to increase the behaviours required for clinical change. In the present context, this would result in an increase of positive parenting skills taken up during PT with a consequent impact on treatment outcomes.

In light of the previous research this study focused on the application of TPB and implementation intentions to address PT non-attendance. The formation of attendance implementation intentions was investigated to determine whether, by generalising to parenting behaviours taught within PT, clinical outcomes were affected. The basis of this study was the need to raise attendance at PT and identify useful theoretical models to apply to it.

HYPOTHESES

Problem solving and implementation intentions

1. Parents* who receive a problem solving psychological intervention to develop implementation intentions to overcome barriers to attendance at group PT will attend more PT sessions.

Psychological Priming

2. Parents who develop implementation intentions prior to PT attendance will show greater improvements in clinical outcomes than parents who did not receive priming prior to PT attendance.

METHODS

Favourable ethical opinion was provided by the North Staffordshire Local Research Ethics Committee and research governance approval was obtained through the North Staffordshire Research and Development Consortium (see Appendix 2 for all approvals). The Sheffield University Clinical Psychology Unit acted as sponsor of the research. All policies and procedures relating to applied research were followed.

* Parents, participants and clients will be used interchangeably throughout this report.

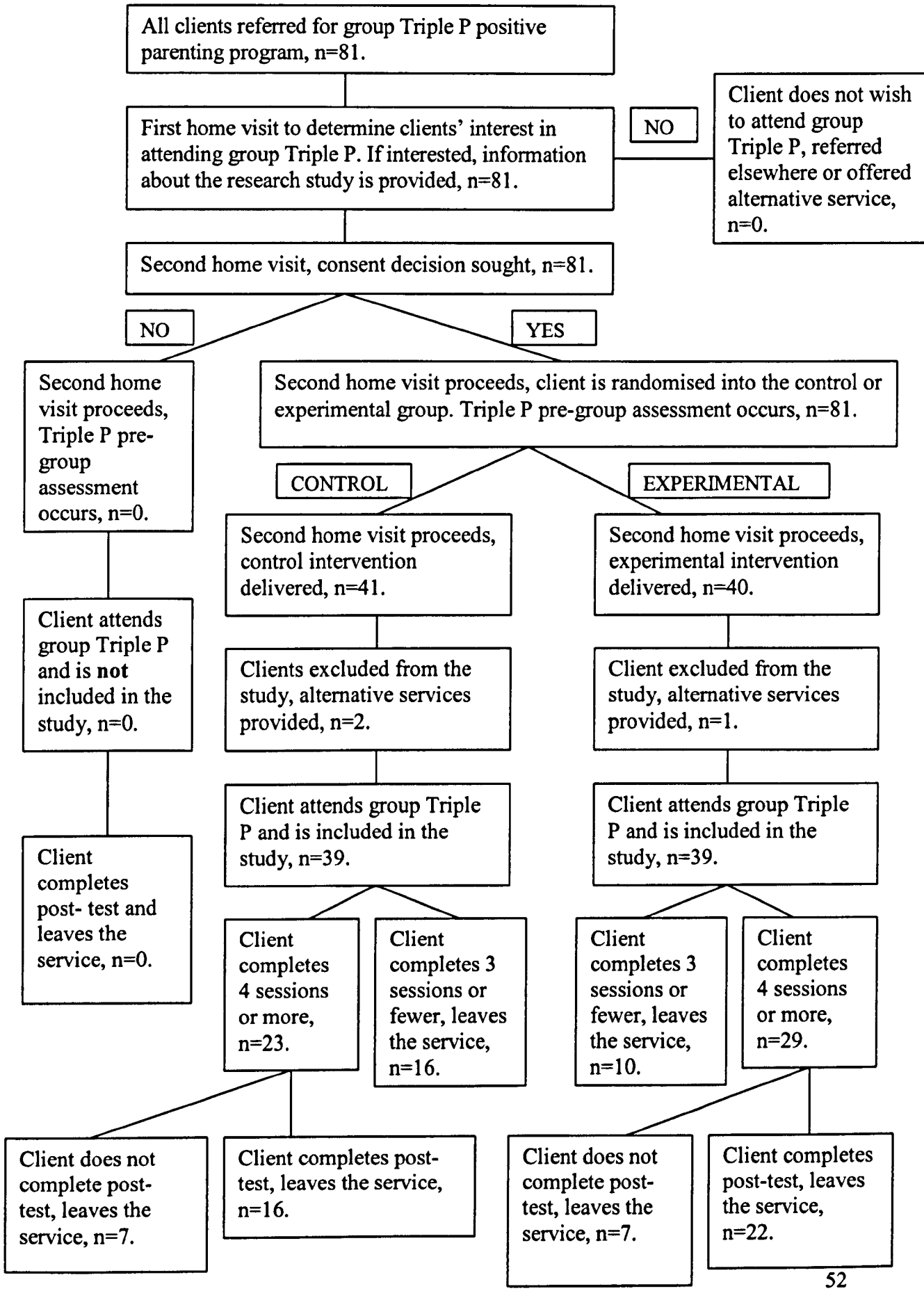
PARTICIPANTS

This study was conducted with clients of a community child and family psychology service within an urban NHS Trust. The PT programme delivered within this service was group Triple P, see Appendix 3 for details of this approach. The research participants were the parents of all children aged 3 to 11 referred over a fifteen-month period to group PT. Of the 81 possible participants all consented to take part in the research; 3 parents were excluded. Of these, 2 experienced physical health difficulties which kept them housebound precluding attendance and 1 was subject to a child protection investigation and was required to access services elsewhere. A total of 78 parents were included, the flow of participants through the study is illustrated in Figure 1.

Inclusion and exclusion criteria

Parents of children aged 3 to 11 years old were targeted for this research in light of their suitability for Triple P (Sanders, 1999). Only parents for whom this was their first referral for Triple P were included. Participants were excluded from the study if they experienced physical health issues that precluded attendance or if child protection concerns became known.

Figure 1. Flow diagram of clients through the study



PROCEDURE

All parents waiting to attend Triple P groups were invited to take part in the research. Two pre-group visits occurred; the first visit was conducted by a Triple P Facilitator other than the researcher. All second home visits, which included pre-group assessments and all experimental and control procedures, were carried out by the researcher. All Triple P groups were conducted by accredited Triple P Facilitators other than the researcher. This occurred to ensure Triple P Facilitators were blind to the experimental condition of participants in their groups. The full procedure is detailed below:

- Following referral, each participant received a home visit from the Triple P Facilitator who would be delivering their group sessions. This is standard practice when delivering Triple P and ensures that each participant is familiar with the clinician delivering his or her service. During this visit the nature of the group Triple P intervention was explained and the participants' interest in attending determined.
- If the participant wished to attend Triple P, the research was then explained and the Client Information Sheet and Consent Forms were left for consideration prior to a second home visit at least 24 hours later by the researcher. If the referred child was 9 years of age or over, the research was also explained directly to them and the Children and Young Person's Information Sheet and Children And Young Person's Consent Form were left for consideration as above (see Appendix 4).
- The second home visit was carried out by the researcher. At this visit participants (and children where applicable) were asked whether they wished to consent to take part in the research, and if so the consent forms were signed. If they did not wish to participate in the research the assessment session proceeded as per usual practice. At the point of consent research participants were randomly assigned to the experimental or control group using

previously printed computer generated random permuted blocks. Participants were not informed of the condition to which they had been allocated. During the remainder of the home visit a package of pre-group questionnaires were completed by the participant (see Appendix 5). Finally, either the experimental or control intervention was undertaken. Several options were considered for the control intervention. For example, one possibility was a period of discussion concerning child behaviour problems. This was not selected as it duplicated the assessment questionnaires and could entail conversation concerning barriers to attendance, potentially confounding the experimental intervention. A time of non-child related discussion was contemplated but it would have been difficult to rationalise to the participant and the inclusion of dialogue about attendance was again possible. The use of no control intervention was dismissed as this would mean no control for the additional period of contact and familiarity with the researcher that was inherent in the experimental intervention. A naturalistic observation was deemed the most appropriate choice of control intervention in this study. As neither attendance strategies, implementation intentions or advice on child management were included in the observation it appeared to be the least likely to confound the experimental intervention whilst controlling for contact and familiarity.

- The experimental intervention consisted of a ten-minute session designed to develop problem solving skills and implementation intentions to overcome barriers to attendance. This scripted intervention was based upon cognitive behaviour therapy and the theory of planned behaviour and included the development of implementation intentions (see Appendix 6).
- The control group underwent a ten-minute period during which the researcher made an unstructured naturalistic observation of the parent and child in the home environment (see Appendix 7). This exercise was consistent with the naturalistic

parent-child observation recommended during assessment prior to individual Triple P services (Sanders *et al.*, 2004). It was presented to parents as a means to better understand their child's behaviour. No child behaviour management or attendance advice was given during the procedure.

The duration of the second home visit was 1 to 1.5 hours for both control and experimental participants. This was slightly longer than standard practice due to the inclusion of the control and experimental interventions.

- The control participants then received a confirmation letter from the researcher informing them of the details of the Triple P group to which they had been allocated. The experimental group received a reminder of their implementation intentions included in the text of the same confirmation letter and a laminated fridge magnet or wallet card detailing their implementation intentions (see Appendix 8).
- Usual practice to address non-attendance was followed for all participants by the Triple P Facilitator, e.g. telephone appointment reminders and offers of transport to their group.
- All participants then had the opportunity to attend their allocated 8 session Triple P group. Each Triple P program occurred over 8 weeks and consisted of 4 group sessions, followed by 3 individual telephone consultations and a final group session.
- Attendance data were collected at each session by the Triple P Facilitators and returned to the researcher on a weekly basis (see Appendix 9). Where a non-attendance occurred Triple P Facilitators attempted to engage parents to complete the session either through a home visit or self-directed session prior to the next group meeting. This represented existing standard practice for the service and, if achieved, was noted as an attendance for research purposes.

- It should be noted that non-attendance after any session did not preclude parents from attending other sessions. For example a participant could miss session 2 yet attend session 3.

- Post-test assessments were completed by participants during session 8, or during a home visit with their Triple P Facilitator if needed (see Appendix 5). The researcher did not complete post-test assessments with participants as this occurred as part of the group Triple P intervention. One measure, the Confidence and Motivation to Attend Questionnaire, was given at pre-test only as it referred to intentions to attend which were no longer relevant at post-test.
    - For research purposes, a subgroup referred to as 'post-test completers' was created. This subgroup were defined as having attended four or more PT sessions and completed the post-test assessment. Attendance at four sessions has been deemed a sufficient minimum treatment dose as, at that point, all parenting strategies have been taught (Gallart & Matthey, 2005; M.R. Sanders, personal communication, 4th December, 2006).

MEASURES

All participants regardless of group received all measures, see Appendix 5.

Socio-demographic characteristics

The Family Background Questionnaire (Zubrick *et al.,* 1995) was used to collect information from all participants on the age, gender and ethnicity of the identified child and parental employment status, couple status (single versus two parent family) and intake of prescribed psychoactive medication, e.g. anti-depressants.

Measure of attendance

The main outcome measure was the number of PT sessions attended out of a possible 8 in total. In instances where participants specified they wished to defer attendance they were given 12 months in which to attend following which, if they attended, they were scored according to the number of sessions attended. If they did not attend they were scored zero.

Intentions

Attitudes towards attendance and intentions to attend were measured using the Confidence and Motivation to Attend Questionnaire (CMQ) (Aubrey, 2003). This questionnaire provided data on six factors described by Aubrey (2003) as follows:

Factor 1, Positive consequences of attending (F1).

Factor 2, Negative affective consequences of attendance (F2).

Factor 3, Self perception of attendance (F3).

Subjective norms (SN).

Perceived behavioural control (PB).

Intention (I).

Due to the scoring system on this measure, lower scores on each factor represented stronger agreement with the factor. Factors F1, F2, F3, PB and I of the CMQ have high reliability, ranging from α =.70 to α =.93 Aubrey (2003). Discriminant validity was acceptable, with these factors accounting for 74.2% of the variance, SN was not reported as having sufficient discriminant validity, reliability could not be computed for SN as it comprised only one question (Aubrey, 2003). In this study results for SN will therefore be interpreted with caution. Reliability of CMQ factors F1, F2, F3, PB and I were computed using data from the present research participants and were α =.79, α =.80, α =.70, α =.73, α =. 72 respectively, indicating adequate reliability for this sample.

Psychological outcome measures: Child measures

Child Emotional and Social Adjustment. Children's emotional and social adjustment was assessed using The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). This measure is routinely used by clinicians delivering Triple P (Triple P, 2002) and within research studies (e.g. CEDAR, 2007). The SDQ is a brief behaviour screening measure consisting of 25 positive and negative attributes which asks respondents to rate how much each attribute applies to the target child (aged between 3 and 16 years) on a 3-point scale from not true (0) to certainly true (2). All SDQ subscales consist of 5 items and have scores ranging from 0 to 10. The SDQ has satisfactory reliability ($\alpha = 0.73$), cross-informant correlation (mean = 0.34), and retest stability after 4-6 months with a UK child population (mean = 0.62) (Goodman, 2001).

Psychological outcome measures: Parent measures

Parenting Style. Parenting style was assessed using the Parenting Scale (PS; Arnold *et al.*, 1993). The PS is a 30-item questionnaire that measures three dysfunctional discipline styles: Laxness (permissive discipline), Over-reactivity (authoritarian discipline, displays of anger, meanness and irritability) and Verbosity (overly long reprimands or reliance on talking). For each item on the PS, respondents are asked to rate which of two statements best describes their parenting style. This yields a total score and three scale scores, with higher scores indicating dysfunctional parenting. Clinical cut-off scores are 3.2 for the total score, 3.2 for Laxness, 3.1 for Over-reactivity and 4.1 for Verbosity. The PS has been found to discriminate between parents of clinic and non-clinic samples of children; satisfactory internal consistency ranged from $\alpha = .63$ to .84 and adequate total and subscale test-retest reliability ranged from $\underline{r} = .79$ to $\underline{r} = .83$ (Arnold *et al.*, 1993).

Parenting Self-Efficacy. The 16-item version of the Being a Parent Scale, (BPS; Johnston & Mash, 1989) was used to measure satisfaction and sense of efficacy as a parent. Two dimensions are considered: (a) satisfaction with the parenting role (reflecting the extent of parental frustration, anxiety and motivation); and (b) feelings of efficacy as a parent (reflecting competence, problem-solving ability and capability in the parenting role). The Total score (16 items), Satisfaction factor (9 items) and the Efficacy factor (7 items) show a satisfactory level of internal consistency, $\alpha = .79, .75$ and $.76$, respectively (Johnston & Mash, 1989).

Parental conflict. Parental disagreement over child rearing was measured using the Parent Problem Checklist, (PPC; Dadds & Powell, 1991). The PPC is a 16-item questionnaire that measures inter-parental conflict over child rearing. It rates parents' ability to co-operate and work together in family management. 6 items explore the extent to which parents disagree over rules and discipline for child misbehaviour, 6 items rate the occurrence of open conflict over child-rearing issues, and a further 4 items focus on the extent to which parents undermine each other's relationship with their children. A Problem Scale score of greater than 5 is considered in the clinical range. The PPC has high test-retest reliability, $\underline{r} = .90$ (Dadds & Powell, 1991).

Parental Mood. The Depression Anxiety Stress Scale (DASS; Lovibond & Lovibond, 1995) was used to measure psychological distress in parents. The DASS asks respondents to rate the severity of 42 symptoms of depression, anxiety and stress on a 4-point scale (0-3). Items are summed to yield a total score and three scale scores. Scores greater than 9 on the Depression scale, 7 on the Anxiety scale and 14 on the Stress scale indicate symptoms in the clinical range. The DASS has adequate discriminant validity and good reliability, total and subscales ranged from $\alpha = .90$ to $.97$ (Crawford & Henry, 2003).

METHODS OF ANALYSIS

All statistical analyses were carried out using SPSS v.12 (SPSS, 2003) with the exception of the Randomisation Analysis of Variance (RANOVA), which was calculated using a specific alternative program (Manly, 1991).

POWER CALCULATION

The number of participants needed for this study was determined on the basis of a power analysis conducted to establish an adequate sample size. Assuming a medium to large effect size of d=.65 and an alpha level of .05, to obtain a power of 80% the required total sample size was 78, n=39 in each group. This sample size was deemed adequate for testing all hypotheses and undertaking the appropriate statistical analyses.

PROPOSED ANALYSES

For the purposes of this study two-tailed t-tests were used to analyse the attendance data and to compare the post-test completers and post-test non-completers. Chi squared, t-tests and Fishers Exact tests were used to compare the demographic data for each group. Analyses of variance (ANOVA's) were applied to the pre and post-test data. In addition to the per protocol analyses an intention-to-treat analysis was performed on pre and post-test data. The intention-to-treat analysis was utilised as post-test data were not available for some participants. This lack of outcome data was expected due to the known high dropout rate from PT. The intention-to-treat analysis was therefore used to avoid potential bias and loss of randomisation caused by the exclusion of participants who were non-compliant. A RANOVA was utilised to

examine trends in the attendance data and a Spearman's rho was applied to the CMQ and attendance data. All analyses were two-tailed where this was an option. A case could be made for the use of one-tailed tests as the original prediction of change had been in one direction only. However, upon consideration, it was possible that the experimental manipulation could have acted contrary to the hypotheses, perhaps by highlighting barriers to attendance, so it was decided that two-tailed tests were the most appropriate in this situation.

SKEWNESS

It was taken into account that some of the data were not normally distributed. Skewness was calculated to determine whether parametric or non-parametric statistics were most suitable for the data. Skewness was present in some of the data (see Appendix 10) and was considered in light of Stevens' (2002) opinion that skewness has only a slight effect on significance and power.

> Skewness has only a slight effect (generally only a few hundredths) on level of significance or power. The effects of kurtosis on level of significance, although greater, also tend to be slight.....For moderately non-normal distributions the approximation is good with as few as 10 to 20 observations. (Stevens, 2002, pp.261-262)

It was decided that, in this case, skewness was of insufficient strength overall to conclude that non-parametric statistics were appropriate. Parametric statistics were therefore used throughout, with the exception of the RANOVA which was utilised where data did not conform to the assumptions for analysis of variance.

RESULTS

DEMOGRAPHICS

Table 1 shows the demographic details of the control and experimental groups and indicates that the groups did not differ substantially. The identified children in both groups were predominantly white, male and had an average age of just under five years old. Participating parents tended to be mothers, in single family households and unwaged; the majority were not taking any prescribed psychoactive medication at the time of the study. The groups did vary slightly in that there were more female children in the control group than the experimental group, 16 compared to 7 respectively. The high proportion of 'not reported' in some categories arose from sensitivity to the personal nature of some questions (i.e. ethnicity, parental relationship, employment status and use of psychoactive medication) which resulted in a refusal to answer these specific questions. It was not felt ethically appropriate to insist upon gaining this information.

Table 1. Participant demographics n=78

		Control Group n=39	Experimental Group n=39
Ethnicity of child	White British	36	31
	Pakistani	0	1
	White Irish	0	2
	Not reported	3	5
Gender of child	Male	22	29
	Female	16	7
	Not reported	1	3
Age of child in months	Mean	56.7	56.0
	Range	36-124	36-131
Gender of participating parent	Male	7	5
	Female	32	34
Parental relationship	Single	20	23
	Married/co-habiting	12	11
	Not reported	7	5
Employment status	Waged	7	8
	Unwaged	25	25
	Not reported	7	6
Psychoactive medication	Yes	5	1
	No	25	22
	Not reported	9	16

RANDOMISATION CHECK

To determine whether randomisation had been effective the demographic information and pre-test scores of the control and experimental groups were compared. Demographic data were analysed using Pearson chi squared tests, a Fishers Exact test and a t-test. Child ethnicity data did not meet the assumptions of the chi squared as some of the expected frequencies were below 5 and a Fishers Exact could not be applied as cells exceeded 2x2. It was not considered respectful of ethnic differences to collapse the ethnic groups into a single "non-white British" category. Statistical testing was therefore not applied to this data so no statement can be made as to whether the groups differed significantly on this category. No significant differences were found between control and experimental groups for the gender of the participating parent, χ^2 (1) =.394, p=.530, parental relationship, χ^2 (2) =.586, p=.746 or parental employment status χ^2 (2) =.144, p=.931. Parental use of psychoactive medication was analysed using a Fishers Exact test* and no significant difference between groups was found, p=.217. Child age was analysed using a two tailed independent samples t-test, no significant difference between groups was found, t(73) =0.218, p=.828.

A significant difference was found in gender of child between the groups, χ^2 (1) =4.432, p=.035, with the control group containing more girls*. To further explore this finding the PT attendance of parents of boys compared to girls, regardless of experimental group, was analysed using a two tailed independent samples t-test, no significant difference was found, t(73) =1.152, p=.253.

Pre-test scores were analysed using two tailed independent samples t-tests. Given that 25 measures were used, a Bonferroni adjustment was made and a statistical significance level

** To apply statistical analyses to the child gender and parental use of medication data the 'Not reported' category was omitted in order to meet the assumptions of the tests.*

of p=.002 applied to avoid the risk of type one errors. As can be seen by the t-test results detailed in Appendix 11, the control and experimental participants were not significantly different on any of the pre-test measures. Randomisation was therefore considered successful in relation to the pre-test scores and demographics with the exception of child gender and, whilst it appears the groups are not dissimilar concerning ethnicity this was not tested statistically.

To test hypothesis two, that experimental participants would show greater improvements in clinical outcomes than controls, a sub group of the total sample was created containing those participants who had attended four or more PT sessions and completed a post-test assessment. These participants are referred to as 'post-test completers'. It was necessary to consider whether the control and experimental members of this subgroup differed significantly on their demographics or pre-test data. Table 2 shows the demographic details of the control and experimental post-test completer groups and indicates that the groups did not differ substantially. An independent samples t-test was applied to the child age data and Fishers Exact tests were used to analyse all remaining demographic data*. No significant differences were found between groups, all p values being equal to or greater than p=.382. Two tailed independent samples t-tests were applied to the pre-test data of post-test completers. A Bonferroni adjustment was made due to the high number of variables included in the analysis and a significance level of p=.002 was therefore applied. As shown in Appendix 12, there were no significant differences between the control and experimental post-test completers on any of the pre-test questionnaires. Control and experimental post-test completer groups did not differ significantly on demographics or pre-test scores.

