

**REPORT ON AN INTERVENTION INVOLVING MASSAGE AND YOGA FOR MALE
ADOLESCENTS ATTENDING A SCHOOL FOR DISADVANTAGED MALE
ADOLESCENTS IN THE UK**

**LA Powell,
L. Potter,**
Coventry University

The purpose of this study was to determine the feasibility of providing an intervention involving massage and yoga in a school exclusively for male disadvantaged adolescents who experience emotional and behavioural difficulties. Data was collected using self-administered questionnaires completed by teachers and pupils prior to, and completion of, the SDP, tutor-monitoring forms completed after each SDP session, open questions on the questionnaires and verbal feedback from participating pupils. Measures included the Strengths and Difficulties Questionnaire used within schools to measure changes in behaviour. Twenty-one pupils and their respective teachers completed the SDP and all questionnaires. Results show improvements in pupil's levels of hyperactivity, as rated by the teachers only. Interestingly, pupils particularly enjoyed learning massage. However, results of this small study suggest that the SDP may be a positive intervention for disadvantaged male adolescents who experience emotional and behavioural difficulties. Future studies are needed to determine whether the SDP does indeed have a positive effect on pupil's behaviour, for example, larger and wider randomised controlled trials with more rigorous measures of change in behaviour

In the 2004-5 school calendar year, the rate of permanent expulsion among adolescents in England was 12 in every 10,000 pupils of compulsory school age (Office of National Statistics, 2007 p29). Amongst adolescents that have been excluded from mainstream schools, problems in later life are reported more often than for those individuals who are still in mainstream schools (Pritchard & Cox, 1998). In response to this there has been a growth in the development of therapeutic interventions such as social skills training and relaxation (Lopata, 2003). The association between relaxation and physiological arousal reduction (Wolpe, 1958), underpins the rationale for incorporating relaxation as a component in interventions for young persons with emotional and behavioural difficulties (EBD). Most interventions have primarily targeted pupils in primary school. Although it has been suggested that problem behaviours are addressed most effectively when pupils are young (Fox et al., 2002), this does neglect pupil's educational journey as they progress to senior school settings.

School-based Interventions

Nurture groups have been implemented primarily for children (usually four or five years of age) with emotional and behavioural disorders (EBD) (Cooper & Lovey, 1999; Colwell & O'Connor, 2003). The framework of Nurture groups is based on Bowlby's (1971) attachment theory, and the central focus is educational, based on the child's learning age, rather than chronological age. Studies have shown positive results for those children progressing from Nurture groups back into mainstream school in comparison with children who displayed a level of difficulty warranting a placement but who were unable to gain a place. However, studies have been limited by the methodology, sample size and lack of rigor in design and measures. Despite this, Nurture groups are highly valued among teachers in primary, and more recently secondary schools, and provide a more positive ethos towards dealing with children *at risk* of expulsion.

Interventions (complementary therapy-based)

The Quiet Place project (Spalding, 2000; 2001) aims to provide a holistic (including the provision of massage), client-led approach, where children attend weekly sessions in a therapeutic room for an agreed number of sessions per week, usually for around six weeks. Renwick & Spalding (2002) examined the Quiet Place Project delivered to 172 children across seven schools compared to a

matched control group (n=54) from three schools. Children were matched (as far as possible) on socio-economic background and similar needs. Compared to the control group, children who took part in the Project were reported to display noticeable decreases in negative behaviours such as bullying, being disruptive, rule breaking, and increases in positive behaviours such as obeying instructions, joining in with a group and asking for help in class.

In Germany, the *Training of Relaxation with elements of Yoga for Children* programme (Stueck & Gloeckner, 2005) not in your references was delivered to 48 children aged 11-12 years who showed *abnormal examination anxiety*, measured by the *anxiety questionnaire for students* (Wieczerkowski, 1974). The study involved the children meeting 15 times over six months, and was divided into three parts; relaxation, yoga, and an interactive type of game. The results from this study show that children were appreciative of the chance to learn the techniques and feelings of helplessness and aggression were reduced. In the UK, Hallam & Price (1998) studied the value of playing calming music to a group of ten girls and boys aged nine to ten years attending an EBD Unit. The results showed improvements in both behaviour and in mathematics performance.

Several studies have also utilised massage therapy for use with children with developmental, emotional and behavioural difficulties. In the USA, Diego et al (2002) looked into helping adolescents with reported aggressive behaviours, through massage therapy using a randomised control trial design. The massage therapy group received ten sessions of massage over a five-week period with a different massage therapist each week. The control group received progressive muscle relaxation for the same period. Results indicate significant improvements in aggression levels for adolescents in the massage condition, but not for those in a relaxation-only condition.

In another randomised controlled trial, Khilnani et al (2003) studied massage versus relaxation among 30 children aged 7-18 years with ADHD in the USA. Children in the massage therapy group received massage therapy for 20 minutes twice a week for one month and the relaxation group were asked to relax for that same time. Results show that the massage-group children rated themselves as happier, and their teachers (who were blind to the group assignment of each child) rated them as less hyperactive, more attentive and their emotional-indulgent scores were improved. The relaxation group had significantly better emotional indulgent scores, but other results remained unchanged.

Meditation has also been used in an educational setting, although not always specifically for EBD issues (e.g. Viarengo, 1998; McLean, 2001). Both studies reported that those children taking part in the meditation showed improved concentration skills as reported by teachers, and children themselves reported that the meditation was relaxing.

The literature has identified a number of school-based interventions available to pupils with EBD. However, the evidence for their efficacy is inconclusive due to varying methodologies, varying age groups, small sample sizes, varying conditions of children taking part, varying Programme content and delivery, and lack of randomisation and control groups. However, the literature does appear to support the use of Complementary Therapy-based interventions for pupils with EBD.

The Self-Discovery Programme

The Self-Discovery Programme (Powell & McCormack 2001; Powell 2005©R) was designed for pupils with extra needs (e.g. learning disability) set within the theoretical framework of self-efficacy (Bandura, 1988). Strategies shown to enhance self-efficacy are mastery experience, role modelling, persuasion and reinterpretation of physiological and affective state (Bandura, 1988). In the context of the SDP pupils are trained in simple yoga postures and relaxation techniques such as simple hand massage and deep breathing. The SDP provides them with a safe environment in which these techniques can be practised (mastery experience), and each pupil can observe their peers also practising the techniques (role modelling). The tutor is instrumental in providing clear instructions and explaining that by using the techniques pupils have a means of relaxing themselves during times of stress and thus they will be able to consider their response from a place of stillness rather than reacting automatically with aggression (persuasion). The relaxation techniques also provide a means of down-regulating physiological arousal and affective states (e.g. anger).

Earlier trials of the SDP (Powell, Gilchrist and Stapley, 2008; Powell, Barlow & Bagh, 2005; Cullen-Powell & Barlow, 2005) have shown the programme to be of value in terms of improvements in self-control, being calmer in class, and use of relaxation techniques (e.g. self hand massage) during stressful

situations in school or class. However, the SDP has not been trialled in a school exclusively for adolescents who have a statement of special educational needs, are socially disadvantaged and experience EBD.

The purpose of this study was to determine the feasibility and the value of providing the SDP in community special school exclusively for male disadvantaged boys aged 11 to 16 and who experience emotional and behavioural difficulties. Coventry University's Ethics Committee granted ethical approval. As this study was a small pilot study to inform a wider, randomised controlled trial, a simple pre-post test evaluation was chosen.