**To apply statistical analyses to this data the 'Not reported' category was omitted in order to meet the assumptions of the Fishers Exact test.*

Table 2. Post-test completer participant demographics n=38

		Control Group n=16	Experimental Group n=22
Ethnicity of child	White British	16	15
	White Irish	0	2
	Not reported	0	5
Gender of child	Male	10	15
	Female	6	5
	Not reported	0	2
Age of child in months	Mean	56.7	60.7
	Range	36-119	36-131
Gender of participating parent	Male	2	3
	Female	14	19
Parental relationship	Single	10	12
	Married/co-habiting	4	6
	Not reported	2	4
Employment status	Waged	4	5
	Unwaged	10	13
	Not reported	2	4
Psychoactive medication	Yes	2	1
	No	9	12
	Not reported	5	9

HYPOTHESIS ONE: ATTENDANCE

Data showed that the average number of PT sessions attended varied between the two conditions. As shown in Table 3, the experimental participants attended an average 1.21 more sessions than the control participants, a higher attendance rate of 15%. In Figure 2 it can be seen that the experimental group were the higher attenders at every PT group session. A two tailed independent samples t-test was conducted on the attendance data and significance was not reached, t (76) =1.74, p=.086.

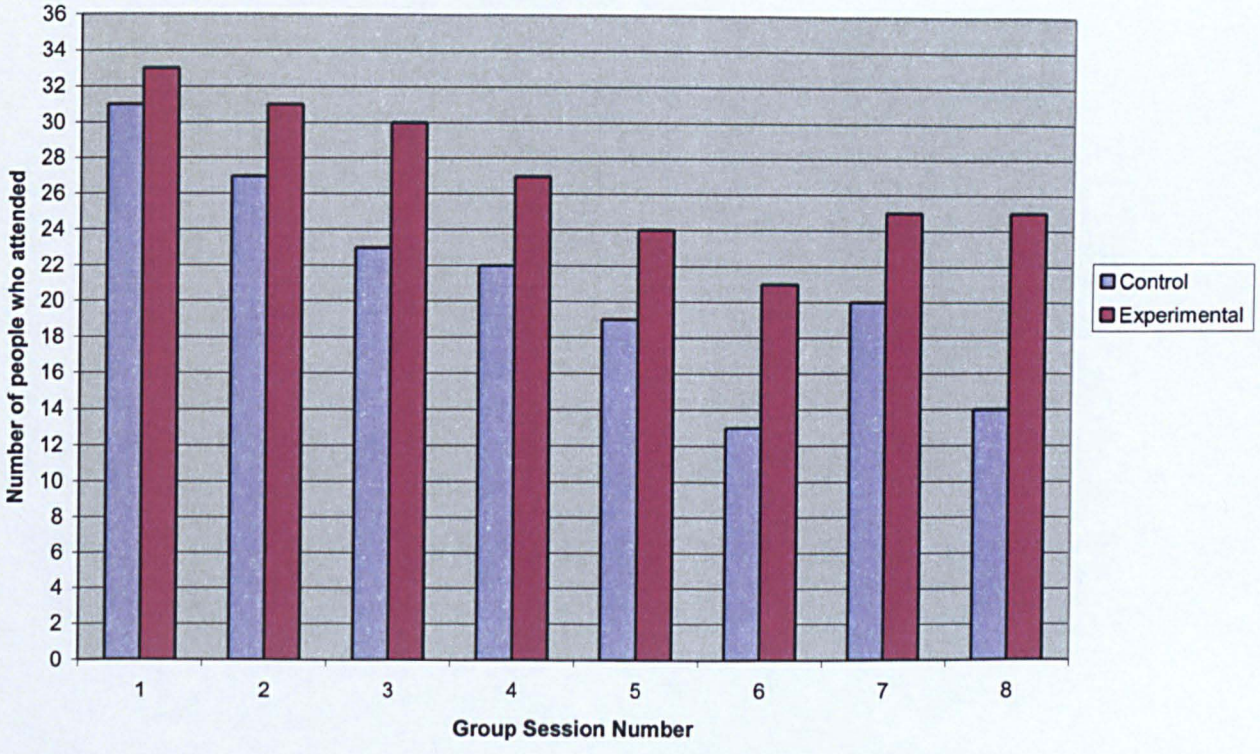
Table 3. Average attendance rates (+ or – 1 SD) and percentage attendance rates

Group	**Average number of sessions attended per participant**	**Percentage attendance**
Control n=39	4.33 (3.14)	54%
Experimental n=39	5.54 (2.97)	69%

Patterns of attendance

Further examination of the attendance data was helpful in understanding differences between the experimental and control participants. It appeared, as shown in Figure 2, that both the control and experimental participants followed a downward pattern of attendance until session 6. The control participants moved from a peak of 79% attendance at session 1 to a low of 33% at session 6 and the experimental participants moved from 82% attendance at session 1 to 54% at session 6. This downward trend altered after session 6 with a slight increase in attendance for both groups.

Figure 2. Control and experimental participants attendance, session-by-session n=78



A RANOVA was used to determine whether the trends in attendance across sessions differed between the control and experimental groups. This non-parametric statistic was used in this instance as the data were dichotomous and did not conform to assumptions for analysis of variance. The outcomes of the RANOVA are shown in Table 4. This test showed no statistically significant difference between control and experimental groups in their session attendance (groups effect, p=.142). The sessions effect was statistically significant, p=.0002, showing a reduction in the attendance of all participants across the eight sessions. In their attendance trends, the control and experimental group patterns of attendance did not differ, p=.399.

Table 4. Trends in attendance session by session examined using a RANOVA n=78

Dependent variable	F value	Significance
Groups effect	2.25	p=.142
Sessions effect	15.91	p=.0002*
Groups x sessions interaction	1.06	p=.399

* p<.0002

INTENTIONS

This study focussed on the development of implementation intentions to overcome barriers to attendance. It was therefore important to evaluate the assumption that TPB and intentions were pertinent to PT attendance per se. A post hoc hypothesis was thus developed that participants with more positive ratings on the CMQ, a measure of TPB factors, would attend more PT sessions. In order to test this hypothesis the relationship between the CMQ subscales and attendance was investigated. As six measures were used, a Bonferroni adjustment was made and a statistical significance level of p=.008 applied to avoid the risk of type one errors. Upon examination, several of the scatterplots were curvilinear: as a result it was decided to use a two-tailed Spearman's rho. As can be seen in Table 5, no significant correlation was found between attendance and the CMQ subscales.

Table 5. Correlations between attendance and CMQ subscales, n= 78

Dependent variable	**Correlation Coefficient#**	**Significance**
F1Positive consequences of attending	r^2=-.138	p=.248
F2 Negative affective consequences of attendance	r^2=.152	p=.203
F3 Self perception of attendance	r^2=-.082	p=.491
SN Subjective norms	r^2=.144	p=.227
PB Perceived behavioural control	r^2=-.052	p=.662
I Intention	r^2=-.265	p=.024

note the negative correlation relates to the CMQ scoring, as lower scores on each factor represent stronger agreement with them.

To further examine the data, it was decided to consider whether the CMQ subscales were predictive of attending four or more sessions and post-test completion, these participants are referred to as post-test completers. The relationship between post-test completion and non-completion and the CMQ subscales were explored using two tailed, independent samples t-tests. As shown in Table 6, post-test completers were found to hold statistically significantly stronger intentions to attend than non-completers, p=.003. On the subscales F1, F3 and PB, post-test completers showed a non-significant tendency to report more positive associations with attendance compared to non-completers (note lower scores on F1, F3, SN PB and I indicate more positive perceptions of attendance).

Table 6. Comparison of post-test non-completers and post-test completers on pre-test confidence and motivation to attend (+ or - 1 SD) n=78

Dependent variable	**Post-Test Non-Completer Mean (SD) n=40**	**Post-Test Completer Mean (SD) n=38**	**Significance**
F1Positive consequences of attending	12.39 (4.422)	11.67 (3.39)	p=.440
F2 Negative affective consequences of attendance	9.36 (4.85)	9.75 (4.00)	p=.712
F3 Self perception of attendance	5.64 (2.02)	5.25 (2.488)	p=.469
SN Subjective norms	2.028 (.999)	2.028 (.878)	p=1.00
PB Perceived behavioural control	6.055 (2.083)	5.417 (1.762)	p=.165
I Intention	2.861 (.930)	2.25 (.732)	p=.003*

* significance p<.008

HYPOTHESIS TWO: CLINICAL OUTCOMES

Post-test data was collected from 38 participants; 16 from the control group and 22 from the experimental group. A between by within mixed ANOVA was applied to the pre and post-test data to test the hypothesis that the experimental group would achieve greater clinical improvements than the control group. In light of the missing post-test data and to address issues of bias due to failure to preserve randomisation, an intention-to-treat analysis was also completed, n=78. Due to the high number of measures reported, a Bonferroni adjustment was made and a statistical significance level of p=.0026 was applied to these analyses. As there was participant drop out prior to completion, the n for the per protocol ANOVA was lower

than previously specified as necessary for this research, therefore results of this analysis should be interpreted with this in mind.

The results of the ANOVA for post-test completers are detailed in Table 7. The pre versus post-test data for research participants who attended four PT sessions or more and completed the post-test is presented. These participants showed a statistically significant pre to post-test change on total scale scores for 4 measures (SDQ, PS, BPS and DASS) and on 8 of the 14 subscales. Significance was not reached on the Parent Problem Checklist, 5 subtests of the SDQ, and the anxiety subscale of the DASS. Graphic representation of the pre versus post-test data are available in Appendix 13.

As reported in Table 7, differences were examined between control and experimental group post-test completers on the whole pre and post assessment data set. No significant differences were found on any of the nineteen scales using the significance level p=.0026.

The ANOVA also examined the interaction between groups and the pre versus post-test variable. As shown in Table 7, the control and experimental groups did not differ significantly with regard to the size of the difference between their pre and post-test scores on 18 of the 19 measures. As displayed in Figure 3, a statistically significant interaction was obtained on the PS subscale of Verbosity only (p=.001), with the control group making significantly greater reductions in verbosity than the experimental group.

An intention-to-treat analysis was applied to the data, n=78. The assumption was made that participants without post-test data, n=40, had made no change from baseline and their pre-test data were therefore also utilised as post-test scores. The results of the intention-to-treat ANOVA are detailed in Table 8. The intention-to-treat analysis considered the pre versus post-test data for all research participants. Research participants showed a statistically significant pre to post-test change on total scale scores for 4 measures (SDQ, PS, BPS and DASS) and on the same 8 of the 14 subscales as did the per protocol ANOVA. Differences

were also examined between control and experimental group participants on the whole pre and post assessment data set. No significant differences were found on any of the nineteen scales, as in the per protocol ANOVA. Lastly, the intention-to-treat ANOVA examined the interaction between groups and the pre versus post-test variable. In this instance none of the interactions was significant. By comparison, the per protocol ANOVA did find one statistically significant interaction, reported above, between the control and experimental participants on the PS subscale of Verbosity.

This data did not support hypothesis two, that experimental participants would show greater improvements in clinical outcomes than controls.

Table 7. Mixed ANOVA comparison of pre and post-test data for post-test completers n=38 (control n=16, experimental n=22)

	Pre versus post		Groups		Interaction	
Dependent variables	**F value**	**Significance**	**F value**	**Significance**	**F value**	**Significance**
SDQ Total	F(1,36) =16.893	p=.0005*	F (1,36) =.557	p=.460	F (1,36) =1.042	p=.314
SDQ Emotional well-being	F(1,36) =.609	p=.440	F (1,36) =1.074	p=.307	F (1,36) =.423	p=.520
SDQ Conduct	F(1,36) =12.178	p=.001*	F (1,36) =.395	p=.534	F (1,36) =.823	p=.370
SDQ Hyperactivity	F(1,36) =7.541	p=.009	F (1,36) =.140	p=.711	F (1,36) =1.849	p=.182
SDQ Peer relationships	F(1,36) =7.123	p=.011	F (1,36) =.051	p=.823	F (1,36) =.013	p=.908
SDQ Pro-social behaviour	F(1,36) =2.325	p=.136	F (1,36) =.297	p=.589	F (1,36) =.107	p=.745
SDQ Impact on family life	F(1,23) =9.228	p=.006	F (1,23) =.195	p=.663	F (1,23) =.005	p=.946
PS Total	F(1,36) =41.611	p=.0005*	F (1,36) =1.569	p=.218	F (1,36) = 10.079	p=.003
PS Laxness	F(1,37) =24.975	p=.0005*	F (1,37) =.343	p=.562	F (1,36) =8.096	p=.007

*significance p<.0026

	Pre versus post		Groups		Interaction	
Dependent variables	**F value**	**Significance**	**F value**	**Significance**	**F value**	**Significance**
PS Over-reactivity	F(1,37) =32.400	p=.0005*	F (1,37) = 5.234	p=.028	F (1,37) = 2.945	p=.094
PS Verbosity	F(1,37) =70.124	p=.0005*	F (1,37) = .134	p=.716	F (1,37) =11.803	p=.001*
BPS Total	F(1,36) =46.154	p=.0005*	F (1,36) = .002	p=.963	F (1,36) =.421	p=.521
BPS Satisfaction	F(1,37) =58.588	p=.0005*	F (1,37) = .384	p=.539	F (1,37) =.838	p=.366
BPS Efficacy	F(1,36) =24.683	p=.0005*	F (1,36) = .270	p=.607	F (1,36) =1.959	p=.170
PPC	F(1,15) =4.317	p=.055	F (1,15) = .151	p=.703	F (1,15) =1.281	p=.569
DASS Total	F(1,36) =15.951	p=.0005*	F (1,36) = .413	p=.524	F (1,36) =.657	p=.423
DASS Depression subscale	F(1,36) =19.809	p=.0005*	F (1,36) = .459	p=.502	F (1,36) =1.265	p=.268
DASS Anxiety subscale	F(1,36) =4.728	p=.036	F (1,36) = .022	p=.883	F (1,36) =.212	p=.648
DASS Stress subscale	F(1,36) =16.147	p=.0005*	F (1,36) = .1.042	p=.314	F (1,36) =.730	p=.399

*significance p<.0026

Figure 3. Parenting Scale: Verbosity, pre and post intervention means of post-test completers (control n = 16 and experimental n = 22)

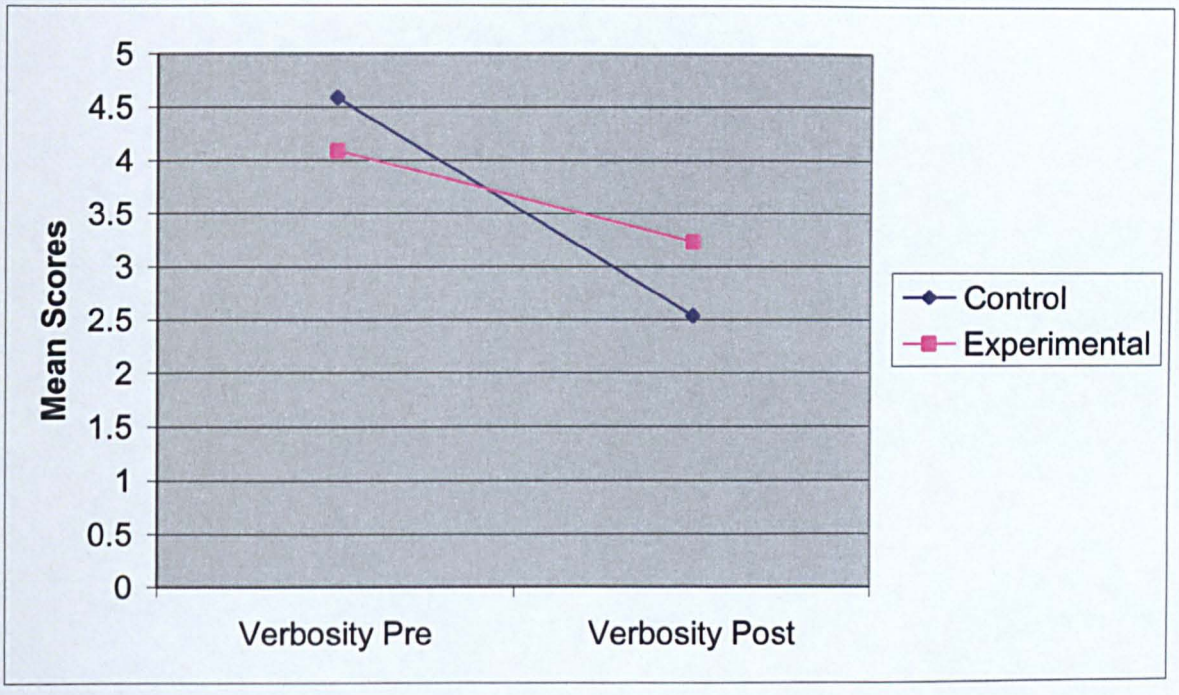


Table 8. Intention-to-treat analysis Mixed ANOVA comparison of pre and post-test data for all control and experimental participants, n=78

	Pre versus post		Groups		Interaction	
Dependent variables	**F value**	**Significance**	**F value**	**Significance**	**F value**	**Significance**
SDQ Total	F(1,73) =13.228	p=.001*	F (1,73) =.794	p=.376	F (1,73) =.152	p=.697
SDQ Emotional well-being	F(1,73) =.487	p=.487	F (1,73) =3.393	p=.070	F (1,73) =.299	p=.586
SDQ Conduct	F(1,73) =10.048	p=.002*	F (1,73) =.745	p=.391	F (1,36) =.144	p=.706
SDQ Hyperactivity	F(1,73) =6.045	p=.016	F (1,73) =.168	p=.683	F (1,73) =.861	p=.357
SDQ Peer relationships	F(1,73) =6.893	p=.011	F (1,73) =.394	p=.532	F (1,73) =.241	p=.625
SDQ Pro-social behaviour	F(1,73) =2.217	p=.141	F (1,73) =.450	p=.505	F (1,73) =.012	p=.915
SDQ Impact on family life	F(1,62) =8.181	p=.006	F (1,62) =1.626	p=.207	F (1,62) =.432	p=.513
PS Total	F(1,74) =22.026	p=.0005*	F (1,74) =.073	p=.787	F (1,74) = 3.279	p=.074
PS Laxness	F(1,75) =15.306	p=.0005*	F (1,75) =.090	p=.764	F (1,75) =3.321	p=.072

*significance p<.0026

	Pre versus post		Groups		Interaction	
Dependent variables	**F value**	**Significance**	**F value**	**Significance**	**F value**	**Significance**
PS Over-reactivity	F(1,75) =21.109	p=.0005*	F (1,75) =.282	p=.597	F (1,75) =.593	p=.444
PS Verbosity	F(1,75) =31.027	p=.0005*	F (1,75) =1.155	p=.286	F (1,75) =2.535	p=.116
BPS Total	F(1,75) =28.428	p=.0005*	F (1,75) = .004	p=.948	F (1,75) =.015	p=.903
BPS Satisfaction	F(1,75) =33.091	p=.0005*	F (1,75) = .180	p=.672	F (1,75) =.016	p=.901
BPS Efficacy	F(1,75) =17.482	p=.0005*	F (1,75) = .096	p=.757	F (1,75) =.501	p=.481
PPC	F(1,45) =3.785	p=.058	F (1,45) = .005	p=.943	F (1,45) =.210	p=.649
DASS Total	F(1,73) =14.756	p=.0005*	F (1,73) =1.940	p=.168	F (1,73) =1.926	p=.169
DASS Depression subscale	F(1,73) =17.758	p=.0005*	F (1,73) =1.722	p=.193	F (1,73) =2.928	p=.091
DASS Anxiety subscale	F(1,73) =5.036	p=.028	F (1,73) = .728	p=.396	F (1,73) =.687	p=.410
DASS Stress subscale	F(1,73) =14.942	p=.0005*	F (1,73) =2.715	p=.104	F (1,73) =2.046	p=.157

*significance p<.0026

DISCUSSION

The present study examined the impact on attendance of a brief intervention involving the development of implementation intentions to overcome barriers to attendance. A post hoc examination was carried out to determine whether holding stronger intentions to attend predicted higher attendance for both control and experimental groups. The rationale for this was to investigate whether TPB and implementation intentions would form a useful theoretical approach to considering attendance at PT. A second hypothesis concerned whether priming parents with problem-solving implementation intentions prior to PT would lead to generalisation resulting in improved clinical outcomes for the experimental group compared to the control.

HYPOTHESIS ONE

The first hypothesis tested during this study was that parents who created implementation intentions to overcome barriers to attendance would attend more PT sessions than parents who did not. To test this hypothesis, PT attendance data were collected from control and experimental participants. For each of the 8 PT sessions the experimental group had higher attendance than the controls. Experimental participants attended an average of 1.21 more sessions, out of a possible 8, than the controls, a higher attendance rate of 15%. The data was analysed using a two tailed t-test and this trend was not found to reach statistical significance, $p=.086$. Hypothesis one therefore, was supported by the descriptive statistics but not upheld to the standard of statistical significance.

The attendance results in this instance were consistent in direction with those obtained previously within TPB research in the fields of health promoting behaviours and AMH. For example, Sheeran and Orbell (2000) found a 23% increase in attendance for a health promoting service when implementation intentions were developed. Similarly, Aubrey (2003) elicited a 26% increase in attendance at AMH when implementation intentions were introduced. The attendance results in the present study were non-significant and lower than found in other TPB research possibly reflecting the complexity of PT compared with services directed at all adults (Snell-Johns *et al.*, 2004). It could be argued that PT participants face particular attendance challenges as a result of performing their childcare responsibilities. Examples might include being impeded from attending not only by their own ill health but that of their children, or through competing demands to attend appointments for other child related services. Such additional barriers need further problem solving and planning, potentially requiring implementation intentions to address a wider range of situations.

Both control and experimental groups followed the same attendance trends of falling rates from the highest at session 1 to the lowest at session 6 followed by a rise for sessions 7 and 8. The pattern of falling attendance from session 1 onwards is consistent with the literature on attendance at other clinical services which also describe this gradual reduction (e.g. Pekarick, 1991; Phillips, 1995). There are a number of possible reasons for this pattern including clients' expectations of treatment and their own predictions of attendance (Reis & Brown, 1999). There are no reported studies in the PT literature concerning this pattern of attendance and it is not known whether the variables reported in the AMH literature apply.