Sample

Of the 52 pupils attending the school, 98% were working with the Child and Adolescent Mental Health Team, 68% were working with the Youth Offending Team, 12% were working with the Community and Safety Team for acceptable behaviour, and, 62% received Free School Meals. Of these 52 pupils a purposeful sample of 36 were identified by the Head Teacher to take part in the study. Inclusion criteria used were based on age (i.e. 11 to 15 years), those who were engaged in the school learning programme (i.e. pupils with a minimum of 70% attendance rate). The Research Team provided the School with 36 information sheets about the SDP and the study, parental consent/pupil assent forms to take part in the study. These forms were distributed to parents and pupils. In addition, pre-paid envelopes were provided for completed forms to be returned to the Research Team.

The Self-Discovery Programme adapted for male pupils

The SDP consists of 12 one hour sessions delivered over two school terms (e.g. spring and summer). The primary activities of the SDP include: self and peer massage (e.g. pupils are shown how to massage their own and their peers hands); simple hatha yoga postures (e.g. triangle, warrior, tree and using the breath, meditation, visualisation and relaxation). Due to the available space provided by the school (i.e. a small room with desks and chairs) the amount of movement was restricted and it was impossible to use yoga mats and lay down on the floor for relaxation. Thus, meditations, visualisations and relaxation were conducted with pupils sitting on chairs. Pupils were shown how to sit comfortably to ensure proper deep, relaxed breathing. This is a more realistic approach as pupils can then transfer these skills to a classroom or other situation.

For the massage sessions, a guest speaker was invited to introduce the topic of massage to pupils. The guest speaker was a male sports massage therapist and has worked with pupils in schools. The purpose of this was: a) to help pupils to overcome any sensitive issues they may have about touch, b) to give pupils some insight of how massage can be used as a career, and c) to provide a male role model as a professional sports massage therapist.

Two tutors, (one qualified in the field of complementary therapy and one an ex-teacher with experience of working with adolescents with EBD) were employed to deliver the SDP throughout the duration of the project to ensure consistency in delivery. The tutors received additional training (half day) by the author in the delivery and format of the SDP and the associated research requirements.

In addition to the tutor, a teaching assistant (TA) from each relevant class group was required to attend each SDP session. The TA's role was to support the tutor and to ensure the safety of the pupils and the tutor and to maintain the discipline expected within school.

Method

On receipt of the completed consent and assent forms by parents and pupils respectively the researcher posted the baseline questionnaires and SAE to the School for completion by teachers and pupils. Once completed baseline questionnaires were returned to the researcher the school was informed and pupils were divided into five groups (four or five pupils in each group). Groups were determined by class, that is, pupils were kept together with their peers.

The study was a simple pre-test, post-test design with data collected through self-administered questionnaires completed by teachers and pupils at two points in time: before commencing the SDP and after completing the SDP. In addition, qualitative data were collected using open questions on the follow-up questionnaires (i.e. immediately on completion of the SDP), tutor -monitoring forms that were completed by the tutors for the duration of the SDP, and meeting with each group of pupils on completion of the SDP to gain feedback regarding their views and experience of taking part in the SDP.

Measures

Information regarding pupils class year, age, level of attainment, medical diagnoses (if applicable), ethnic origin, and support received from school and/or outside agencies, was collected at baseline only (i.e. before commencing the SDP). *Behavioural profiles* included information on pupil's self and social confidence, communication, self-control within the school/classroom, and attention span. The behavioural profile consists of nine questions each rated one to seven, with low scores indicating no confidence, great difficulty in communication, eye contact and no contribution in class. Scores are reported for each sub-scale and summed to give a total behavioural score (minimum 7, maximum 63). The scale was developed in earlier development phases of the SDP with teachers to reflect some of the behavioural problems often experienced within a classroom. Thus, we would hope to see some change in one or more of these domains on completion of the SDP. The behavioural profile is completed by the teachers before and after the SDP.

A *Strengths and Difficulties Questionnaire* (SDQ Goodman, 1997; 2001) was completed by both pupils and their respective teachers. The scale consists of 25 items divided into five scales: emotional symptoms, conduct problems, hyperactivity, peer relationship problems and pro-social behaviour. Some statements are negative and some are positive. Statements are anchored from *not true*; *somewhat true*; to *certainly true*. Each subscale consisted of five questions, and each question scores between one and three points. Scores are banded from *normal*; through to *borderline*; and *abnormal* in order to identify individuals likely to have mental health disorders. Low scores generally indicate *normal* behaviour, whilst high scores indicate *abnormal* behaviour.

Qualitative data was collected using *open-ended questions* immediately after the SDP including:

Did you enjoy taking part in the SDP?

Name one activity or skill learnt on the SDP that you liked.

Name one activity or skill that you learnt on the SDP that you disliked.

Have you used any of the techniques learnt on the SDP during the school day?

Due to the majority of pupils with special educational needs, some pupils may experience difficulty in articulating their experiences in written form; thus, the researcher gained informal *verbal feedback* from the pupils on completion of the SDP. The researcher met with pupils at the school and in their respective SDP groups. In addition, *Tutor monitoring forms* provided information on the tutors' experiences of each session and an overall reflection of their experience of the SDP in terms of delivery and content.

Analysis

Quantitative data was analysed using SPSS v14 with a significance level set at five percent. Before and after analyses on study variables used independent and paired t-tests.

Results

Information and consent/assent forms were distributed by the school to 36 pupils and their parents. Twenty three parent consent forms and the respective pupil assent form were returned to the researcher giving a response rate of 64%. Thirteen parents failed to return the consent form and therefore 13 pupils were unable to take part in the study.

Pupil characteristics

Pupils were aged 11-15 years, 18 *white British*, two *black/Afro-Caribbean* and one *mixed race*. Of the 21 pupils, 6 were diagnosed with an EBD alone, two were diagnosed with EBD and ADHD, one were diagnosed with ADHD alone, one was reported by teachers to have ADHD and epilepsy, and one child had a diagnosis of *global delay*. The remaining nine pupils had mild to severe learning disability. Six pupils were in receipt of additional help, such as play therapy, during school hours.

Teacher and pupil ratings of the pupils' behaviours did not differ, either before or after the SDP. Thus, the teachers' views of the behaviour of the pupils changed in the same direction as the pupils themselves reported.

Behaviour Profiles completed by teachers

The total mean behavioural score before commencing the SDP was 36.1, (SD 10.85) and 38.4, (SD 10.20) on completion of the SDP indicating an overall improvement in behaviour. There were improvements in self-confidence, social confidence with peers and with teachers, communication with peers and with teachers, self-control, and attention span and eye contact with teachers. Contribution in class showed no improvement.

Strengths and Difficulties Questionnaire (SDQ)

Table 1 below shows the mean scores on the SDQ for both teacher-ratings of students and student-ratings both before and after the SDP. The general overall trend is towards improvement, and even where there are no significant responses, the range of responses has narrowed, indicating less extremes of response. The pro-social score, that is, the extent to which pupils were actively kind and helpful towards other pupils also indicates improvement (Table 2). However, none of the changes in scores on the SDQ were of statistical significance with the exception of hyperactivity, as rated by the teachers.

Table 1
Showing total mean scores (range) on the SDQ as rated by teachers and students before and after the SDP.

	Teacher before SDP	Teacher after SDP	P (t)	Pupil before SDP	Pupil after SDP	P (t)
Emotional symptoms Range 0 – 10, ↑ = worse	4.9 (0-9) Normal (towards borderline)	5 (0-10) Normal (towards borderline)	0.41 (-.84)	3.5 (0-10) Normal	3.4 (0-9) Normal	0.83 (-.19)
Conduct problems Range 0 – 10, ↑ = worse	3.8 (0-8) Borderline (towards abnormal)	4.5 (0-9) Borderline	0.09 (.00)	(1-7) Borderline	3.5(2-6) Normal	0.9 (-.12)
Hyperactivity scale Range 0 – 10, ↑ = worse	6.3 (0-10) Borderline	5.7 (0-10) Normal (towards borderline)	0.02 (2.48)	4.7 (3-7) Normal (towards borderline)	4.9 (3-7) Normal (towards borderline)	0.37 (3.30)
Peer problems Range 0 – 10, ↑ = worse	4.7 (2-8) Borderline (towards abnormal)	4.3 (0-8) Borderline (towards normal)	0.45 (1.01)	5.2 (2-10) Borderline	3.1 (1-8) Normal	0.52 (0.64)
Total difficulties score Range 0 – 40, ↑ = worse	20.1 (11-31) Abnormal	19.5 (7-33) Borderline	0.33 (0.98)	17.1 (11-29) Borderline	16.3 (8-26) Borderline	0.83 (0.21)