Contrary to the studies cited previously, the present research found an upward trend in attendance at the penultimate and final sessions. To understand this data it is helpful to

remember that Triple P sessions 5, 6 and 7 are telephone consultations and it is possible that, as such, they presented different demand characteristics than group sessions. Lowest attendance for both control and experimental groups was found at session 6, the midpoint of telephone sessions. One interpretation of this could be that curiosity was a motivator to attend telephone session 1. This session was both the first telephone consultation experienced by participants and incorporated feedback concerning their pre-group measures. Session 6, which occurs after the treatment dose has been achieved (Gallart & Matthey, 2005) and has no test results or novelty could be seen as the least interesting to participants. Lastly, in session 7 both control and experimental participants increased attendance. It is possible that this rise occurred because participants wished to be well prepared in readiness for further face-to-face contact at session 8. Overall, telephone sessions might have been less well attended for a number of reasons; they were simply easier to forget; they were less well defined as an event out of the normal routine or these differences in attendance could simply have occurred by chance.

In conclusion, hypothesis one was not upheld, the difference in attendance between the control and experimental groups did not reach statistical significance.

INTENTIONS

One premise of this study was that TPB could be applied to PT given its successful application to health behaviours and AMH (Aubrey, 2003; Sheeran & Orbell, 2000). The outcome of hypothesis one did not support the application of TPB implementation intentions to PT attendance. The usefulness of TPB was, therefore, not ascertained from the attendance data. In consequence it was considered useful to explore the applicability of TPB to PT using

a post hoc hypothesis. Thus, the hypothesis was developed that participants reporting more positive associations with attendance and stronger intentions on the TPB measure (CMQ) would attend more PT sessions. This hypothesis was explored for all participants using a Spearman's rho and no statistically significant correlations were found. The data was then grouped according to whether participants were 'post-test completers' or 'post-test non-completers' to explore whether this provided a meaningful way to examine the applicability of TPB. Two tailed t-tests were used to compare the CMQ subscales of post-test completers and non-completers and it was found that post-test completers expressed significantly stronger intentions to attend, p=.003. The groups did not differ significantly on any other CMQ subscale. These results were consistent with Ajzen's (1991) description of the role of intentions in TPB: 'Intentions are assumed to capture the motivational factors that influence behaviour;' (p.181) and 'As a general rule, the stronger the intention to engage in a behaviour, the more likely should be its performance.' (p.181). In the present study, the strength of participants' expressed intentions to attend were predictive of their attendance at four or more sessions and post-test completion. The question remains whether post-test completers represented a definable subgroup of those referred to PT and if so, what were their characteristics? One approach to this query might be to consider the past history of each participant in terms of their development of behavioural, normative and control beliefs (Azjen, 1991). Explorations of this sort should increase our understanding of which parents are most likely to be in need of additional support to increase attendance.

In conclusion it appears that TPB is worthy of further consideration in relation to PT, in that intentions effectively predicted post-test completion regardless of condition.

HYPOTHESIS TWO

The second hypothesis tested during this study was that parents who created implementation intentions to overcome barriers to attendance would show greater improvements in the clinical outcomes of PT compared to those who did not. Post-test measures were obtained in order to test this hypothesis (n=38). Post-test completers were defined as participants who had completed 4 sessions or more and the post-test questionnaires. Experimental and control post-test completers did experience statistically significant clinical improvements at post-test on most measures, this is consistent with the outcomes reported in a range of research concerning Triple P (Sanders, 1999; Sanders *et al.*, 2000). The experimental and control post-test completers did not differ significantly in their pre to post-test clinical change except in the case of the Verbosity subscale from the measure Parenting Style. The Verbosity subscale showed a greater pre to post improvement for the post-test completer controls, p=.001, compared to the post-test completer experimental participants. In Figure 3 it can be seen that the controls initially showed greater difficulty in this area than the experimental group although this difference did not reach statistical significance, p=.064. The results of the intention-to-treat analysis did not differ from the per protocol ANOVA's, with the exception that the intention-to-treat analysis found no significant difference between groups on pre to post-test change in the Verbosity scale. This per protocol result could be explained in that the change for the control group represented a regression to the mean, however this is unlikely. It should also be recalled that the sample size in the case of post-test completers was low (n=38) meaning interpretation of this data should be made with caution. Given these factors, and the lack of significance found in the intention-to-treat analysis, the difference in Verbosity between control and experimental PT completers could have been a type 1 error. This issue needs to be explored further before conclusions can be drawn.

In considering reasons that hypothesis two was not upheld it might be suggested that the brevity of the experimental manipulation, approximately 10 minutes per person, was of insufficient power to allow generalisation of the use of implementation intentions to PT itself. An additional factor was the small sample size in the post-test completer group (n=38) which might not have allowed for differences between the groups to emerge. Important differences between the control and experimental groups might have been missed due to a type 2 error, in which case working with a larger sample would be essential.

In conclusion, hypothesis two was not upheld; receipt of the problem solving, implementation intentions intervention prior to PT did not result in improved clinical outcomes following PT.

CLINICAL IMPLICATIONS

The results of this study show a non-significant trend towards higher attendance by participants who received the experimental intervention. The clinical implications of this study are unclear as statistical significance was not reached. The descriptive statistics tell us that the experimental group attended an average 1.21 sessions more than the control group and this should be considered in light of the brevity of the PT programme (8 sessions). Where the maximum possible attendance is 8 sessions, an increase of 1.21 sessions represents a high proportion of the available service. For participants, this additional attendance might mean the difference between receiving a sufficient or insufficient treatment dose (Gallart & Matthey, 2005), and therefore a clinically effective or ineffective service. The clinical implications of the experimental intervention are not determined by this research but further study is warranted given the descriptive statistics.

A further issue to consider is the cost-benefit of the experimental intervention. This was a brief intervention of 10 minutes incorporated into a standard home visit prior to PT. Its cost in terms of staff time and resources was therefore very low. With the stakes high in terms of the clinical, financial and organisational costs of conduct disorder (Cahill *et al.*, 2003; Kazdin *et al.*, 1997; Scott *et al.*, 2001), it would be worthwhile to further explore such brief interventions.

LIMITATIONS

This research was affected by some limitations which could usefully be addressed in future studies. One issue was difference between the control and experimental groups. In this study there were no significant differences between the control and experimental groups on any of the 25 pre-test measures used. However, the demographic data revealed that the control group contained a significantly greater number of female children compared to the experimental group. This difference was considered in light of the work of Kazdin and Wassell (2000) who found no clear evidence that gender has a direct effect on attendance. In addition, no statistically significant difference was found between the attendance of parents of girls compared to boys in the present study. The work of Kazdin and Wassell (2000) and the attendance data from this study indicate this gender difference between groups was unlikely to have had a confounding effect on the study.

The choice of control intervention was also a possible limitation. It entailed child observation only and dialogue between the researcher and the participant was avoided. In comparison, the experimental intervention was a discussion between the researcher and participant. The latter might thus have engendered greater interpersonal rapport and familiarity than an observation period. Increased rapport could in turn affect attendance. This

effect may have been limited however, as rapport gained during either of these interventions was with the researcher and not the Triple P Facilitator delivering the clinical service. Another potential issue was whether the observation per se altered participants' likelihood of attending PT or had an effect on outcomes. The chance of this was lowered by the fact that no advice concerning the child's behaviour or parent-child interaction were made during or after the observation. Overall, it was possible that using a control intervention without interpersonal interaction might not have been as effective as necessary in controlling for the rapport and familiarity created during the experimental intervention.

A further consideration related to the content of the PT itself. The PT programme applied here was Triple P which, unlike other PT programmes, included telephone sessions within its 8 week course. This difference was not overtly addressed in the experimental intervention. The barriers to attendance scripted intervention (Appendix 6) placed emphasis on attendance in general; it included no specific prompts to address barriers to attendance or develop implementation intentions specifically for telephone sessions. As a consequence, it was possible that the experimental group was no better prepared to attend the telephone sessions than the control group. Omitting to specifically address attendance at telephone sessions may have resulted in a weakening of the experimental intervention in this instance.

Sample size is often an issue when carrying out field research due to constraints of time and access to participants (Robson, 2002). It must be considered whether a sufficient sample size was used in this piece of research. It is possible that the effect size used in the initial power calculation was overly optimistic. Assuming a smaller effect size would have suggested a larger sample size, in turn providing a larger data set for analysis. In relation to testing hypothesis two it was informative that the intention-to treat analysis, n=78, differed

little from the per protocol ANOVA which had the smaller sample, n= 38. In order to fully test hypothesis two however, a larger overall sample size would have been helpful. In this way a greater number of post-test completers would have been likely, with a concomitant increase in the confidence with which statistical analyses could have been used and interpreted. In conclusion, a replication study informed by the learning from this research and with a larger sample size would now be useful.

It is apparent from the results described that, whilst this study had limitations, the investigation of TPB and implementation intentions in relation to PT attendance has been useful. This study has interesting implications for the direction of future research.

FUTURE RESEARCH

Further exploration of the application of TPB and implementation intentions in the field of PT attendance are warranted by the results presented here. There is clearly potential to expand upon the current study using a larger sample size to determine whether the trend of increased attendance can be further investigated. It is clear that, in future trials, refinements could be made to the experimental intervention to ensure that specific characteristics of PT, such as telephone sessions, be considered when implementation intentions are being developed. The use of a control intervention involving interpersonal interaction could also be considered. Accepting that TPB and implementation intentions are applicable to PT attendance, there is a wealth of previous research in the health behaviours field which might be usefully replicated with a PT population.

The present research does indicate the value of TPB as a theoretical model to understand attendance at PT. As such, it opens up a potential body of research almost untouched to date concerning the mechanisms by which PT participants do and do not attend, and the beliefs and past experiences which influence their decision making and actions.

CONCLUSION

The purpose of this research was to examine a method by which attendance at parent training might be increased. The findings of this study were that the experimental participants attended more PT sessions than the controls, however this difference did not reach statistical significance. It was found that TPB did have applicability to PT attendance, as shown by the finding that participants with stronger intentions to attend were more likely to complete four or more sessions of PT and a post-test. Lastly, data showed that having developed implementation intentions to address attendance did not generalise to PT itself and did not result in improved clinical outcomes for participants.

There is much to be gained from this study for future research. Addressing the limitations of this study would be valuable. Further investigation of implementation intentions and PT may also offer insights into issues specific to attendance by clients who are parents. At a broad level, the finding that TPB could provide a valuable theoretical model to understand and explain PT attendance opens up a fascinating area of new research. Further study of the use of TPB to increase PT attendance and systematically investigate its applicability as a theoretical model is now recommended. In conclusion, TPB and implementation intentions warrant further study to investigate their potential to affect attendance at PT.

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Critical Reflection On The Research Process

ORIGINS OF THE PROJECT

The origins of this research project were firmly based in clinical practice in that, at the time when these research ideas were being formulated, issues of delivery and evaluation of parent training were very much coming to the fore in the United Kingdom (Wolpert *et al.*, 2006). A range of issues presented themselves as potential research questions; from comparators of different parent training (PT) packages to implementation issues. These were thoroughly discussed with supervisors, with consideration for the uniqueness of the proposals, clinical value of any research findings and the practicalities of the size and suitability of the project for the Post Qualification Doctorate. As this process of refinement and discussion went on, it became clear that one of the issues for PT was not its efficacy but the attendance of parents at the service (Dumka *et al.*, 1997; Miller & Prinz, 2003). A review of the literature revealed a range of methods used to increase parental attendance at PT which had made some, but not enough, impact (e.g. White *et al.*, 2002). A lack of theoretical understanding of attendance was also hampering progress in addressing this issue (Kazdin, 1999). As the research proposal took shape, various theoretical models were considered including the health belief model (Spoth *et al.*, 2000) and the theory of planned behaviour (TPB; Azjen, 1991). Of these, TPB appeared to hold the most potential as it presented both a means to understand behaviour and a method of increasing attendance. TPB had not been applied to this area of clinical work previously, but lent itself to a brief intervention which could be applied in practice. If effective, it held considerable potential to improve attendance and consequently impact on clinical outcomes (Aubrey, 2003). In conjunction with this process, the service within which I worked was implementing PT, using the Triple P positive parenting program with underserved or hard to reach families. The service was experiencing the same attendance

difficulties as have been cited above, and this provided a significant personal motivation to explore strategies to address the issue.

Throughout the period of proposal development the constant challenge for supervisors was to curb a desire to expand the research and try to study too much. It is with gratitude that I look back on their frequent reminders to keep it simple and not to attempt more grandiose ideas. Keeping a research project to a manageable scale has been a lesson learnt for future research.

ETHICS AND GOVERNANCE

I approached the application for ethical approval with some trepidation, having been primed by colleagues that this was a complex process both from a paperwork point of view and in meeting challenging questions from the ethics panel. This however, was not my experience, and I found the then newly created electronic COREC form user-friendly and relatively easy to complete. The unanticipated challenge was dividing responsibilities for the research between the NHS Trust, which was the site of the research and the University. After some effort to find the correct person to approve sponsorship and insurance, a balance was achieved. Passage through the ethics committee was also less stressful than anticipated, with useful queries arising at the meeting. Minor changes were then made to the proposal and the application passed through in July 2004. Overall, the experience of gaining ethical approval was encouraging and promoted my confidence in future applications for further research.

ORGANISATION AND IMPLEMENTATION

DATA COLLECTION

The main challenge faced in the initial data collection was timing. PT services tend to be scheduled during school term times with programmes starting in early September, January and April. This meant times of very high demand for pre-test assessments and pressure to reach all the potential research participants in advance of the groups commencing. Attempting to make appointments which fitted with parents' schedules became challenging at times and evening work was common. However, the satisfaction of having parents and children agree to participate in the research and take part in the experimental intervention was highly motivating.

The next stage of data collection was to obtain the attendance records of participants at PT. This relied upon the Triple P group facilitators returning the data on a session by session basis. After a slightly faltering start, as facilitators became used to the additional process of sending me the completed forms, this went surprisingly smoothly. I experienced anxiety that my most crucial outcome measure was to be collected by others, however all completed their tasks with efficiency and the data reached me in good time.

The final piece of data to be acquired was the post-test assessment, which our service had found in the past to be the most difficult to obtain. This was possibly because parents had left the programme prior to the final session or lacked motivation to complete the forms, having already recognised the positive change they had achieved and not needing further confirmation. All the Triple P group facilitators were familiar with these difficulties and worked hard to ensure parents were provided with opportunities to complete the assessment. Again, the reliance on others was anxiety-provoking but successful, and post-group data was

collected from 38 participants. Unfortunately this number was not as large as had been hoped and meant that the results of the statistical analysis of the post-test assessment had to be interpreted with caution.

DATA ANALYSIS

It was with some concern to me, as my research proposal took shape, that the main measure was such a simple one – that of attendance at PT sessions. I was worried that this was too simplistic to be able to demonstrate the understanding and application of statistics required for the qualification. However, as the proposal grew and a second hypothesis developed, it became clear that I would have more rather than less data, and could examine it statistically in a range of ways which would assist in answering the research questions and show an ability to use statistical analyses. In analysing the data I benefited from the support of statistician Adrian Simpson and he was instrumental in opening my eyes to the nuances of statistics. In the course of analysing this data it became clear that the field of statistics contained fewer absolutes than I thought and debate seemed common as to which statistic could or should be used in certain circumstances.

Whilst I used some familiar statistical analyses, such as ANOVA and t-tests, I was also introduced to the RANOVA, an analysis which had to be completed by Adrian Simpson as it was not available through SPSS. Through understanding the use of and interpretation of this statistic I became more familiar with non-parametric statistics which was an unexpected addition to my learning.

Overall I became more familiar with the statistical package for social sciences (SPSS, 2003) during the course of analysing this data. With the help of Kinner & Gray (2004) I came

to feel less daunted by SPSS and became competent in its use. The experience of this research demystified statistics for me and I feel much more confident to apply analysis to a data set.

FINDINGS

It was disappointing not to gain a statistically significant result for attendance. I debated the use of two tailed versus one tailed t-tests; however accuracy and robustness was of greater consideration, and the decision to use two tailed tests was ultimately the more sound of the options. Although hypothesis one was not supported to the level of statistical significance, the trends in the descriptive statistics suggest further studies using implementation intentions would be both interesting and potentially helpful in relation to attendance. It was with great disappointment that I realised I could have strengthened the experimental intervention by specifically addressing the issue of attendance at telephone sessions. A lesson has been learnt about carefully considering all aspects of the subject to be studied.

It was pleasing to see that the result for intentions was significant and supported the argument to pursue the application of the theory of planned behaviour within the field of PT attendance. This was perhaps the most exciting outcome of the research; that there is so much more to know and so much potential for the application of TPB and implementation intentions in PT.

Lastly, hypothesis two concerning clinical outcomes was not upheld by the data. I had originally anticipated that the experimental intervention would take 30 minutes, however in practice the duration was approximately 10 minutes. Given this short time period it was unsurprising that there was no significant generalisation of the use of implementation intentions to PT and no effect on outcomes. This result seemed appropriate, however I would

be interested to discover the impact of implementation intentions if their use during PT was made overt at the pre-group phase.

In conclusion, whilst the main finding did not reach statistical significance there was a sense of satisfaction that the experimental intervention had potential to change attendance. I hope that future research can build upon this start.

DISSEMINATION

The presentation of this research for publication in the British Journal of Clinical Psychology has been proposed as part of the dissemination plan. This will occur, however it is possible publication might not be achieved due to the lack of statistically significant findings for the attendance data. The literature review will also be presented for publication in the British Journal of Clinical Psychology, and may stimulate further debate about PT attendance, especially where underserved or hard to reach families are concerned. To reach a multi-disciplinary audience it is suggested that posters and conference presentations are prepared. Submissions to conferences in the United Kingdom will occur during 2008. Please see Table 1 for a timetable of dissemination. Research participants will be informed of the outcome of the research by letter. This will also allow an opportunity to thank them for taking part.

Table 1. Timetable for research dissemination

Form of dissemination	**Place of dissemination**	**Date**
Submission of the literature review for publication.	British Journal of Clinical Psychology	September 2008
Submission of the research report for publication.	British Journal of Clinical Psychology	November 2008
Poster presentations at conferences.	As calls for posters are made	2008/2009

LESSONS LEARNED

The process of completing this research and writing it up has been one of constant learning and more recently my commitment to the project has been tested. The most crucial learning has come in terms of motivation. Completion of the thesis has been a personal challenge requiring all my skills in self-motivation. An awareness of my own limitations has been helpful and meant that I have occasionally relied on the motivating support of supervisors to carry on with the write up. So, whilst I can self-motivate for most of the time, there comes a point when my personal resources falter and the assistance of supportive others is helpful.

The need to be aware of the practicalities of performing research was made considerably clearer to me during this period of study. For example, it quickly became obvious that good organisational skills were required to ensure that paperwork was copied and filed correctly as soon as it came in. The value of summary sheets and careful data inputting all seem obvious in retrospect. Timing became paramount as data collection started. For example, the clustering of referrals in certain months had not been considered. This meant stretching my capacity to carry out the pre-group home visits and experimental and control procedures. I now know that successful research needs some added leeway in time scales to allow for unanticipated issues.

Lastly came an acceptance that, despite the most detailed planning, some obvious issues were not addressed in preparing the research. For example, omitting to specifically consider the telephone sessions of PT forced a realisation that sometimes being close to a subject does not necessarily mean being able to identify all the key components. As an

inexperienced researcher, I have learnt a basic lesson that detailed scrutiny of every aspect of the research at the initial stages alleviates later difficulties.

CONTINUING PROFESSIONAL DEVELOPMENT

The present study expanded my knowledge of research and, as in much learning, resulted in a greater awareness of what I do not know. An increased familiarity with statistics, and a greater sense of competence and confidence in applying them would be a priority before further research is undertaken. The current research was quantitative, yet one could have approached this subject with a more qualitative proposal in mind. Therefore, an area for my development would be to consider qualitative research projects and the application of qualitative techniques. In order to pursue further research, it is apparent that there is a need to maintain research skills, for example by close liaison with research and development services.

CONCLUSION

I have enjoyed the challenge that completing this research has presented. I consider that I have been stretched in my thinking and critical reasoning, and that my perseverance has been tested and found sufficient. It is with a great sense of satisfaction that I finish this document and can reflect that I have tackled the burning question which prompted this piece of work. I hope that I have added something unique to the literature and prompted further research in a subject I have found of interest.

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APPENDICES

APPENDIX 1) Formats

Notes for Contributors

The *British Journal of Clinical Psychology* publishes original contributions to scientific knowledge in clinical psychology. This includes descriptive comparisons, as well as studies of the assessment, aetiology and treatment of people with a wide range of psychological problems in all age groups and settings. The level of analysis of studies ranges from biological influences on individual behaviour through to studies of psychological interventions and treatments on individuals, dyads, families and groups, to investigations of the relationships between explicitly social and psychological levels of analysis.

The following types of paper are invited:

- Papers reporting original empirical investigations
- Theoretical papers, provided that these are sufficiently related to the empirical data
- Review articles which need not be exhaustive but which should give an interpretation of the state of the research in a given field and, where appropriate, identify its clinical implications
- Brief reports and comments

1. Circulation

The circulation of the Journal is worldwide. Papers are invited and encouraged from authors throughout the world.

2. Length

Papers should normally be no more than 5000 words, although the Editor retains discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length.

3. Reviewing

The journal operates a policy of anonymous peer review. Papers will normally be scrutinised and commented on by at least two independent expert referees (in addition to the Editor) although the Editor may process a paper at his or her discretion. The referees will not be aware of the identity of the author. All information about authorship (including personal acknowledgements and institutional affiliations) should be confined to the title page (and the text should be free of such clues as identifiable self-citations, e.g. 'In our earlier work...').

4. Online submission process

1) All manuscripts must be submitted online at **http://bjcp.edmgr.com**.

First-time users: Click the REGISTER button from the menu and enter in your details as instructed. On successful registration, an email will be sent informing you of your user name and password. Please keep this email for future reference and proceed to LOGIN. (You do not need to re-register if your status changes e.g. author, reviewer or editor).
Registered users: Click the LOGIN button from the menu and enter your user name and password for immediate access. Click 'Author Login'.

2) Follow the step-by-step instructions to submit your manuscript.

3) The submission must include the following as separate files:

- Title page consisting of manuscript title, authors' full names and affiliations, name and address for corresponding author - **Manuscript title page template**

- Abstract
- Full manuscript omitting authors' names and affiliations. Figures and tables can be attached separately if necessary.

4) If you require further help in submitting your manuscript, please consult the Tutorial for Authors - **Editorial Manager - Tutorial for Authors**
Authors can log on at any time to check the status of the manuscript.

5. Manuscript requirements

- Contributions must be typed in double spacing with wide margins. All sheets must be numbered.
- Tables should be typed in double spacing, each on a separate page with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript with their approximate locations indicated in the text.
- Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Captions should be listed on a separate page. The resolution of digital images must be at least 300 dpi.
- For articles containing original scientific research, a structured abstract of up to 250 words should be included with the headings: Objectives, Design, Methods, results, Conclusions. Review articles should use these headings: Purpose, Methods, Results, Conclusions:
  British Journal of Clinical Psychology - Structured Abstracts Information
- For reference citations, please use APA style. Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full.
- SI units must be used for all measurements, rounded off to practical values if appropriate, with the imperial equivalent in parentheses.
- In normal circumstances, effect size should be incorporated.
- Authors are requested to avoid the use of sexist language.
- Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations, etc. for which they do not own copyright.

For Guidelines on editorial style, please consult the *APA Publication Manual* published by the American Psychological Association, Washington DC, USA (http://www.apastyle.org).

6. Brief reports and comments

These allow publication of research studies and theoretical, critical or review comments with an essential contribution to make. They should be limited to 2000 words, including references. The abstract should not exceed 120 words and should be structured under these headings: Objective, Method, Results, Conclusions. There should be no more than one table or figure, which should only be included if it conveys information more efficiently than the text. Title, author and name and address are not included in the word limit.

7. Publication ethics

Code of Conduct - **Code of Conduct, Ethical Principles and Guidelines**
Principles of Publishing - **Principles of Publishing**

8. Supplementary data

Supplementary data too extensive for publication may be deposited with the British Library Document Supply Centre. Such material includes numerical data, computer programs, fuller details of case studies and experimental techniques.

The material should be submitted to the Editor together with the article, for simultaneous refereeing.

9. Post acceptance

PDF page proofs are sent to authors via email for correction of print but not for rewriting or the introduction of new material. Authors will be provided with a PDF file of their article prior to publication.

10. Copyright

To protect authors and journals against unauthorised reproduction of articles, The British Psychological Society requires copyright to be assigned to itself as publisher, on the express condition that authors may use their own material at any time without permission. On acceptance of a paper submitted to a journal, authors will be requested to sign an appropriate assignment of copyright form.

11. Checklist of requirements

- Abstract (100-200 words)
- Title page (include title, authors' names, affiliations, full contact details)
- Full article text (double-spaced with numbered pages and anonymised)
- References (APA style). Authors are responsible for bibliographic accuracy and must check every reference in the manuscript and proofread again in the page proofs
- Tables, figures, captions placed at the end of the article or attached as separate files

The University Of Sheffield.

Department Of Psychology.
Clinical Psychology Unit.

Doctor of Clinical Psychology (DClin Psy) Programme
Clinical supervision training and NHS research training & consultancy.

Clinical Psychology Unit
Department of Psychology
University of Sheffield
Western Bank
Sheffield S10 2TP UK

Telephone: 0114 2226570
Fax: 0114 2226610
Email: dclinpsy@sheffield.ac.uk

24 July 2007

Claire Halsey
Clinical Psychology Unit
University of Sheffield

Dear Claire

I am writing to indicate our approval of the journal(s) you have nominated for publishing work contained in your research thesis.

Literature Review: British Journal of Clinical Psychology

Research Report: British Journal of Clinical Psychology

Please ensure that you bind this letter and copies of the relevant Instructions to Authors into an appendix in your thesis.

Yours sincerely

Andrew Thompson
Director of Research Training

APPENDIX 2) Ethical Approvals

THE UNIVERSITY OF SHEFFIELD
Clinical Psychology Unit
Department of Psychology

Doctor of Clinical Psychology (DClin Psy) Programmes (Pre-registration and post-qualification)
Clinical supervision training and NHS research training and consultancy

Clinical Psychology Unit
Department of Psychology
University of Sheffield
Western Bank
Sheffield S10 2TP UK

Telephone: ++44 (0)114 22 26632
Fax: ++44 (0)114 22 26610
Email: dclinpsy@sheffield.ac.uk

Unit Director: Prof Graham Turpin (26569)
Clinical Practice Director: Ms Joyce Scaife (26574)
Assistant Director : Professor Pauline Slade (26568)
Course Administrator: Carole Gillespie (26570)

To: Research Governance Office

RESEARCH THESIS

Approval of Research Project

Trainee name CLAIRE HALSEY

University Research Supervisor .....

Title of Research Project

Random Controlled Trial of an Intervention to Increas Attendance at Parenting Group Services

I confirm that this research project has been reviewed by two independent reviewers appointed by the Clinical Psychology Unit Research Sub-committee. Any necessary amendments have been made and the project therefore receives full approval from the Clinical Psychology Course.

Signed ..... Date March 25th 2004

(University Research Supervisor)

Signed ..... Date 26/3/03

(Course Research Tutor)

North Staffordshire Local Research
Ethics Committee
Heron House
120 Grove Road
Fenton
Stoke-on-Trent
Staffordshire
ST4 4LX

NHS

2 - AUG 2004

29 July 2004

Mrs C Halsey
Consultant Clinical Psychologist
North Staffordshire Combined Healthcare
NHS Trust
2B, Westcliffe Hospital
Turnhurst Road,
Chell
Stoke on Trent
Staffs

Dear Mrs Halsey

Full title of study: Random controlled trial of an intervention to increase attendance at parenting group services
REC reference number: 04/Q2604/30

Thank you for your letter of 16 July 2004, responding to the Committee's request for further information on the above research.

The further information was considered at the meeting of the Sub-Committee of the REC held on 28 July 2004. A list of the members who were present at the meeting is attached.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation.

The favourable opinion applies to the following research site:

Site: North Staffordshire Combined Healthcare NHS Trust
Principal Investigator: Mrs C Halsey

Conditions of approval

The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document Type: Application
Version:
Dated: 14/04/2004

Date Received: 12/05/2004

Document Type: Investigator CV
Version:
Dated: 31/03/2004
Date Received: 12/05/2004

Document Type: Protocol
Version:
Dated: 13/05/2004
Date Received: 12/05/2004

Document Type: Covering Letter
Version:
Dated: 13/05/2004
Date Received: 12/05/2004

Document Type: Peer Review
Version:
Dated: 13/05/2004
Date Received: 12/05/2004

Document Type: Statistician Comments
Version:
Dated: 13/05/2004
Date Received: 12/05/2004

Document Type: Interview Schedules/Topic Guides
Version:
Dated: 13/05/2004
Date Received: 12/05/2004

Document Type: Copy of Questionnaire
Version:
Dated: 13/05/2004
Date Received: 12/05/2004

Document Type: Participant Information Sheet
Version: 2
Dated: 16/07/2004
Date Received: 22/07/2004

Document Type: Participant Consent Form
Version: 2
Dated: 16/07/2004
Date Received: 22/07/2004

Document Type: GP Letter
Version:
Dated: 16/07/2004
Date Received: 22/07/2004

Document Type: Randomization Flow Diagram
Version:
Dated: 16/07/2004
Date Received: 22/07/2004

Document Type: Children's Information Sheet
Version:
Dated: 16/07/2004
Date Received: 22/07/2004

Document Type: Children's Consent Form
Version:
Dated: 16/07/2004
Date Received: 22/07/2004

Management approval

The study may not commence until final management approval has been confirmed by the organisation hosting the research.

All researchers and research collaborators who will be participating in the research must obtain management approval from the relevant host organisation before commencing any research procedures. Where a substantive contract is not held with the host organisation, it may be necessary for an honorary contract to be issued before approval for the research can be given.

Notification of other bodies

We shall notify the research sponsor, North Staffordshire Combined Healthcare NHS Trust and the Medicines and Health-Care Products Regulatory Agency that the study has a favourable ethical opinion.

Statement of compliance *(from 1 May 2004)*

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

REC reference number: 04/Q2604/30 **Please quote this number on all correspondence**

Yours sincerely,

J E Clarke

Miss Nicola Brookspp
Chairman

Enclosures *List of names and professions of members who were present at the meeting and those who submitted written comments*
Standard approval conditions [SL-AC1 or SL-AC2]

cc Sharon Finney, R&D Office, Medical Research Unit, Thornburrow Drive, Hartshill, Stoke-on-Trent, ST4 7QB

List of Names and Professions of Members who were Present at the Meeting or who Submitted Written Comments

Vice Chairman	Dr. N. Edelstyn	Lecturer in the Department of Psychology, Keele University
	Professor J. Robinson	Nurse Member

North Staffordshire Research and Development Consortium NHS

DEPARTMENT OF RESEARCH AND DEVELOPMENT
Medical Institute
Hartshill Road
Hartshill
Stoke-on-Trent
ST4 7NY

Telephone: 01782 554334
Fax: 01782 554610

Email: darren.clement@uhns.nhs.uk
katie.roebuck@uhns.nhs.uk

Ref: NC04359/HT

5th August 2004

Mrs Claire Halsey
Consultant Clinical Psychologist
Child Speciality
Psychological Services
North Staffordshire Combined Healthcare NHS Trust
Ward 2B, Westcliffe Hospital
Turnhurst Road
Chell
Stoke on Trent
Staffs

Dear Mrs Halsey

Re: Random controlled trial of an intervention to increase attendance at parenting group services

I can confirm that the above project has been approved by the Research & Development Department. The details of the project will be entered on to the R&D database and will be included with our next submission to the National Research Register.

I note that this research project has been approved by the North Staffordshire Local Research Ethics Committee (04/Q2604/30).

If you need any further advice or guidance please do not hesitate to contact us.

Yours sincerely,

Darren Clement
R&D Manager - North Staffordshire NHS R&D Consortium

The University Of Sheffield.

The Research Office.

A Section of the Academic Division, Research Services

Mrs C Halsey
Consultant Clinical Psychologist

New Spring House
231 Glossop Road
Sheffield
S10 2GW

Telephone: +44 (0) 114 222 1448
Fax: +44 (0) 114 222 1452
Email: r.j.hudson@sheffield.ac.uk

1st October 2007

Project title: **Random controlled trial of an intervention to increase attendance at parenting group services**
6 digit URMS number: **120594**

Dear Mrs Halsey

LETTER TO CONFIRM THAT THE UNIVERSITY OF SHEFFIELD IS THE PROJECT'S RESEARCH GOVERNANCE SPONSOR

The Research Office has reviewed the following documents:

1. A University approved URMS costing record;
2. Signed, dated confirmation of scientific approval;
3. Signed, dated confirmation of ethics approval.

All the above documents are in place. Therefore, the University now **confirms** that it is the project's research governance sponsor and, as research governance sponsor, **authorises** the project to commence research activities.

You are expected to deliver the research project in accordance with the University's policies and procedures, which includes the University's Good Research Practice Standards: www.shef.ac.uk/researchoffice/gov_ethics_grp/grpstandards.html

Your Supervisor, with your support and input, is responsible for monitoring the project on an ongoing basis. Your Head of Department is responsible for independently monitoring the project as appropriate. The project may be audited during or after its lifetime by the University. The monitoring responsibilities are listed in **Annex 1**.

Yours sincerely,

Robert Sykes
Head of Research Operations Section
The University of Sheffield

cc. Supervisor: Dr Jason Davies
Course Module Leader: Dr Andrew Thompson

APPENDIX 3) Triple P

THE GROUP TRIPLE P POSITIVE PARENTING PROGRAM

GROUP TRIPLE P

Group Triple P is a manualised, evidence based intervention for parents of children with mild to severe behavioural and emotional difficulties. It requires parents to attend a specific number of individual or group sessions. The theoretical underpinnings of PT are social learning theory and the approach also draws on attachment theory, developmental and community psychology and functional analysis (Mihalopoulos *et al.*, 2007; Sanders, 1999). Triple P is delivered by Triple P Facilitators trained and accredited in provision of the service.

THE 5 KEY PRINCIPLES OF TRIPLE P:

- Ensuring a safe, engaging environment
- Creating a positive learning environment
- Using assertive discipline
- Having realistic expectations
- Taking care of yourself as a parent

17 PARENTING STRATEGIES ARE TAUGHT WITHIN TRIPLE P

Promoting positive relationships

- Brief quality time, talking to children, affection

Encouraging desirable behaviour

- Praise, positive attention, engaging activities

Teaching new skills and behaviours

- Modelling, incidental teaching, ask-say-do, behaviour charts

Managing misbehaviour

- Ground rules, directed discussion, planned ignoring, clear, calm instructions, logical consequences, quiet time, time-out

TRIPLE P SESSION CHRONOLOGY

Chronology	Individual/ group	Duration	Content
2 x pre-group assessment	Individual	1 – 1.5 hours each	The Triple P Facilitator obtains family history information and administers the pre-group assessment questionnaires.
4 x sessions	Group	2 hours each	The Triple P Facilitator teaches 17 parenting strategies designed to improve parent-child relationships and increase assertive parenting.
3 x telephone sessions	Individual	20 – 30 minutes each	Individual consultations to review homework and refine the implementation of parenting strategies.
1 x session	Group	2 hours	The Triple P Facilitator reviews progress, relapse prevention strategies are discussed and the post-group assessment completed.

Mihalopoulos, C., Sanders, M.R., Turner, K.M.T., Murphy-Brennan, M. & Carter, R. (2007). Does the Triple P-Positive Parenting Program provide value for money? *Australian and New Zealand Journal of Psychiatry, 41*, 238-246.

Sanders, M. R. (1999). Triple P – Positive Parenting Program: Towards an empirically validated multilevel parenting and family support strategy for the prevention of behaviour and emotional problems in childhood. *Clinical Child and Family Psychology Review, 2*, 71–89.

APPENDIX 4) Research information and consent forms

CLIENT INFORMATION SHEET

Study of attendance at a Positive Parenting Group

You are being invited to take part in a research study. Before you decide to take part it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and talk it over with others if you wish. Please ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Questions you might have about the study.

What is the purpose of the study?

One of the most effective ways for parents to receive support and information about parenting is in a group with other parents. In some groups we don't have very many parents turn up and we are concerned to find out why this might be and work out new ways to improve our service so more parents can come.

Why have I been chosen?

All parents who are invited to Triple P groups by our service are also being invited to take part in this study.

Do I have to take part?

It is up to you whether or not you take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive.

What will happen to me if I take part?

Being part of the study will mean you spend about an extra twenty to thirty minutes with our staff during a home visit during which we will be trying a new way of working to encourage parents to come to the Triple P group.

Your time in the study will be 8 to 12 weeks but the only difference for you will be the extra time during a single home visit.

Sometimes, because we are trying out a new way of working with people, we need to make comparisons. So some people will have the extra time used one way and others will have a different way. Which service you get will be decided as if by chance, for example like the toss of a coin. You will have a one in two chance of having the service we are studying, you will not be told which service you are receiving and the Triple P group facilitator will not know.

What do I have to do?

You will need to spend an extra twenty to thirty minutes with our staff, after this there are no restrictions on you of any sort.

What are the alternatives?

The alternative is to receive your usual, slightly shorter home visit and go to the group as planned.

What are the possible disadvantages of taking part?

The service you receive will be the same except you will spend an extra twenty to thirty minutes of your time during one visit.

What are the advantages of taking part?

We hope that all our services will help you and that the information from this study will make our services better for other parents and carers.

What if new information became available about the service?

Sometimes during a study new information becomes available about the service, we will tell you about this straight away.

What if something goes wrong?

If you wish to complain about the way this study has been conducted please do so by using the North Staffordshire Combined Healthcare NHS Trust complaints policy which is available to you by calling First Steps Psychological Service on 01782 425 883 or by calling XXXX Hospital on 01782 273 510.Your agreement to take part in this study does not affect your right to complain.

Will my taking part be kept confidential?

If you consent to take part in this study your name, address and those of your family will not be disclosed outside of our Triple P service. The information from your home visit, questionnaires and a record of your attendance at the group will have all your private details removed so no one can identify you. When you come to the group your group leaders will keep your personal information confidential.

When you come to group meetings you, and the other parents, will be asked to keep information discussed in the group confidential. This is a voluntary commitment by parents. No information about your taking part in this study will be discussed in the group.

What will happen to the results of the research study?
The results of the research will be published as a doctoral thesis, you can have a copy of the results by contacting the researcher on 425 883. You will not be identified in any report or publication.

Who is organising and funding the research?
XXXX, Consultant Clinical Psychologist is organising the research. No funding or additional payment is involved in this study.

Who has reviewed this study?
North Staffordshire Local Research Ethics Committee

If you would like and more information about this study please contact:
XXXX, Consultant Clinical Psychologist at Ward 2B, Westcliffe Hospital, Turnhurst Road, Chell, Stoke on Trent, Staffs on telephone 01782 425 883.

You may also obtain an information leaflet called Medical Research and You by contacting the North Staffordshire Research Ethics Committee at 120 Grove Road, Fenton, Stoke-on-Trent

Thank you for taking the time to read this

Client Identification Number for this trial :

CONSENT FORM

Title of Project: Study of attendance at a Positive Parenting Group

Name of Researcher :

Please initial box

1. I confirm that I have read and understand the information sheet dated ..... for the above study and have had the opportunity to ask questions. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my care or legal rights being affected. ☐

3. I understand that sections of my Triple P notes may be looked at by the researcher.
   I give my permission for the researcher to have access to my Triple P records. ☐

4. I agree to take part in the above study.

Name of Client	**Date**	**Signature**
Name of person taking consent	**Date**	**Signature**
Researcher	**Date**	**Signature**

1 copy for client; 1 for researcher; 1 to be kept with healthcare notes.

Children and Young Persons Information Sheet

This information sheet tells you about the research that we are asking you to take part in. Please read this carefully so that you understand all about the research before you decide if you want to take part in it. You might want to ask a grown up to help you read it.

What is research?

Research is finding out answers to questions that we think are important. This can be done in lots of ways. Some of these ways are by asking people questions and by watching what people do.

Why have I been chosen?

We have asked every family that has been invited to the Triple P groups if they would be happy to take part in our research.

Do I have to take part?

If you do not want to take part you don't have to. If you decide you want to take part but change your mind later on that is okay as well – just tell us or have an adult let us know if you change your mind.

How much time will it take?

It will not take you any extra time. All the research will be done by asking your parents questions.

What will I have to do?

You will not have to do anything. All the questions will be asked to your parents but they might be asked questions about you.

What are the good things about taking part?

The good things are that by finding out the answers to these questions we will hope to offer people like your parents better services in the future.

What are the bad things about taking part?

The bad things about taking part are that your parents might be talking to us about you. You will be able to hear everything they say and talk about it afterwards if you want to.

Will you talk to other people about how I have done?

We will not tell people that the information was collected from you. Your name will be kept private from everybody else.

What will happen to the results of the research?

The results of the research will be published as a doctoral thesis. The thesis is like a big report. It will not give your private details.

What if something goes wrong?

If you are not happy about something to do with this research you can contact us or ask an adult who can then tell us. To let us know if you are not happy with something contact XXXX (Clinical Psychologist) at :

Ward 2b
Westcliffe Hospital
Turnhurst Road
Stoke-On-Trent
ST6 6LA

Telephone Number: 01782 425883

Client Identification Number for this trial :

CHILDREN AND YOUNG PERSON'S CONSENT FORM

Title of Project: Study of attendance at a Positive Parenting Group

Name of Researcher :

Please initial box

5. I confirm that I have read and understand the information sheet dated ..... for the above study and have had the opportunity to ask questions. ☐

6. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my care or legal rights being affected. ☐

7. I understand that sections of my Triple P notes may be looked at by the researcher.
I give my permission for the researcher to have access to my Triple P records. ☐

8. I agree to take part in the above study.

Name of Client	Date	Signature
Name of person taking consent	Date	Signature
Researcher	Date	Signature

1 copy for client; 1 for researcher; 1 to be kept with healthcare notes.

APPENDIX 5) Measures

Group pref - am/pm/eve
Transport - yes/no
Crèche - essential/preferred/no

Triple P
Positive Parenting Program®
for every parent

First Steps Psychological Service

GROUP TRIPLE P

Assessment Booklet One

CLIENT NO.: ..... NAME: .....

DATE: ..... LOCATION OF GROUP: .....

INSTRUCTIONS: Please answer all questions on the following pages. We ask that you give us your own opinion in response to the questions. Please make sure that you fill in both sides of each page. If you have any questions regarding these forms, please contact: .....

.....*We thank you for your time and effort.*

FAMILY BACKGROUND QUESTIONNAIRE

This questionnaire is about your family. Please read and answer every question.

All information provided will be treated in strict confidence and will not be made available to any other person or agency without your written approval.

Full name .....D.O.B.....
Partners name .....D.O.B.....
Address.....
.....
.....
.....Postcode.....
Home telephone number(s).....
Mobile telephone number(s).....
Today's date ...../...../.....

YOUR FAMILY

Please provide details of the child/children whose behaviour you are concerned about

	Child 1	Child 2	Child 3
1. Child's Name			
2. Child's Sex			
3. Child's D.O.B			

4. Your relationship to this child (please tick):

	Child 1	Child 2	Child 3		Child 1	Child 2	Child 3
Mother (inc adoptive)				Father(inc adoptive)			
Step Mother				Step Father			
Foster Mother				Foster Father			

5. Your current relationship status (please tick):

Married		Separated/Divorced	
Living Together		Widow/er	
Single		Other	

6. At present who lives at home with your child (e.g. grandparents, parents, brothers or sisters).

NAME	AGE	SEX	RELATIONSHIP TO CHILD
		M/F	
		M/F	
		M/F	
		M/F	
		M/F	
		M/F	

YOUR EDUCATION AND EMPLOYMENT

7. Your highest level of education:

	You	Partner
GCSE's/O-Levels		
A-Levels		

	You	Partner
Further Education		
Degree		

8. Do you or your partner currently have work or study commitments?

	You	Partner
Yes		
No		

If yes, please specify.

You:.....

Partner:.....

YOUR HEALTH

9. In the last 6 months have either you or your partner sought professional assistance from any other services? (e.g. social worker, psychologist, counsellor).

	You	Partner
Yes		
No		

If yes, please specify.

You:.....

Partner:.....

Are you or your partner currently taking prescribed medication for your emotions?

You: YES/NO Partner: YES/NO

YOUR CHILDS HEALTH

10. Does your child have any medical or learning difficulties (e.g. sensory impairment, dyslexia, asthma)?

	Child 1	Child 2
Yes		
No		

If yes, please specify.

Child 1:.....

Child 2:.....

11. Is your child having any regular contact with another professional Service for emotional or behavioural problems?

	Child 1	Child 2
Yes		
No		

If yes, please specify.

Child 1:.....

Child 2:.....

STRENGTHS AND DIFFICULTIES QUESTIONNAIRE

For each item, please mark the box for Not true, Somewhat true or Certainly true. Please answer all items as best you can, even if you are not absolutely certain. Give your answers on the basis of your child's behaviour **over the last six months.**

	Not true	Some what true	Certainly true
Considerate of other people's feelings	☐	☐	☐
Restless, overactive, cannot stay still for long	☐	☐	☐
Often complains of headaches, stomach-aches or sickness	☐	☐	☐
Shares readily with other children (treats, toys, pencils etc.)	☐	☐	☐
Often has temper tantrums or hot tempers	☐	☐	☐
Rather solitary, tends to play alone	☐	☐	☐
Generally obedient, usually does what adults request	☐	☐	☐
Many worries, often seems worried	☐	☐	☐
Helpful if someone is hurt, upset or feeling ill	☐	☐	☐
Constantly fidgeting or squirming	☐	☐	☐
Has at least one good friend	☐	☐	☐
Often fights with other children or bullies them	☐	☐	☐
Often unhappy, down-hearted or tearful	☐	☐	☐
Generally liked by others	☐	☐	☐
Easily distracted, concentration wanders	☐	☐	☐
Nervous or clingy in new situations, easily loses confidence	☐	☐	☐
Kind to younger children	☐	☐	☐
Often lies or cheats	☐	☐	☐
Picked on or bullied by other children	☐	☐	☐
Often volunteers to help others (parents, teachers, other children)	☐	☐	☐
	___	___	___

Thinks things out before acting	☐	☐	☐
Steals from home, school or elsewhere	☐	☐	☐
Gets on better with adults than with other children	☐	☐	☐
Many fears, easily scared	☐	☐	☐
Sees tasks through to the end, good attention span	☐	☐	☐

Overall do you think that your child has difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?

No	Yes, minor difficulties	Yes, definite difficulties	Yes, severe difficulties
☐	☐	☐	☐

If you have answered 'Yes', Please answer the following questions about these difficulties:

- How long have these difficulties been present?

Less than a month	1-5 months	6-12 months	over a year
☐	☐	☐	☐

- Do these difficulties upset or distress your child?

Not at all	only a little	quite a lot	a great deal
☐	☐	☐	☐

- Do the difficulties interfere with your child's everyday life in the following areas?

	Not at all	only a little	quite a lot	a great deal
Home life	☐	☐	☐	☐
Friendships	☐	☐	☐	☐
Classroom learning	☐	☐	☐	☐
Leisure activities	☐	☐	☐	☐

- Do the difficulties put a burden on you or the family as a whole?

Not at all	only a little	quite a lot	a great deal
☐	☐	☐	☐

Note. Reproduced with permission of the author R. Goodman. Available from <http:/www.iop.kcl.ac.uk/IoP/Departments/ChildPsy/sdq/b2.stm> Copyright 2000 by King's College London

Parenting Scale

At one time or another, all children misbehave or do things that could be harmful, that are "wrong", or that parents don't like. Examples include: hitting someone, whining, throwing food, forgetting homework, not picking up toys, lying, having a tantrum, refusing to go to bed, wanting a cookie before dinner, running into the street, arguing back, coming home late.

Parents have many different ways or styles of dealing with these types of problems. Below are items that describe some styles of parenting. For each item, circle the number that best describes your style of parenting during the past 2 months with your child.

Sample item

At meal time...

I let my child decide how much to eat	1	2	3	4	5	6	7	I decide how much my child eats

1. When my child misbehaves...

I do something right away	1	2	3	4	5	6	7	I do something about it later

2. Before I do something about a problem...

I give my child several reminders or warnings	1	2	3	4	5	6	7	I use only one reminder or warning

3. When I'm upset or under stress...

I am picky and on my child's back	1	2	3	4	5	6	7	I am no more picky than usual.

4. When I tell my child not to do something...

I say very little	1	2	3	4	5	6	7	I say a lot

5. When my child pesters me...

I ignore the pestering	1	2	3	4	5	6	7	I can't ignore the pestering

6. When my child misbehaves...

I usually get into a long argument with my child	1	2	3	4	5	6	7	I don't get into an argument.

7. I threaten to do things that...

I am sure I can carry out.	1	2	3	4	5	6	7	I know I won't actually do.

8 I am the kind of parent that...

Sets limits on what my child is allowed to do	1	2	3	4	5	6	7	Lets my child do whatever he or she wants.

9. When my child misbehaves...

I give my child a long lecture	1	2	3	4	5	6	7	I keep my talks short and to the point.

10. When my child misbehaves...

I raise my voice or yell	1	2	3	4	5	6	7	I speak to my child calmly

11. If saying no doesn't' work right away...

I take some other kind of action	1	2	3	4	5	6	7	I keep talking and trying to get through to my child.

12.When I want my child to stop doing something...

I firmly tell my child to stop	1	2	3	4	5	6	7	I coax or beg my child to stop.

13. When my child is out of sight...

I often don't know what my child is doing	1	2	3	4	5	6	7	I always have a good idea of what my child is doing.

14. After there's been a problem with my child...

I often hold a grudge	1	2	3	4	5	6	7	Things get back to normal quickly.

15. When we're not at home...

I handle my child the way I do at home	1	2	3	4	5	6	7	I let my child get away with a lot more.

16. When my child does something I don't like...

I do something about it every time it happens	1	2	3	4	5	6	7	I often let it go.

17. When there's a problem with my child...

Things build up and I do things I don't mean to do.	1	2	3	4	5	6	7	Things don't get out of hand.

18. When my child misbehaves, I spank, slap, grab, or hit my child...

Never or rarely	1	2	3	4	5	6	7	Most of the time.

19.When my child doesn't do what I ask...

I often let it go or end up doing it myself	1	2	3	4	5	6	7	I take some other action

20. When I give a fair threat or warning...

I often don't carry it out	1	2	3	4	5	6	7	I always do what I said

21. If saying "No" doesn't work...

I take some other kind of action	1	2	3	4	5	6	7	I offer my child something nice so he/she will behave

22. When my child misbehaves...

I handle it without getting upset	1	2	3	4	5	6	7	I get so frustrated or angry that my child can see I'm upset

23. When my child misbehaves...

I make my child tell me why he/she did it	1	2	3	4	5	6	7	I say "No" or take some other action

24. If my child misbehaves and then acts sorry...

I handle the problem like I usually would	1	2	3	4	5	6	7	I let it go at the time

25. When my child misbehaves...

I rarely use bad language or curse	1	2	3	4	5	6	7	I almost always use bad language.

26. When I say my child can't do something...

I let my child do it anyway	1	2	3	4	5	6	7	I stick to what I said.

27. When I have to handle a problem...

I tell my child I am sorry about it.	1	2	3	4	5	6	7	I don't say I am sorry.

28. When my child does something I don't like, I insult my child, say mean things, or call my child names...

Never or rarely	1	2	3	4	5	6	7	Most of the time

29. If my child talks back or complains when I handle a problem...

I ignore the complaining and stick to what I said	1	2	3	4	5	6	7	I give my child a talk about not complaining

30. If my child gets upset when I say "No"...

I back down and give in to my child	1	2	3	4	5	6	7	I stick to what I said

Note. From "The Parenting Scale: A Measure of Dysfunctional Parenting in Discipline Situations, " by D.S. Arnold, S.G. O'Leary, L.S. Wolff and M.M. Acker, 1993, *Psychological Assessment*, 5, p. 140. Copyright 1993 by the American Psychological Association, Inc. Adapted with permission.

Being a Parent Scale

On this questionnaire are 16 items relating to your feelings about being a parent. Please read each item carefully and rate whether you feel it applies to you, by circling a number from 1 (strongly agree) to 6 (strongly disagree) on the scale.

The rating scale is as follows:

1 Strongly agree

2 Agree

3 Mildly agree

4 Mildly disagree

5 Disagree

6 Strongly disagree

1	The problems of taking care of a child are easy to solve once you know how your actions affect your child	1	2	3	4	5	6
2	Even though being a parent could be rewarding, I am frustrated now while my child is at his/her present age.	1	2	3	4	5	6
3	I go to bed the same way I wake up in the morning, feeling I have not accomplished a whole lot.	1	2	3	4	5	6
4	I do not know why it, is but sometimes when I'm supposed to be in control, I feel more like the one being manipulated.	1	2	3	4	5	6
5	My mother/father was better prepared to be a good mother/father than I am.	1	2	3	4	5	6
6	I would make a fine model for a new mother/father to follow in order to learn what he/she would need to know in order to be a good parent.	1	2	3	4	5	6
7	Being a parent is manageable and any problems are easily solved.	1	2	3	4	5	6
8	A difficult problem in being a parent is not knowing if you're doing a good job or a bad one.	1	2	3	4	5	6
9	Sometimes I feel like I'm not getting anything done.	1	2	3	4	5	6
10	I meet my own personal expectations for expertise in caring for my child.	1	2	3	4	5	6
11	If anyone can find the answer to what is troubling my child, I am the one.	1	2	3	4	5	6
12	My talents and interests are in other areas, not in being a parent.	1	2	3	4	5	6
13	Considering how long I've been a mother/father, I feel thoroughly familiar with this role	1	2	3	4	5	6
14	If being a mother/father were only more interesting, I would be motivated to do a better job as a parent.	1	2	3	4	5	6
15	I honestly believe that I have all the skills necessary to be a good mother/father to my child.	1	2	3	4	5	6
16	Being a parent makes me tense and anxious	1	2	3	4	5	6

Note. From "A Measure of Parenting Satisfaction and Efficacy," by C. Johnston and E.J. Mash, 1989, *Journal of Clinical Child Psychology,* 18, p. 171. Copyright 1989 by Lawrence Erlbaum Associates, Inc. Adapted with permission.

Parent Problem Checklist

Below is a list of issues over child-rearing which parents often discuss. Please (I) circle either "Yes" or "No" to indicate whether or not each issue has been a problem for you and your partner over the last 4 weeks, and (2) circle the number describing the extent to which each issue has been a problem for you and your partner in the last 4 weeks.

	1.Has this been a problem for you and your partner?		2.To what extent has this been a problem for you and your partner?						
			Not at all	A little		Some what	Much		Very Much
1	Disagreement over household rules (e.g. bedtime, play areas)	Yes No	1	2	3	4	5	6	7
2	Disagreement over type of discipline (e.g. smacking children)	Yes No	1	2	3	4	5	6	7
3	Disagreement over who should discipline the children	Yes No	1	2	3	4	5	6	7
4	Fighting in front of the children	Yes No	1	2	3	4	5	6	7
5	Inconsistency between parents	Yes No	1	2	3	4	5	6	7
6	Children preventing parents from being alone	Yes No	1	2	3	4	5	6	7
7	Disagreement about sharing childcare workloads.	Yes No	1	2	3	4	5	6	7
8	Inability to resolve disagreements about childcare.	Yes No	1	2	3	4	5	6	7
9	Discussions about childcare turning into arguments.	Yes No	1	2	3	4	5	6	7
10	Parents undermining each other, (i.e. not backing each other up)	Yes No	1	2	3	4	5	6	7
11	Parents favouring one child over another.	Yes No	1	2	3	4	5	6	7
12	Lack of discussions between parents about child	Yes No	1	2	3	4	5	6	7
13	Lack of discussion about anything	Yes No	1	2	3	4	5	6	7
14	One Parent 'soft', one parent 'tough' with children	Yes No	1	2	3	4	5	6	7
15	Children behave worse with one parent than the other.	Yes No	1	2	3	4	5	6	7
16	Disagreement over what is 'naughty' behaviour	Yes No	1	2	3	4	5	6	7

Note. From *Behavioural Family Intervention* (p.80), by M.R. Sanders and M.R. Dadds, 1993, Needham Heights, MA: Allyn and Bacon. Copyright 1993 by Allyn and Bacon. Adapted with permission.

Depression Anxiety Stress Scale

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me a considerable degree, or a good part of the time
3 Applied to me very much, or most of the time

1	I found myself getting upset by quite trivial things.	0	1	2	3
2	I was aware of dryness of my mouth	0	1	2	3
3	I couldn't seem to experience any positive feeling at all	0	1	2	3
4	I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness) in absence of physical exertion.	0	1	2	3
5	I just couldn't seem to get going.	0	1	2	3
6	I tended to over-react to situations	0	1	2	3
7	I had feelings of shakiness(e.g. legs going to give way)	0	1	2	3
8	I found it difficult to relax	0	1	2	3
9	I found myself in situations which made me so anxious I was most relieved when they ended	0	1	2	3
10	I felt that I had nothing to look forward to.	0	1	2	3
11	I found myself getting upset rather easily	0	1	2	3
12	I felt that I was using a lot of nervous energy	0	1	2	3
13	I felt sad and depressed	0	1	2	3
14	I found myself getting impatient when I was delayed in any way (e.g. lifts, traffic lights, being kept waiting).	0	1	2	3
15	I had a feeling of faintness	0	1	2	3
16	I felt that I had lost interest in just about everything	0	1	2	3
17	I felt I wasn't worth much as a person	0	1	2	3
18	I felt that I was rather touchy	0	1	2	3
19	I perspired noticeably (e.g. hands sweaty) in the absence of high temperatures	0	1	2	3
20	I felt scared without good reason	0	1	2	3
21	I felt that life wasn't worthwhile	0	1	2	3
22	I found it hard to wind down	0	1	2	3
23	I had difficulty in swallowing	0	1	2	3
24	I couldn't seem to get any enjoyment out of the things I did.	0	1	2	3
25	I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0	1	2	3
26	I felt down-hearted and blue	0	1	2	3
27	I found that I was irritable	0	1	2	3

Reminder of rating scale:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me a considerable degree, or a good part of the time
3 Applied to me very much, or most of the time

28	I felt I was close to panic.	0	1	2	3
29	I found it hard to calm down after something upset me.	0	1	2	3
30	I feared that I would be "thrown" by some trivial but unfamiliar task	0	1	2	3
31	I was unable to become enthusiastic about anything.	0	1	2	3
32	I found it difficult to tolerate interruptions to what I was doing	0	1	2	3
33	I was in a state of nervous tension	0	1	2	3
34	I felt I was pretty worthless	0	1	2	3
35	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
36	I felt terrified	0	1	2	3
37	I could see nothing in the future to be hopeful about.	0	1	2	3
38	I felt that life was meaningless	0	1	2	3
39	I found myself getting agitated	0	1	2	3
40	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
41	I experienced trembling (e.g. in the hands)	0	1	2	3
42	I found it difficult to work up the initiative to do things	0	1	2	3

Confidence and Motivation to Attend Questionnaire Code No:

PRIVATE AND CONFIDENTIAL

Please complete the following questions by circling the answer of your choice.

For example: If you thought that attending the group you've been given would be fairly unimportant, you would circle the number for fairly unimportant.

	Very	*Fairly*	*Unsure*	*Fairly*	*Very*	
...Important	**1**	**2**	**3**	**4**	**5**	**Unimportant**

Please continue by circling the answer of your choice

I think that attending the group I've been given would be.....

	Very	*Fairly*	*Unsure*	*Fairly*	*Very*	
...Helpful	**1**	**2**	**3**	**4**	**5**	**Unhelpful**
...Easy	**1**	**2**	**3**	**4**	**5**	**Difficult**
...Useful	**1**	**2**	**3**	**4**	**5**	**Useless**
...Worthwhile	**1**	**2**	**3**	**4**	**5**	**Pointless**

Attending my group would make me see myself as...

	Very	*Fairly*	*Unsure*	*Fairly*	*Very*	
...Strong	**1**	**2**	**3**	**4**	**5**	**Weak**
...Wise	**1**	**2**	**3**	**4**	**5**	**Foolish**
...Mature	**1**	**2**	**3**	**4**	**5**	**Immature**

Attending my group would make me feel...

	Strongly *agree*	*Agree*	*Unsure*	*Disagree*	*Strongly disagree*
...Relieved	**1**	**2**	**3**	**4**	**5**
...Upset	**1**	**2**	**3**	**4**	**5**
...Supported	**1**	**2**	**3**	**4**	**5**
...Ashamed	**1**	**2**	**3**	**4**	**5**
...Reassured	**1**	**2**	**3**	**4**	**5**
...Embarrassed	**1**	**2**	**3**	**4**	**5**
...Exposed	**1**	**2**	**3**	**4**	**5**

I intend to come to the group I've been given

1	**2**	**3**	**4**	**5**
Strongly agree	*Agree*	*Unsure*	*Disagree*	*Strongly disagree*

People who are important to me think I should attend the group I've been given

1	2	3	4	5
Strongly agree	*Agree*	*Unsure*	*Disagree*	*Strongly disagree*

How confident are you that you will be able to attend the group you've been given?

1	2	3	4	5
Very confident	*Confident*	*Unsure*	*Unconfident*	*Very unconfident*

I will attend the group I've been given

1	2	3	4	5
Strongly agree	*Agree*	*Unsure*	*Disagree*	*Strongly disagree*

I am certain I can attend the group I've been given

1	2	3	4	5
Strongly agree	*Agree*	*Unsure*	*Disagree*	*Strongly disagree*

If I <u>did not</u> attend the group I've been given I would....

	Strongly agree	*Agree*	*Unsure*	*Disagree*	*Strongly disagree*
...feel guilty	**1**	**2**	**3**	**4**	**5**
...regret it	**1**	**2**	**3**	**4**	**5**

Thank you for completing this questionnaire. All the information obtained will be **<u>strictly confidential</u>** and will in no way affect the service you will receive.

POST GROUP ASSESSMENT

All measures used at post-test are identical to the pre-test questionnaires with the exception of the Strengths and Difficulties Questionnaire (SDQ). At post-test a post-intervention version of the SDQ is used. In addition the Confidence and Motivation to Attend Questionnaire is excluded at post-test as it is only applicable prior to the intervention. As a consequence the only measure included here is the post-test SDQ.

STRENGTHS AND DIFFICULTIES QUESTIONNAIRE

For each item, please mark the box for Not true, Somewhat true or Certainly true. Please answer all items as best you can, even if you are not absolutely certain. Give your answers on the basis of your child's behaviour **over the last month.**

	Not true	Some what true	Certainly true
Considerate of other people's feelings	☐	☐	☐
Restless, overactive, cannot stay still for long	☐	☐	☐
Often complains of headaches, stomach-aches or sickness	☐	☐	☐
Shares readily with other children (treats, toys, pencils etc.)	☐	☐	☐
Often has temper tantrums or hot tempers	☐	☐	☐
Rather solitary, tends to play alone	☐	☐	☐
Generally obedient, usually does what adults request	☐	☐	☐
Many worries, often seems worried	☐	☐	☐
Helpful if someone is hurt, upset or feeling ill	☐	☐	☐
Constantly fidgeting or squirming	☐	☐	☐
Has at least one good friend	☐	☐	☐
Often fights with other children or bullies them	☐	☐	☐
Often unhappy, down-hearted or tearful	☐	☐	☐
Generally liked by others	☐	☐	☐
Easily distracted, concentration wanders	☐	☐	☐
Nervous or clingy in new situations, easily loses confidence	☐	☐	☐
Kind to younger children	☐	☐	☐
Often lies or cheats	☐	☐	☐
Picked on or bullied by other children	☐	☐	☐
Often volunteers to help others (parents, teachers, other children)	☐	☐	☐
	___	___	___

Thinks things out before acting	☐	☐	☐
Steals from home, school or elsewhere	☐	☐	☐
Gets on better with adults than with other children	☐	☐	☐
Many fears, easily scared	☐	☐	☐
Sees tasks through to the end, good attention span	☐	☐	☐

Since coming to the group, are your child's problems:

Much worse	A bit worse	About The same	A bit better	Much better
☐	☐	☐	☐	☐

Overall do you think that your child has difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?

No	Yes, minor difficulties	Yes, definite difficulties	Yes, severe difficulties
☐	☐	☐	☐

If you have answered 'Yes', Please answer the following questions about these difficulties:

- How long have these difficulties been present?

Less than a month	1-5 months	6-12 months	over a year
☐	☐	☐	☐

- Do these difficulties upset or distress your child?

Not at all	only a little	quite a lot	a great deal
☐	☐	☐	☐

- Do the difficulties interfere with your child's everyday life in the following areas?

	Not at all	only a little	quite a lot	a great deal
Home life	☐	☐	☐	☐
Friendships	☐	☐	☐	☐
Classroom learning	☐	☐	☐	☐
Leisure activities	☐	☐	☐	☐

- Do the difficulties put a burden on you or the family as a whole?

Not at all	only a little	quite a lot	a great deal
☐	☐	☐	☐

APPENDIX 6) Barriers to attendance scripted intervention

BARRIERS TO ATTENDANCE SCRIPTED INTERVENTION

The following scripted intervention seeks to identify and solve barriers to attendance by facilitating parents' access to their own problem solving skills, personal resources and by developing implementation intentions.

The intervention focuses on three types of barrier to attendance:

- Practical difficulties, such as child care problems, illness, transport etc.
- Personal anxieties, such as concerns about being judged, social anxiety and the influence of others.
- Concerns about the group facilitator or treatment modality.

Various strategies are used to elicit from parents their possible barriers to attendance and corresponding solutions and implementation intentions including:

- Accessing their own past experience.
- Accessing others past experience.
- Accessing the internalised advice of known and trusted others.

Solutions generated can include:
Practical access to support and information such as child-care.
Challenges to negative automatic thoughts and practicing alternative thoughts.
Challenges to negative views of the service modality or perceptions of the group facilitator.

The intervention ends with the development of implementation intentions to solve the specified barriers to attendance.

BARRIERS TO ATTENDANCE SCRIPTED INTERVENTION

This scripted intervention should follow completion of the Motivation and Confidence Questionnaire and after consent to participate in the research project and allocation to the experimental group has occurred according to the randomisation procedure.

Introduction to be delivered by the Clinical Psychologist:

"Thank you for completing the questionnaire about coming to the Triple P group. The final part of our meeting today is about things that can make it difficult for people to come to the group.

What we've found is that even when parents are really keen to come to group sessions there can be things that make it difficult to come each week. These could be things like child-care or concerns about what the group might be like.

I'd like to spend some time now talking about some of the things which might make it difficult to come and imagining some ways around them. Is that okay with you?

If the parent says "No" ask if they'd rather do this at another time, or not do it at all. If they don't want to do it at all then close the session and remind the parent you'll see them at the group. If they want to carry on at a later date make a further appointment prior to the group commencing.

If the parent wants to proceed start the intervention as follows:

"First of all, it would be helpful to know some things you think might make it difficult for you to come to the group?"

Encourage the parent to state something that might hold them back.

If a reason is generated then summarise and paraphrase back to the parent, then encourage the parent to generate a solution and implementation intention to resolve the barrier (see page 3 and 4).

Once a solution is generated and an implementation intention recorded move on to prompt for a further example.

PROMPTS TO GENERATE BARRIERS:

If the parent is unable to come up with several ideas prompt as follows:

- **"Perhaps you could think back to a time in the past when you've had something planned but couldn't go in the end, maybe a meeting at school or a trip out?"**

If the parent describes an example prompt further with:

"What were the reasons you didn't go on that occasion?"

- **"It can be difficult to guess what might make it difficult to get to the group. Here are some things which other parents have found to be a problem".**

1) **"Everyday issues can be a problem. For example having difficulty travelling to the group, having child care problems or a children being unwell."**

Pause and ask if this might apply and in what way?
Give the parent time for more ideas to follow before you move on to the next prompt.

2) **"Worries can get in the way, some parents think that they are the only one having difficulties with a child, that they will be judged by the other parents in the group or that their own friends and relatives will not be supportive."**

Pause and ask if this might apply and in what way?
Give the parent time for more ideas to follow before you move on to the next prompt

3) **"Lastly some parents wonder if they'll get on with the group facilitator or whether this sort of group will suit them.**

Pause and ask if this might apply and in what way?
Give the parent time for more ideas to follow before you move on to examples.

ELICITING SOLUTIONS AND IMPLEMENTATION INTENTIONS

To elicit achievable solutions and implementation intentions for each example from the parent introduce the subject as follows:

"What we've found is that it is very useful to plan in advance how you might tackle problems that make it difficult to get to the group.
It can be helpful to think about ....

<u>Who</u> could help you solve the problem ?
This could be yourself, a friend or relative or a worker.

<u>How</u> they could help?
For example with practical help, by giving you information or listening to you.

<u>What</u> will you do to overcome the barrier to attendance?
Let's think about each example using those three questions."

If prompts are needed these could include:

"Has this problem ever happened to you in the past? If so how did you find a way around it then?"

"Do you know anyone else in your family or a friend who's had to overcome anything like this, how did they handle it?"

"If you asked someone you trust, like a best friend or parent, what would they advise you to do?"

It is important to ensure the parent has at least one implementation intention addressing each of the areas they've identified in the examples.

If there are any omissions go back to the three examples and present them as "What if" scenarios.

Introduce the examples as follows:

"Here are some examples to give you ideas about what could happen …

Example for practical problems:
"On the morning of the group your child is unwell and can't go to school which means you'll need to stay home and miss the group"

Prompt the parent as follows:
"Who might help you with this? Yourself or someone else?
What might be done?
What will you do?"

Example for worries about how you'll feel in the group:
"The day before the group you imagine walking into the group and seeing the other parents sitting around. You begin to wonder if you can face going to the group even though you think it will help"

Prompt the parent as follows:
Who might help you with this? Yourself or someone else?
What might be done?
What will you do?"

Example for concerns about whether they'll like the group leader or if the group service will suit them:
"You are thinking about the group and remembering all the things you've tried already to sort things out with your child. You wonder if you'll go to the group as you don't think it'll come up with anything new."

Prompt the parent as follows:
Who might help you with this? Yourself or someone else?
What might be done?
What will you do?"

If the parent is unable to come up with solutions and implementation intentions by the end of the interview suggest, in the event of a barrier to attendance occurring, the parent calls you to seek assistance, rearrange attendance at the group or cancel. Then provide your name and contact details in writing.

Please thank the parent and inform the parent that, as a reminder, a personalised fridge magnet or wallet sized prompt card will be sent out within three working days detailing the solutions they have found to their main barriers to attendance.

This ends the barriers to attendance scripted intervention.

APPENDIX 7) Description of the naturalistic observation task

THE NATURALISTIC OBSERVATION TASK

"The fourth component of assessment in Triple P is direct observation of parent-child interaction. Direct observation is used to determine the relationship between child problem behaviour and parents' interactional style and specific parenting behaviours. The main goals for conducting a formal observation of parent-child interaction are as follows:

- To assess the form, frequency, duration and intensity of the identified problem behaviour/s. This includes confirming that the problem behaviour occurs in a manner that is consistent with parental reports of the problem. It also enables the practitioner to observe the age-appropriateness of the behaviour.
- To identify the immediate antecedents and consequences of the problem behaviour/s. Exploration of the cues or contexts that either trigger the problem behaviour or are associated with the behaviour being absent provide clues to the role of various interpersonal and task characteristics that maintain the problem and can subsequently be changed through intervention. Similarly, identifying the immediate outcomes or consequences that follow the problem behaviour enables the practitioner to assess the function of the behaviour and its motivational context.
- To assess the broader ecological context of the problem behaviour/s (e.g. the physical environment, family routines and activities, tasks, noise level)."

Sanders, R.W., Markie-Dadds, C. & Turner, K.M.T (2004). *Practitioner's Manual for Standard Triple P. The University of Queensland.* Brisbane: The Australian Academic Press, p49.

APPENDIX 8) Letter to participants

LETTER TO CONTROL PARTICIPANTS

North Staffordshire Combined Healthcare NHS

NHS Trust

First Steps Psychological Service,
First Steps, Roundwell Street, Tunstall,
Stoke-on-Trent, ST6 5JJ
Tel: 01782 425480/425883 **Fax:** 01782 425879
www.firststepsstoke.co.uk

Our Ref:

21 April 2008

Clients Name
Address 1
Address 2
Address 3

Dear First Name,

Further to our conversation, I am writing to inform you of the dates and times for the next Positive Parenting group. It will be held at Location. They are:

00/00/00	00:00 to 00:00	Session 1
00/00/00	00:00 to 00:00	Session 2
00/00/00	00:00 to 00:00	Session 3
00/00/00	00:00 to 00:00	Session 4
00/00/00	time to be arranged	Session 5
00/00/00	time to be arranged	Session 6
00/00/00	time to be arranged	Session 7
00/00/00	00:00 to 00:00	Session 8

Sessions 5, 6, and 7 are shorter sessions and will be carried out over the phone. Refreshments will be supplied during the group. Please arrive on time as there is a lot to be covered in each session.

I am looking forward to seeing you on 00/00/00, a crèche place for your child has been booked and a taxi is available to collect you from home and return you there after each group session. If you have any queries in the meantime please call me on the number above.

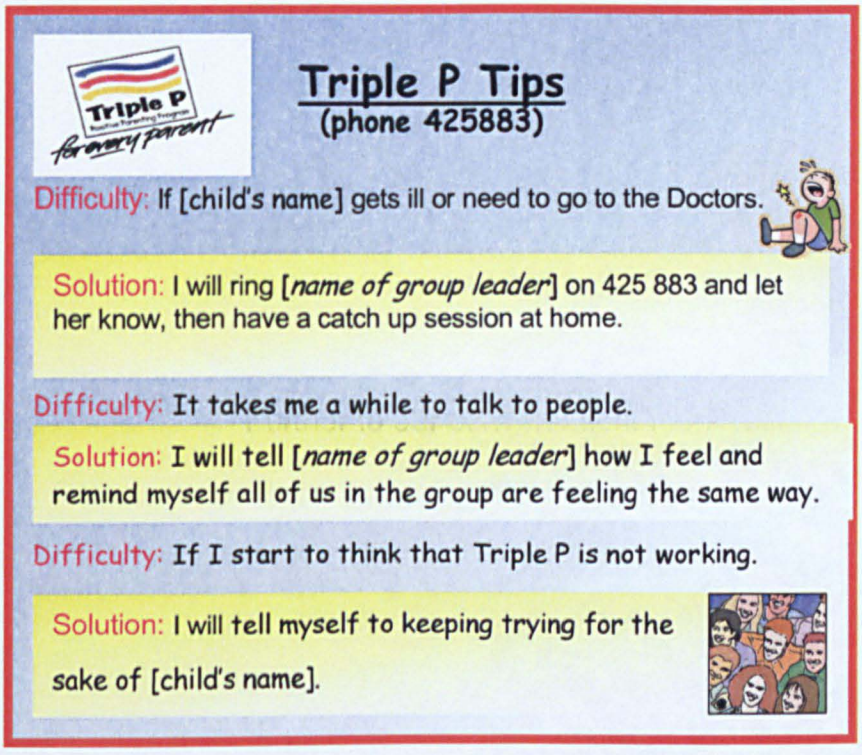
Yours sincerely,

ASSIGNED CLINICIAN
TITLE

FICTIONAL EXAMPLE OF AN

IMPLEMENTATION INTENTIONS FRIDGE MAGNET

Experimental participants receive the same letter as controls (see page 156) with the addition of their implementation intentions as per the fridge magnet detailed below.



APPENDIX 9) Sample Attendance Form

TRIPLE P GROUP ATTENDANCE RECORD
Group leader please fill this out at each session and fax to researcher on 425 879

Venue of the Triple P group: .....
Group Facilitators Name(s): .....
Date of first session: .....

Parents Name	Research Code	Session 1	Session 2	Session 3	Session 4	phone Session 5	phone Session 6	phone Session 7	Session 8
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									

Code
Attended - ✓
Did not attend - DNA
Cancelled - CANC
Deferred - D
Top up session delivered - T

APPENDIX 10) Descriptive Statistics: Skewness

DESCRIPTIVE STATISTICS – SKEWNESS

Condition		Skewness		
		Statistic	Std. Error	Z score
CONTROL	Attendance	-.293	.378	-0.78
	SDQ_PRE_TOTAL	.702	.388	1.81
	SDQ_POST_TOTAL	.934	.564	1.66
	SDQ_PRE_EMOTIONAL	.611	.388	1.57
	SDQ_POST_EMOTIONAL	-.126	.564	-0.22
	SDQ_PRE_CONDUCT	4.580	.388	11.80 *
	SDQ_POST_CONDUCT	1.756	.564	3.11 *
	SDQ_PRE_HYPER	-.528	.388	1.36
	SDQ_POST_HYPER	.232	.564	0.41
	SDQ_PRE_PEER	.495	.388	1.28
	SDQ_POST_PEER	.558	.564	0.99
	SDQ_PRE_PRO	-.682	.388	-1.76
	SDQ_POST_PRO	.012	.564	0.02
	SDQ_PRE_IMPACT	.701	.421	1.67
	SDQ_POST_IMPACT	1.004	.687	1.46
	PS_PRE_LAX	-.026	.378	-0.07
	PS_POST_LAX	1.135	.550	2.06
	PS_PRE_OVER	.087	.378	0.23
	PS_POST_OVER	.094	.550	0.17
	PS_PRE_VERB	-.186	.378	-0.49
	PS_POST_VERB	.330	.550	0.6
	PS_PRE_TOTAL	.020	.378	0.05
	PS_POST_TOTAL	.614	.550	1.12
	BPS_PRE_EFF	-.538	.378	1.42
	BPS_POST_EFF	-.738	.550	1.34
	BPS_PRE_SAT	.678	.378	1.79
	BPS_POST_SAT	.151	.550	0.27
	BPS_PRE_TOTAL	.315	.378	0.83
	BPS_POST_TOTAL	-.214	.550	0.39
	PPC_PRE	.071	.456	0.16
	PPC_POST	.180	.661	0.27
	DASS_PRE_DEP	1.121	.383	2.93
	DASS_POST_DEP	2.708	.564	4.80 *
	DASS_PRE_ANX	1.847	.383	4.82 *
	DASS_POST_ANX	2.106	.564	3.73 *
	DASS_PRE_STR	.396	.383	1.03
	DASS_POST_STR	.645	.564	1.14
	DASS_PRE_TOT	1.144	.383	2.99
	DASS_POST_TOT	1.622	.564	2.88
	F1_POS_CON	.978	.398	2.46
	F2_NEG_AFF_CON	.691	.398	1.74
	F3_SELF_PERC	1.184	.398	2.97
	SN	1.002	.398	2.52
	PB	.676	.398	1.69
	INT	1.012	.398	2.54
	Valid N (listwise)			

DESCRIPTIVE STATISTICS – SKEWNESS (CON'T)

EXPERIMENTAL	Attendance	-1.007	.378	-2.66
	SDQ_PRE_TOTAL	.577	.383	1.51
	SDQ_POST_TOTAL	.523	.491	1.07
	SDQ_PRE_EMOTIONAL	.539	.383	1.41
	SDQ_POST_EMOTIONAL	.383	.491	0.78
	SDQ_PRE_CONDUCT	-.039	.383	-0.10
	SDQ_POST_CONDUCT	-.137	.491	-0.28
	SDQ_PRE_HYPER	-.773	.383	-2.02
	SDQ_POST_HYPER	-.251	.491	-0.51
	SDQ_PRE_PEER	.421	.383	1.09
	SDQ_POST_PEER	1.092	.491	2.22
	SDQ_PRE_PRO	-.627	.383	-1.64
	SDQ_POST_PRO	-.447	.491	-0.91
	SDQ_PRE_IMPACT	.718	.409	1.76
	SDQ_POST_IMPACT	1.291	.536	2.41
	PS_PRE_LAX	.605	.383	1.58
	PS_POST_LAX	.518	.491	1.05
	PS_PRE_OVER	-.186	.383	-0.49
	PS_POST_OVER	.694	.491	1.41
	PS_PRE_VERB	.171	.383	0.45
	PS_POST_VERB	-.248	.491	-0.51
	PS_PRE_TOTAL	-.276	.388	-0.71
	PS_POST_TOTAL	.178	.501	0.36
	BPS_PRE_EFF	-.068	.383	-0.17
	BPS_POST_EFF	-.930	.501	-1.86
	BPS_PRE_SAT	.031	.383	0.08
	BPS_POST_SAT	.263	.491	0.54
	BPS_PRE_TOTAL	.023	.383	0.06
	BPS_POST_TOTAL	.012	.501	0.02
	PPC_PRE	.000	.501	0
	PPC_POST	.746	.661	1.13
	DASS_PRE_DEP	.282	.388	0.73
	DASS_POST_DEP	1.283	.491	2.61
	DASS_PRE_ANX	1.313	.388	3.38 x
	DASS_POST_ANX	1.258	.491	2.56
	DASS_PRE_STR	-.011	.388	0.03
	DASS_POST_STR	.354	.491	0.72
	DASS_PRE_TOT	.384	.388	0.99
	DASS_POST_TOT	.835	.491	1.70
	F1_POS_CON	1.465	.388	3.78 x
	F2_NEG_AFF_CON	.473	.388	1.22
	F3_SELF_PERC	.894	.388	2.30
	SN	1.045	.388	2.69
	PB	.368	.388	0.95
	INT	2.413	.388	6.22 x
	Valid N (listwise)			

APPENDIX 11) Randomisation check: control and experimental participants

RANDOMISATION CHECK: CONTROL AND EXPERIMENTAL PARTICIPANTS

Comparison of pre-test means (SD) for control and experimental group participants on all pre-group questionnaires using two tailed independent samples t-tests, n=78

Dependent variable	**Control Mean (SD)**	**Experimental Mean**	**Significance**
SDQ Total	20.51 (6.991)	19.11 (5.26)	p=.327
SDQ Emotional well-being	3.7838 (2.54)	2.8158 (1.97)	p=.069
SDQ Conduct	5.81 (4.465)	5.18 (2.116)	p=.438
SDQ Hyperactivity	7.76 (2.14)	7.34 (2.592)	p=.453
SDQ Peer relationships	3.38 (2.215)	3.76 (2.174)	p=.450
SDQ Pro-social behaviour	6.24 (2.51)	6.61 (2.112)	p=.501
SDQ Impact on family life	2.74 (2.25)	2.18 (1.991)	p=.295
PS Total	3.6426 (.7819)	3.5184 (.8802)	p=.517
PS Laxness	3.5441 (1.268)	3.4087 (1.5067)	p=.671
PS Over-reactivity	3.4785 (1.0561)	3.5184 (1.1834)	p=.876
PS Verbosity	4.3744 (1.0005)	3.9453 (1.0016)	p=.064
BPS Total	53.92 (13.354)	53.95 (9.792)	p=.993
BPS Satisfaction	27.9 (7.542)	27.13 (6.117)	p=.627
BPS Efficacy	25.87 (7.255)	26.76 (6.627)	p=.575
PPC	8.04 (3.747)	8.00 (3.633)	p=.972
DASS Total	36.5 (29.286)	48.84 (33.133)	p=.092
DASS Depression subscale	12.34 (12.106)	17.41(13.594)	p=.093
DASS Anxiety subscale	8.16 (9.252)	10.38 (9.708)	p=.314
DASS Stress subscale	15.74 (9.929)	21.08 (12.846)	p=.048
CMQ F1 Positive Consequences	12.714 (4.00)	11.378 (3.80)	P=.151
CMQ F2 Negative Affective Conseq's	10.085 (5.095)	9.054 (3.674)	P=.326
CMQ F3 Self Perception	6.114 (2.348)	4.811 (1.997)	P=.013
CMQ SN Subjective norms	2.00 (.907)	2.054 (.970)	P=.808
CMQ PB Perceived behavioural control	6.00 (1.955)	5.486 (1.924)	P=.265
CMQ I Intention	2.657 (.9056)	2.459 (.869)	P=.348

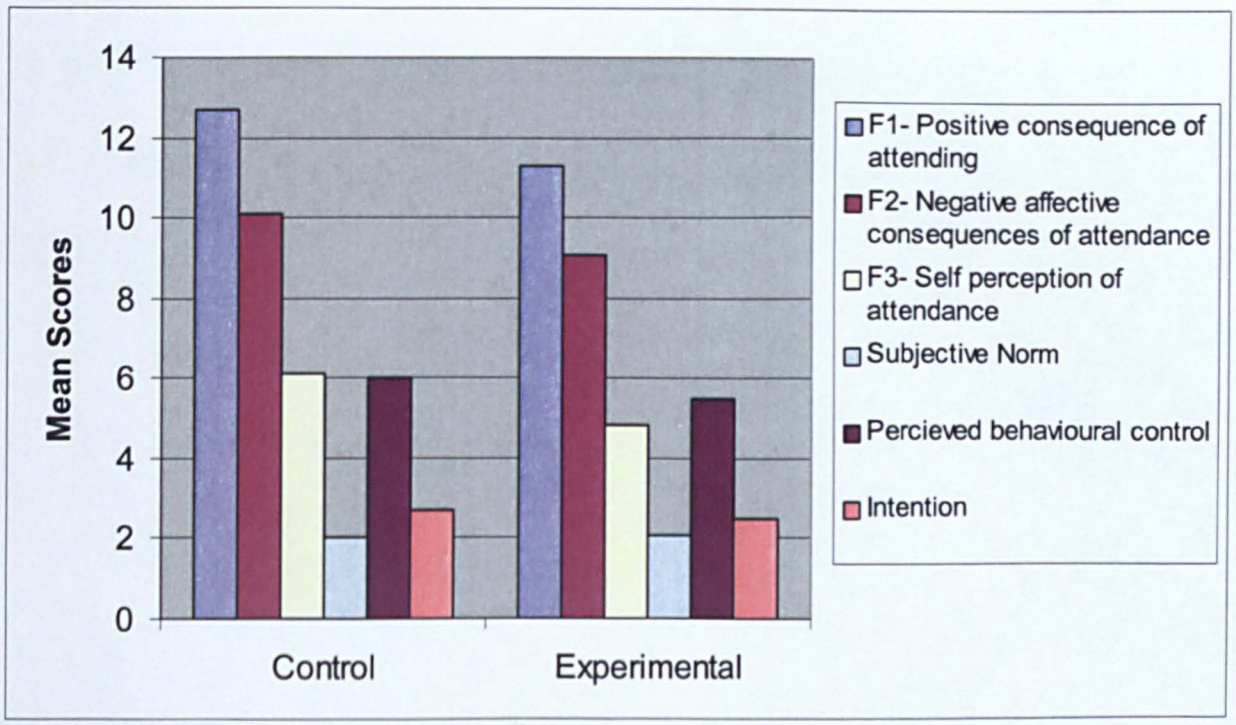
APPENDIX 12) Randomisation check: control and experimental post-test completers

RANDOMISATION CHECK: CONTROL AND EXPERIMENTAL POST-TEST COMPLETERS

Comparison of pre-test means (SD) for control and experimental group post-test completers on all pre-group questionnaires using two tailed independent samples t-tests, n=78

Dependent variable	Control PT Completers Mean (SD)	Experimental PT Completers Mean	Significance
SDQ Total	20.82 (8.202)	18.77 (5.004)	p=.341
SDQ Emotional well-being	3.294 (2.889)	2.59 (1.736)	p=.351
SDQ Conduct	5.88 (6.47)	4.91 (2.091)	p=.511
SDQ Hyperactivity	7.94 (2.249)	7.55 (2.54)	p=.615
SDQ Peer relationships	3.71 (1.896)	3.73 (2.074)	p=.974
SDQ Pro-social behaviour	6.59 (2.293)	6.36 (2.105)	p=.752
SDQ Impact on family life	2.55 (1.968)	2.44 (1.947)	p=.894
PS Total	3.718 (.787)	3.519 (.817)	p=.453
PS Laxness	3.70 (1.425)	3.334 (1.479)	p=.441
PS Over-reactivity	3.376 (.981)	3.709 (1.193)	p=.358
PS Verbosity	4.588 (.894)	4.087 (1.019)	p=.117
BPS Total	53.06 (15.413)	54.77 (9.33)	p=.669
BPS Satisfaction	27.35 (8.177)	27.09 (6.225)	p=.910
BPS Efficacy	25.35 (8.66)	28.05 (5.859)	p=.255
PPC	7.00 (3.232)	8.50 (4.275)	p=.388
DASS Total	35.94 (30.277)	44.36 (34.146)	p=.428
DASS Depression subscale	12.00 (12.865)	15.73(13.246)	p=.383
DASS Anxiety subscale	8.00 (9.401)	9.23 (10.397)	p=.705
DASS Stress subscale	15.35 (8.993)	19.45 (13.147)	p=.256
CMQ F1 Positive Consequences	11.75 (2.517)	11.6 (4.031)	P=.898
CMQ F2 Negative Affective Conseq's	10.312 (4.976)	9.3(3.079)	P=.483
CMQ F3 Self Perception	5.875 (2.895)	4.75(2.049)	P=.181
CMQ SN Subjective norms	2.187 (1.047)	1.9 (.718)	P=.336
CMQ PB Perceived behavioural control	5.5 (2.0)	5.35(1.598)	P=.804
CMQ I Intention	2.125 (.341)	2.35 (.933)	P=.367

Figure 1 Confidence and motivation to attend sub-tests* - Control and experimental group means n=78



* Due to scoring systems lower scores on these measures indicate a more positive response.

APPENDIX 13) Graphic representation of the pre and post-test data of post-test completers

Figure 1. SDQ Total pre and post intervention means of post-test completers, (control n = 16, experimental n = 22)

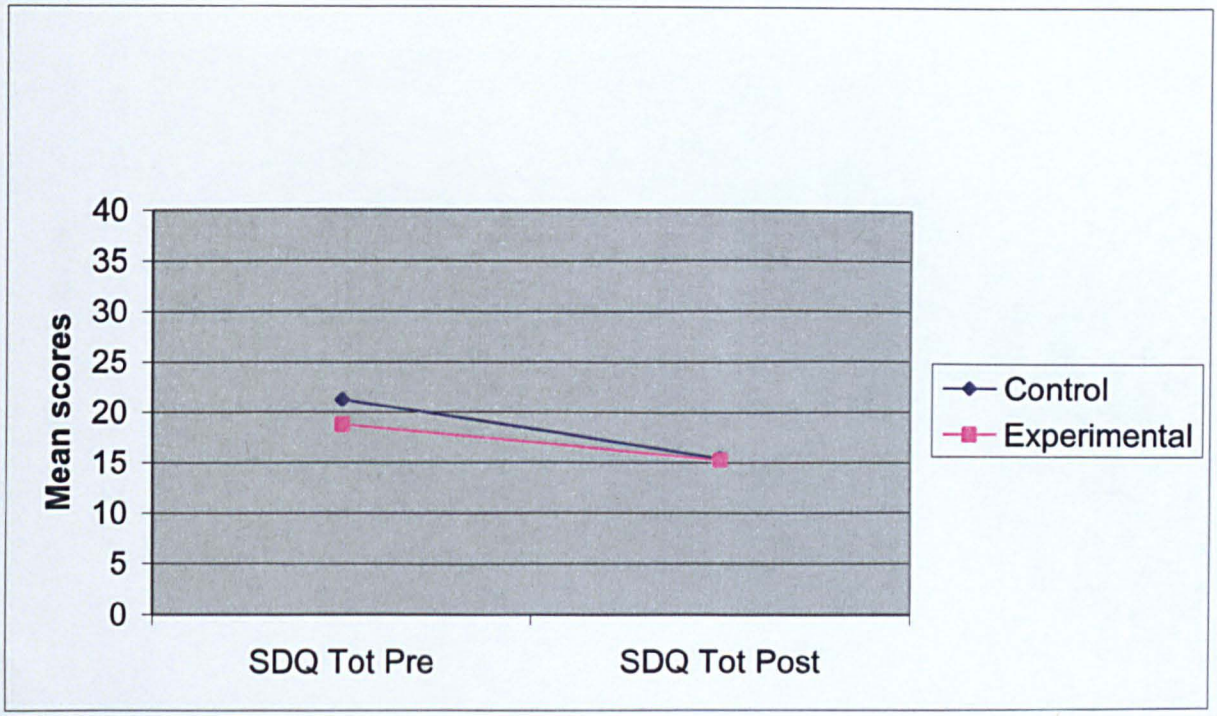


Figure 2. SDQ Emotional Scale, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

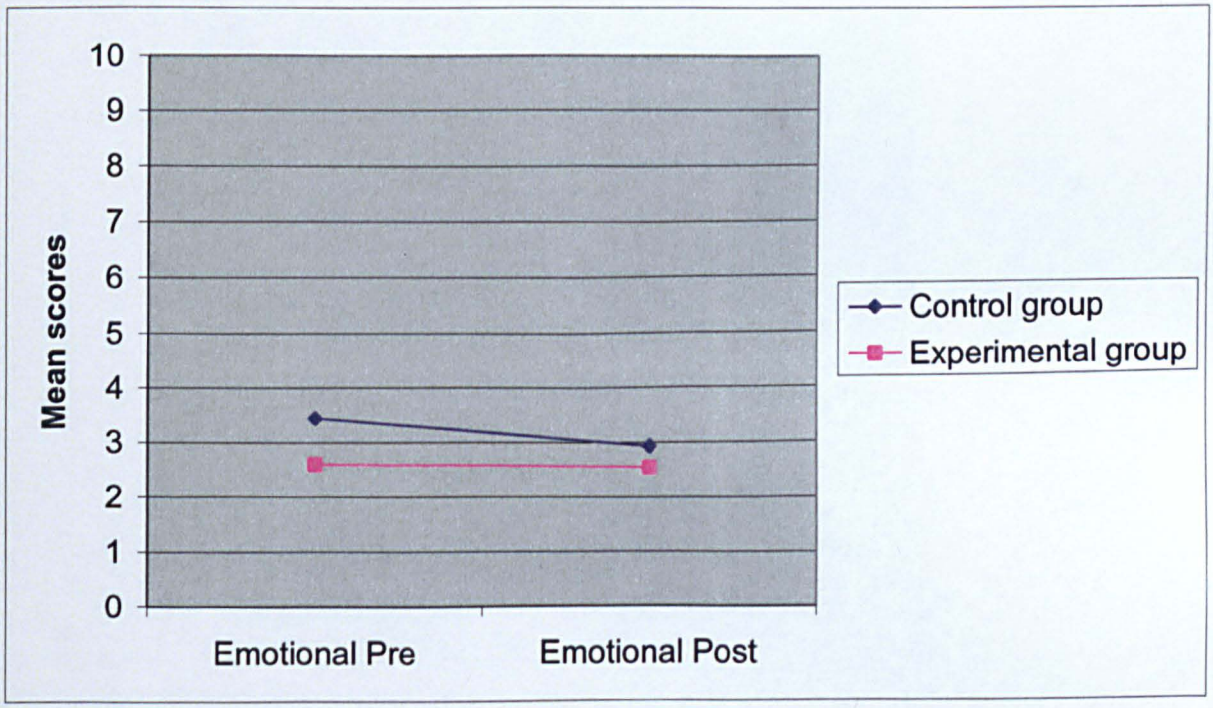


Figure 3. SDQ Conduct Sub-Scale, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

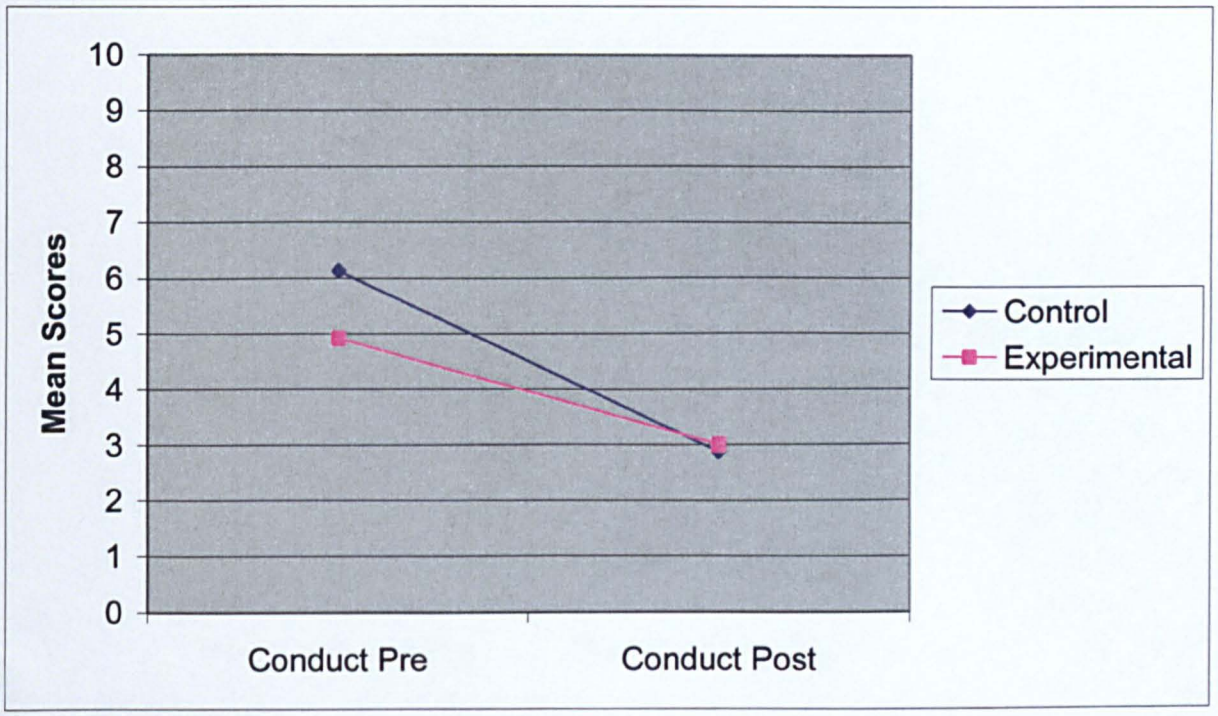


Figure 4. SDQ Hyperactivity Sub-Scale, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

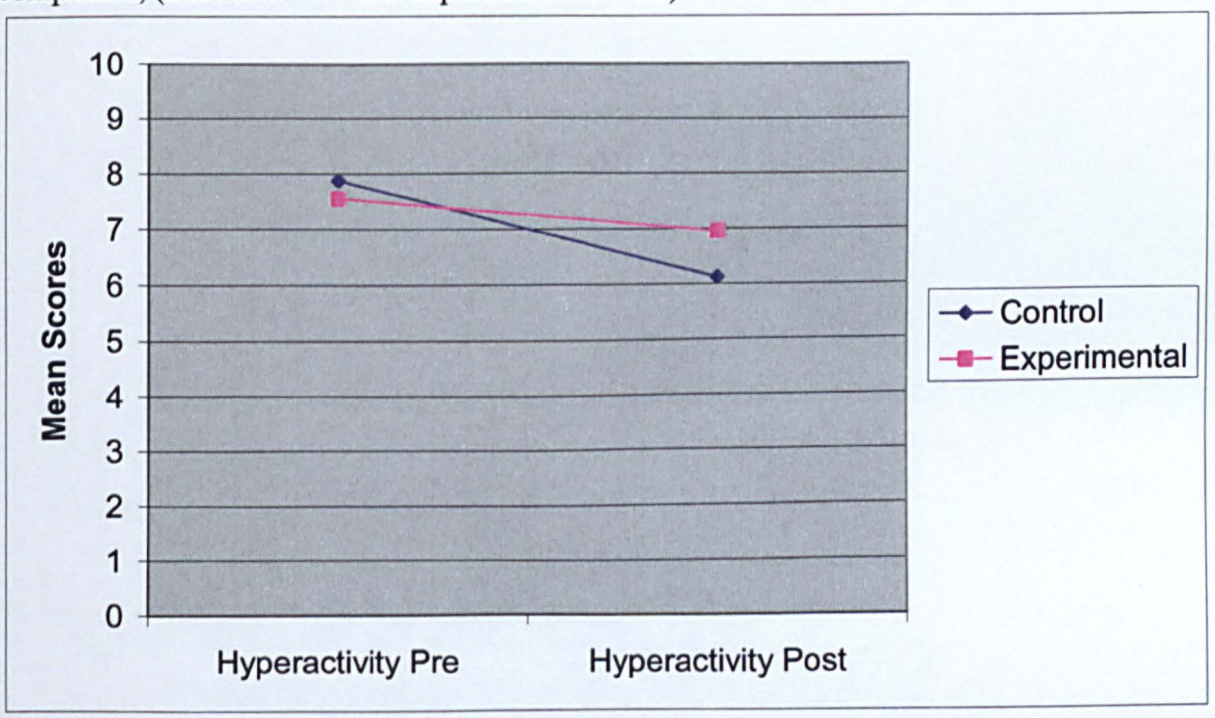


Figure 5. SDQ Peer Problems Sub-Scale, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

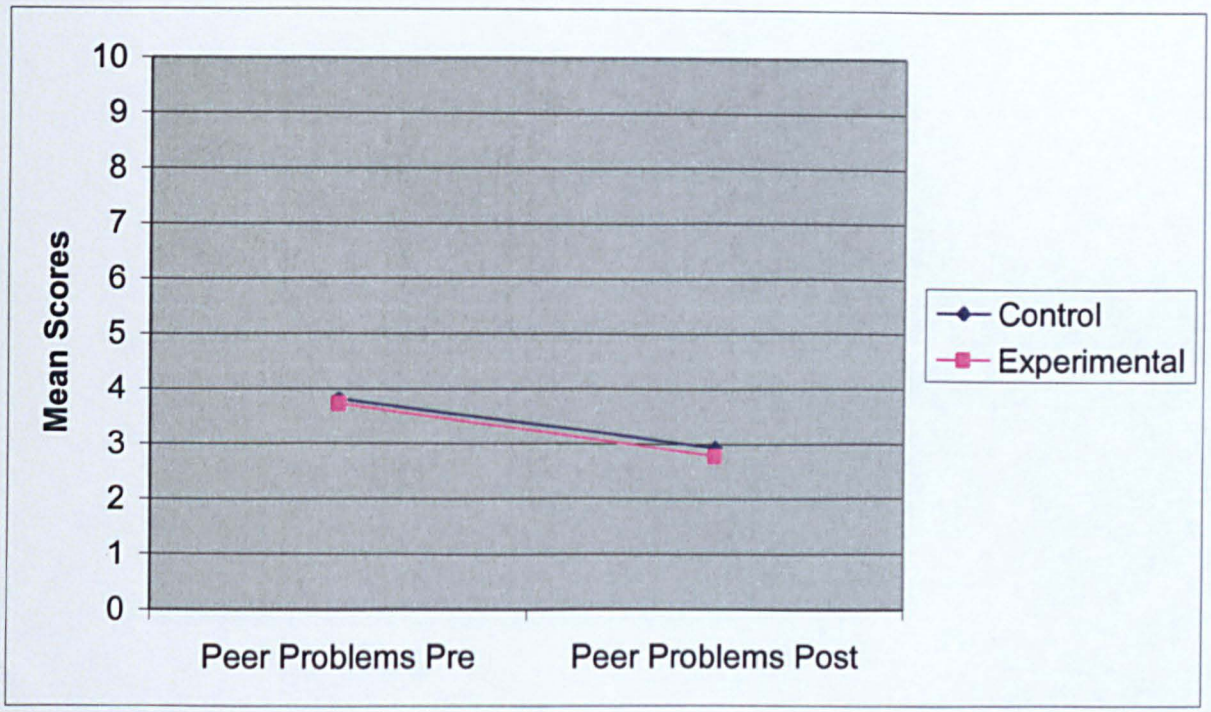


Figure 6. SDQ Pro-Social Behaviour Sub-Scale, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

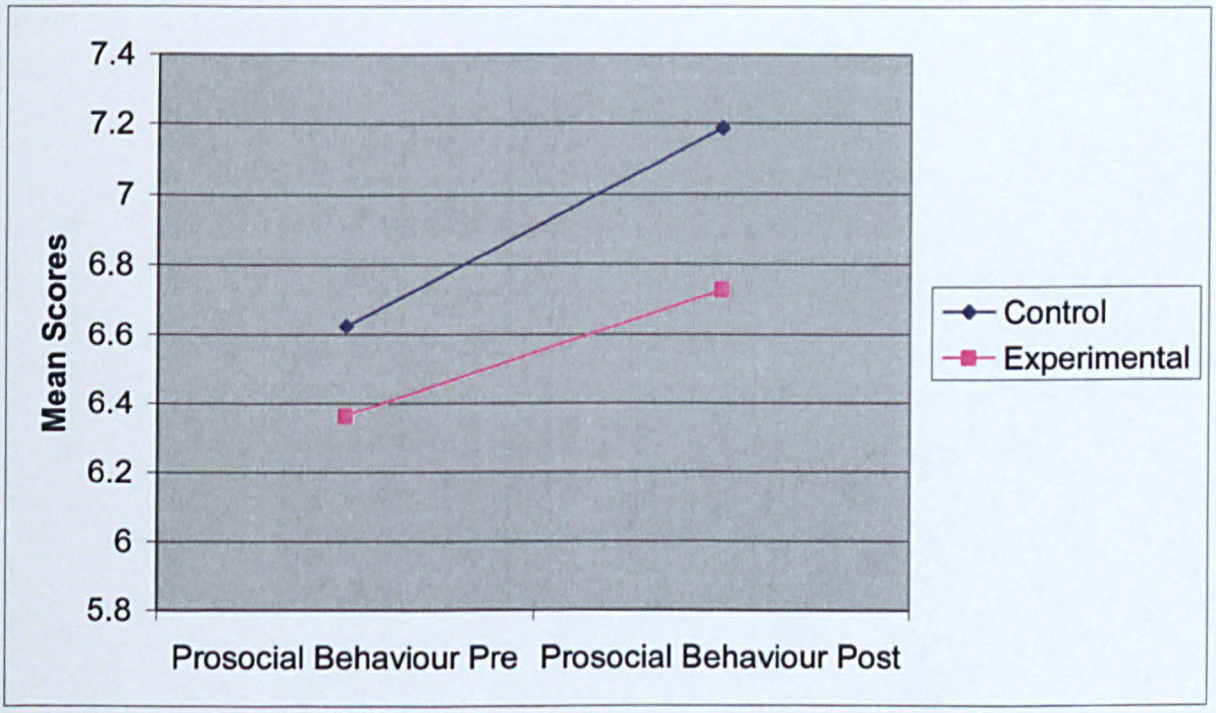


Figure 7. SDQ Impact, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

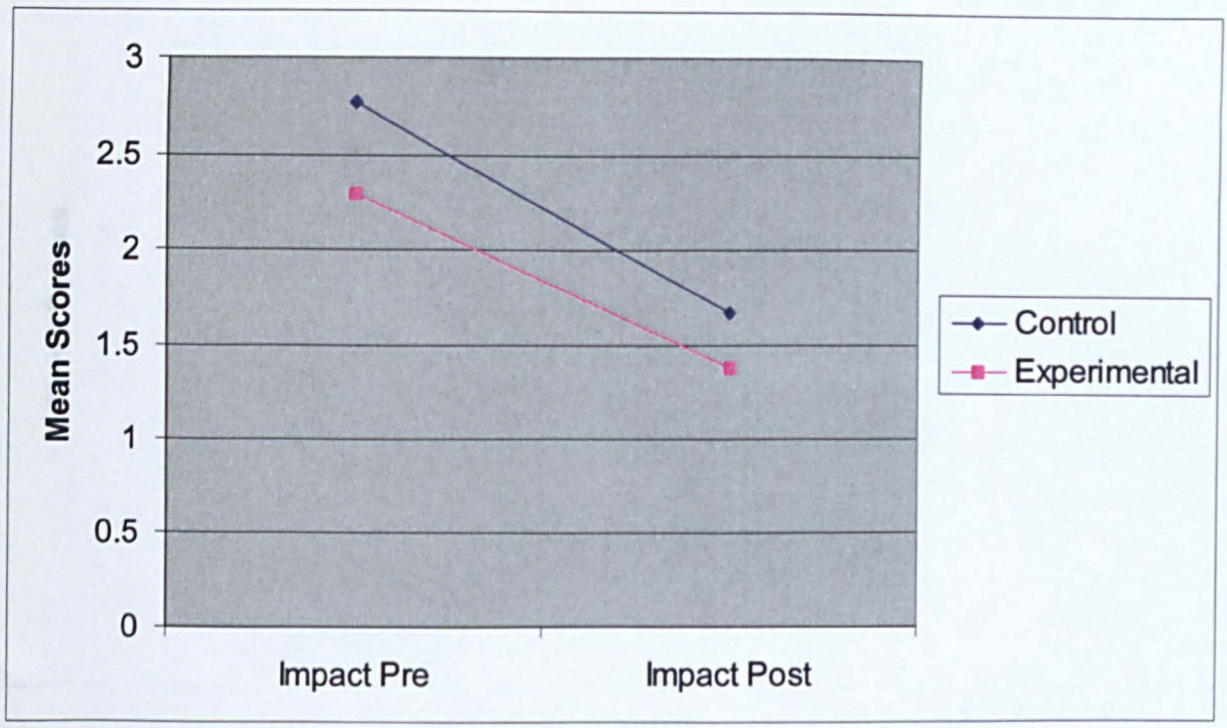


Figure 8. Parenting Scale Total, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

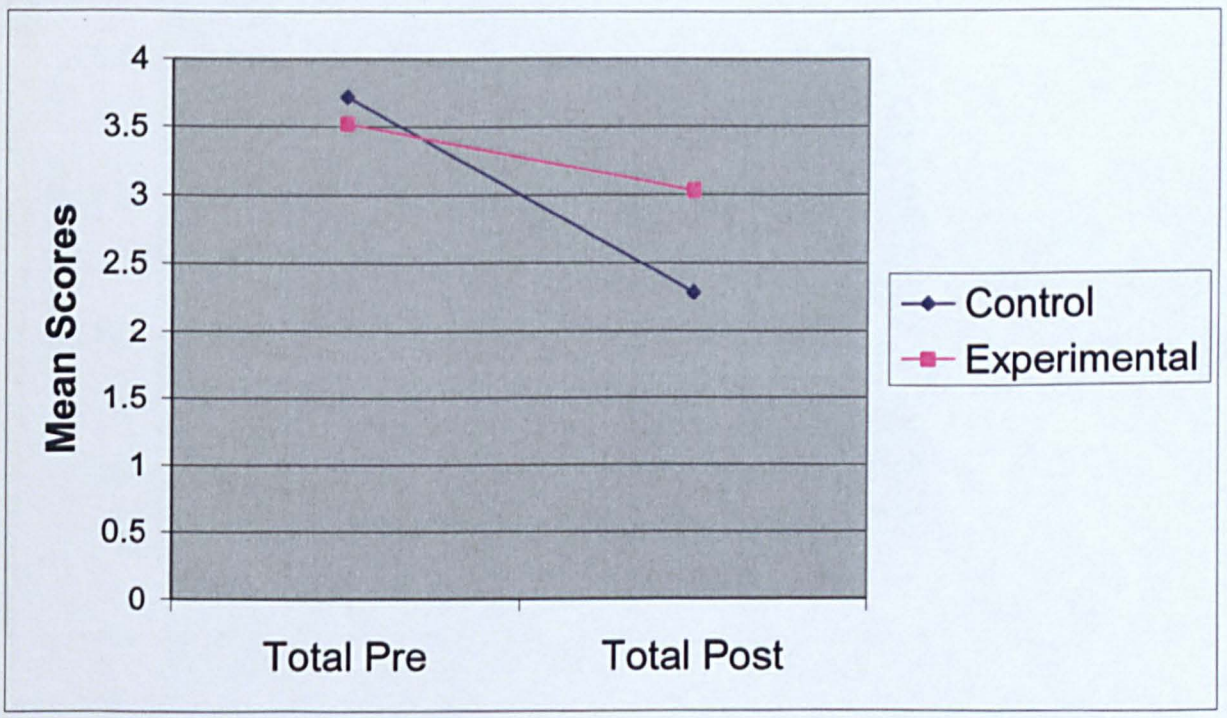


Figure 9. Parenting Scale Laxness, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

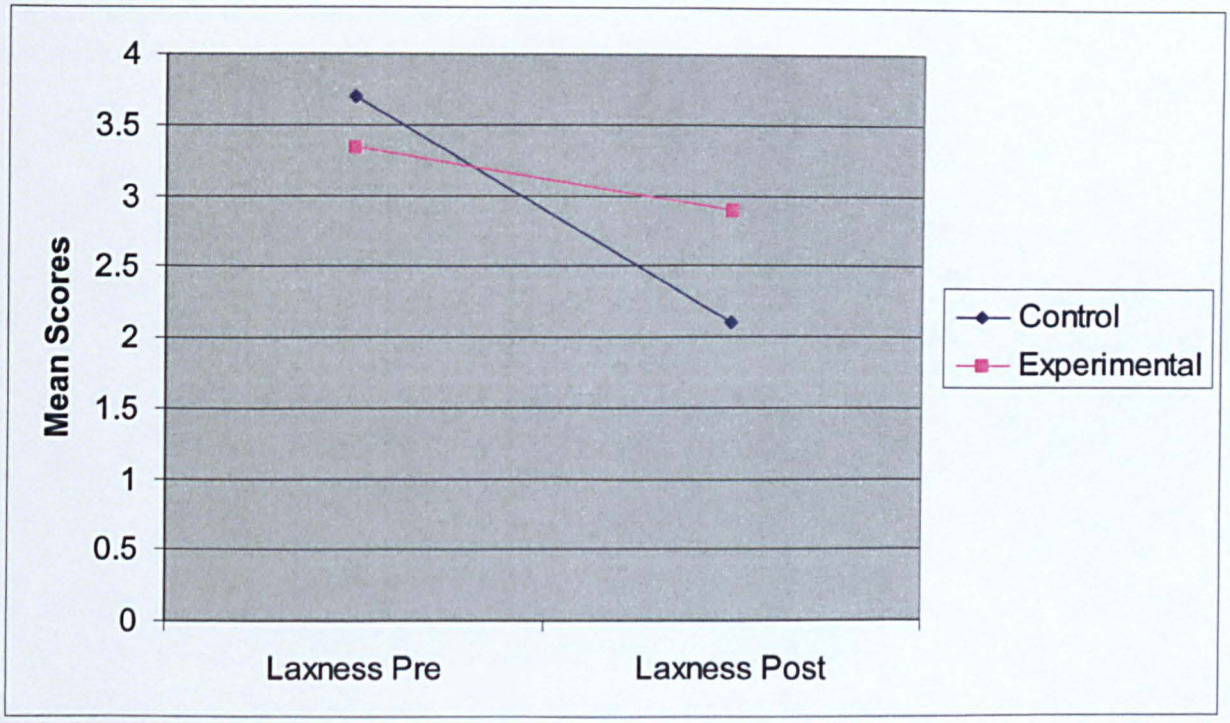


Figure 10. Parenting Scale Over-reactivity, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

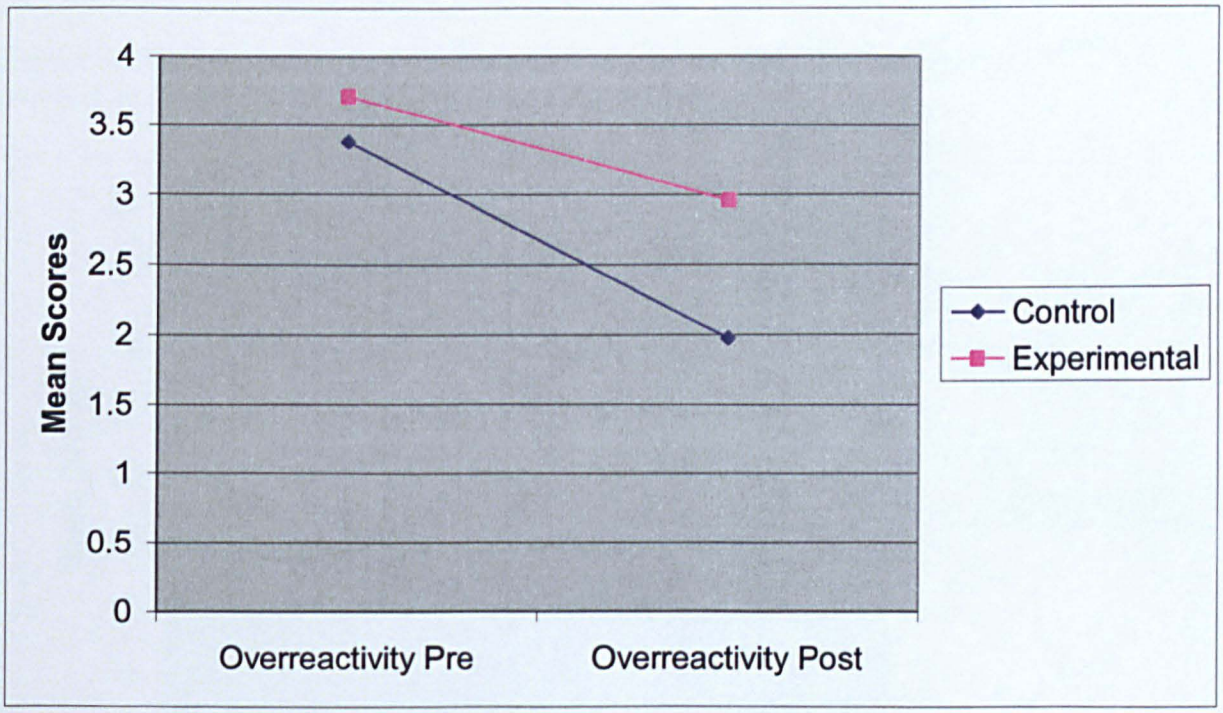


Figure 11. Parenting Scale Verbosity, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

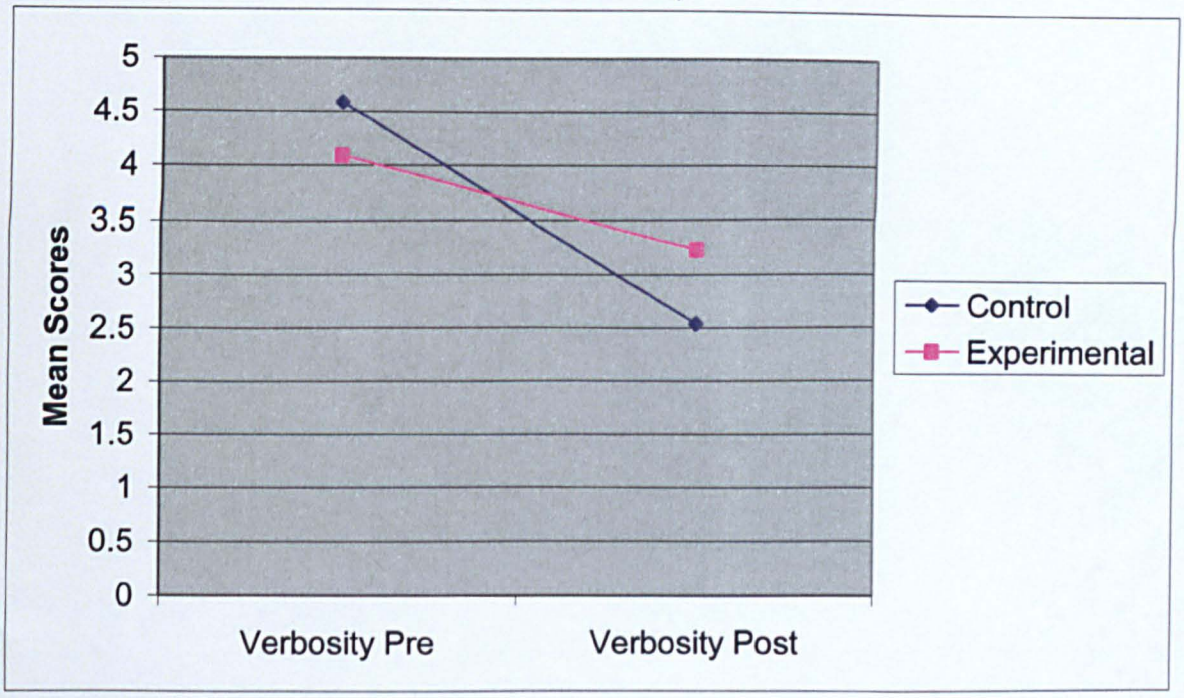


Figure 12. Being a Parent Scale Satisfaction, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

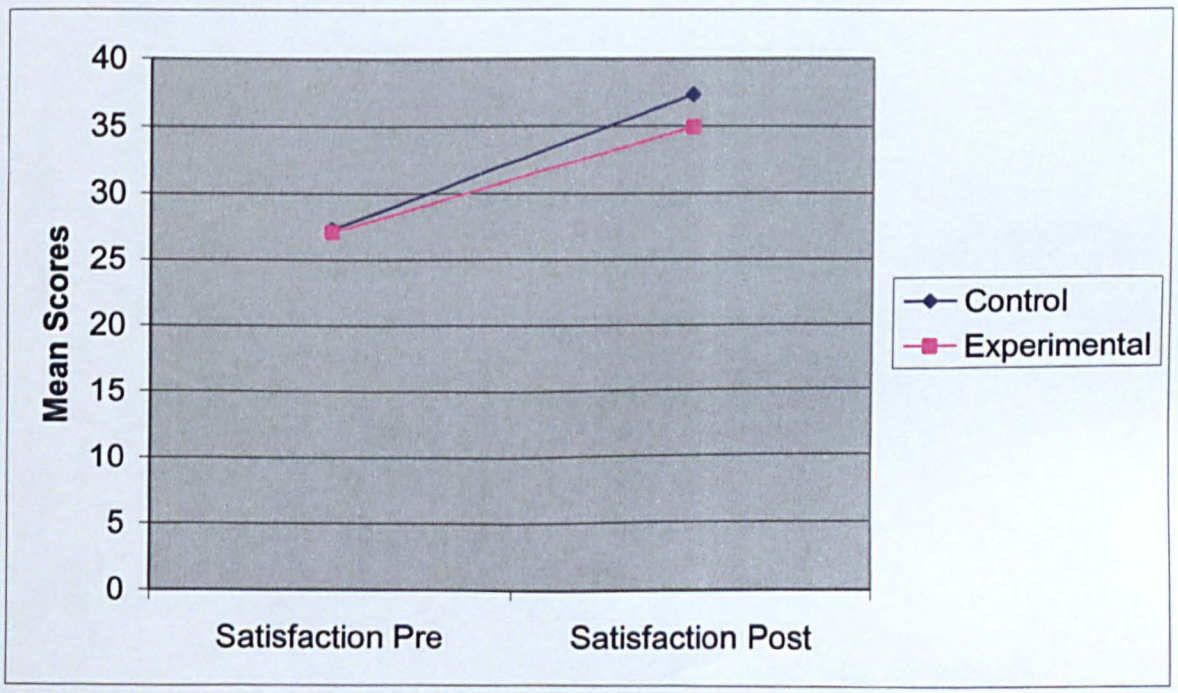


Figure 13. Being a Parent Scale Efficacy, pre and post intervention means of post-test completers, (control n = 16 and experimental n = 22)

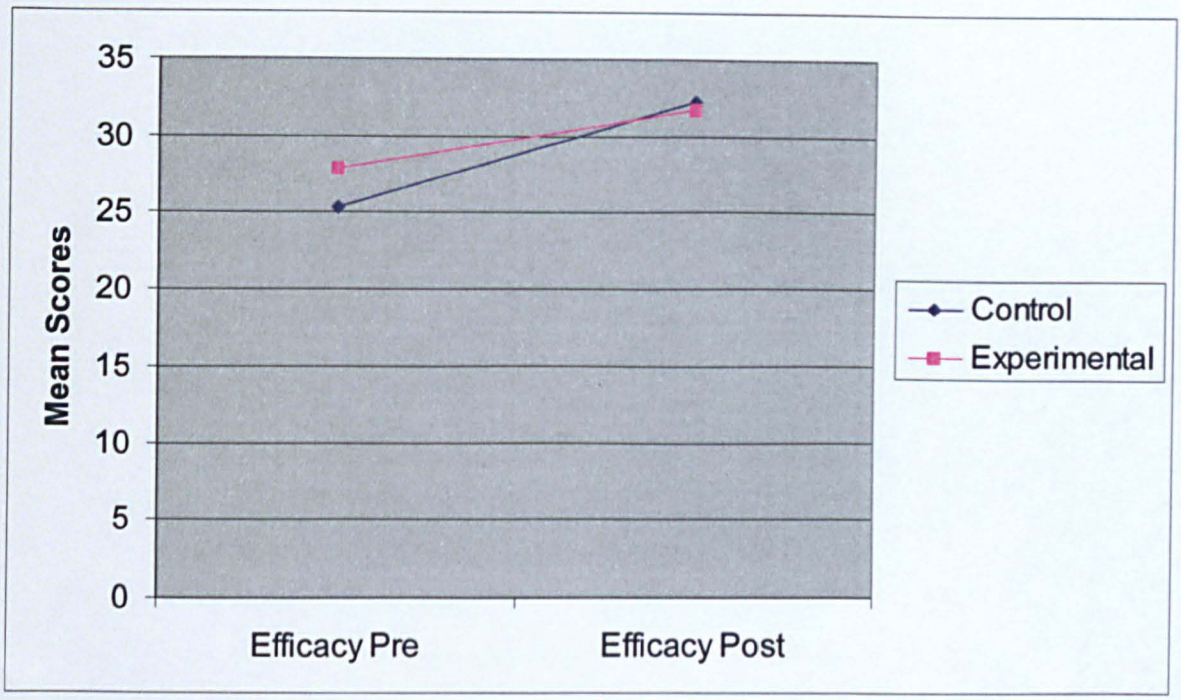
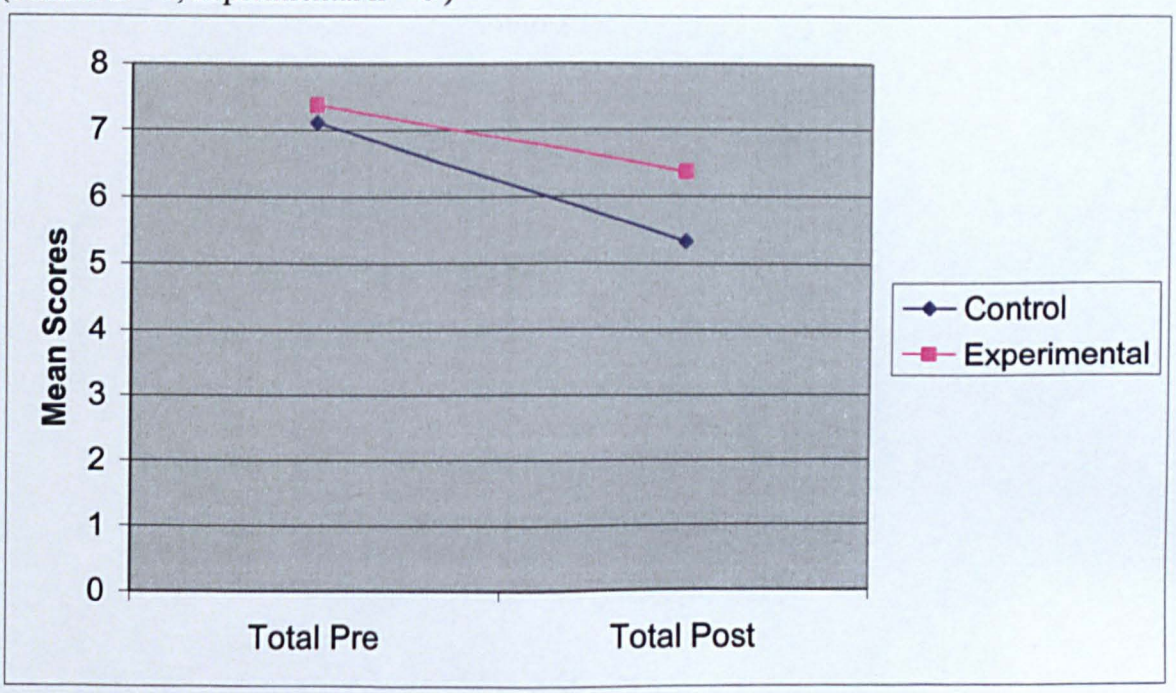


Figure 14. Parent Problem Checklist, pre and post intervention means of post-test completers (control n = 9, experimental n = 8)*



*This measure is completed only by participants with partners.

Figure 15. Depression Anxiety Stress Scale Depression, pre and post intervention means of post-test completers (control n = 16 and experimental n = 22)

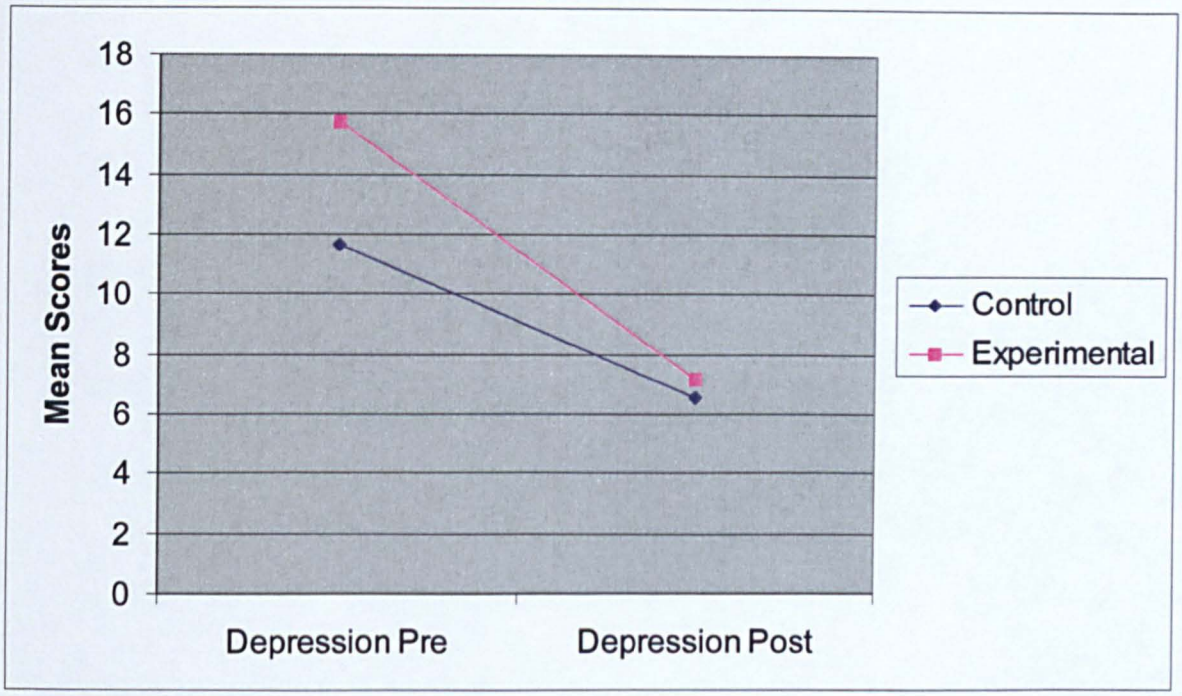


Figure 16. Depression Anxiety Stress Scale Anxiety, pre and post intervention means of post-test completers (control n = 16 and experimental n = 22)

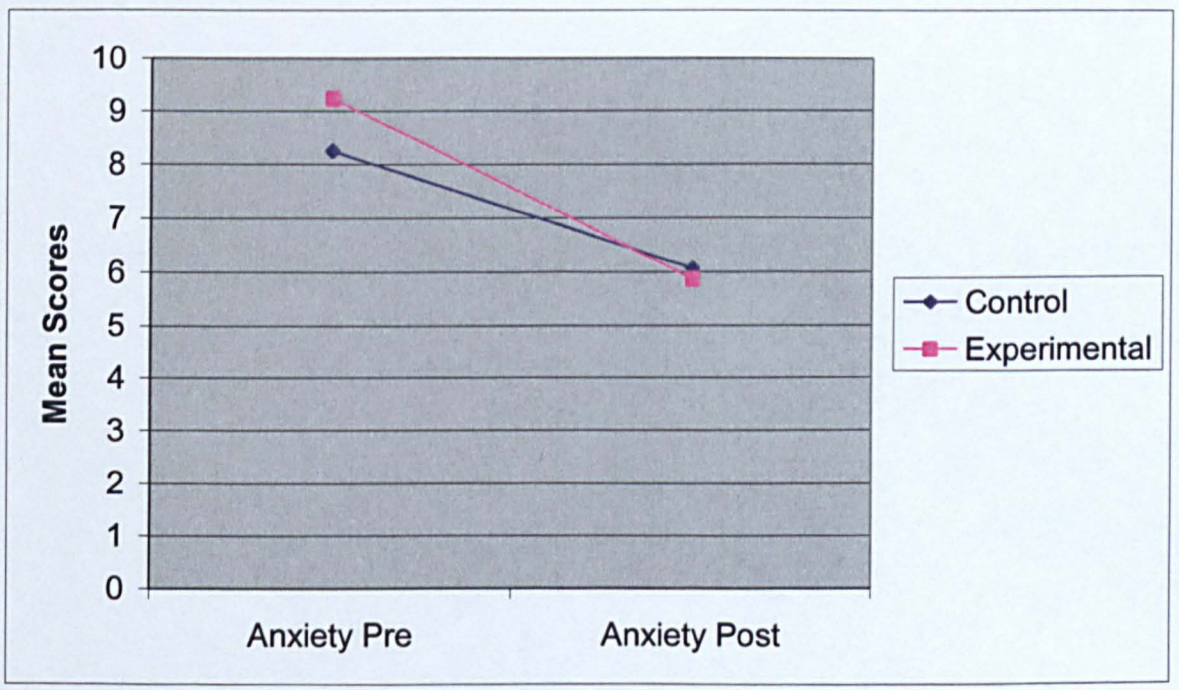


Figure 17. Depression Anxiety Stress Scale Stress, pre and post intervention means from post-test completers (control n = 16 and experimental n = 22)