Table 2
Showing total mean scores (range) on the SDQ Pro-social behaviour score before and after the SDP.

	Teacher before SDP	Teacher after SDP	P (t)	Pupil before SDP	Pupil after SDP	P (t)
Pro-social scale Range 0 – 10, ↑ = better	4.5 (0-10) abnormal	5.0 (0-10) Borderline	0.27 (-1/12)	5.3 (2-8) borderline	5.2 (3-8) borderline	0.79 (0.26)

Pupils (questionnaire responses)

Nineteen pupils responded to the open-questions on the questionnaire on completion of the SDP. Of these 19 responses, 16 pupils indicated that they had enjoyed taking part in the SDP. Of the three pupils who stated they had not enjoyed the SDP two gave no further clarification as to why, and one pupil found it *a bit boring*, which may be a combination of both content, and experience of the tutor. These three pupils also reported that they had enjoyed the massage.

The most enjoyed features of the SDP were the meditation and the massage, with eight boys commenting that the massage was the most enjoyable part of the Programme. Yoga was the most

disliked activity, although in at least one case, the boy who disliked yoga the most, cited Tai Chi as the most enjoyable part. Basic Tai-Chi movements were utilised by one tutor as an alternative to Yoga.

Thirteen pupils reported they had used some of the skills (breathing (3), self hand massage (3), meditation (1) learnt on the SDP, in class. Six pupils referred to these skills just as *techniques* without clarification as to what these techniques were.

Pupils (verbal feedback)

On the whole pupils appeared to have enjoyed taking part in the SDP. They particularly liked some of the activities, especially the topic on *unusual and healthy* foods (incorporating sensory awareness and colour), massage, breath, and meditation. One pupil didn't like the oil used for the massage, but alternatives were at this time offered (such as a moisturising cream). Five pupils suggested that they had used some of the techniques, particularly massage, breath techniques, and meditation at home as well as in school. One pupil liked the breathing techniques and suggested that it did help to keep him calm during demanding situations. Two pupils felt that the meditations were repeated too often. It was explained that this was the purpose of meditation to become *master* of one's own ability to problem-solve and of *quieting the mind*.

In terms of the timing and length of the sessions and the SDP overall, this was reported to be *okay*. In terms of improving the SDP, it was felt that there was not enough time for all the activities to be completed during one session, thus perhaps longer sessions would be better, or, more weeks. The pupils also liked the tutors who were described as *always pleasant and calm; they never got angry*.

Teachers

Teachers reported that they had noticed changes in pupils during the SDP such as increased attention in class. In particular, two pupils who reported to use *techniques* learnt on the SDP in class were also noted by their respective teacher to have global changes (more self-control and concentration skills, appeared less worried, had better communication skills, higher contribution levels in class) and had observed these same pupils using breathing and hand massage techniques. One teacher reported that a pupil who had took part in the SDP was now calmer and more relaxed in stressful situations despite the pupil himself reporting that he does not employ any of the skills learnt on the SDP.

The teacher of one pupil noted that whilst the SDP had been in progress, the pupil had experienced a *very unsettling time in his home*, which in turn affected his behaviour in a negative manner. It is possible, that given the chaotic nature of these pupils' lives, that there was more than one pupil experiencing an unsettling time, but that this information was not recorded.

Tutors' Experiences

Reflections from the tutors who delivered the SDP show that the experience of delivering the Programme had been very positive and had enhanced their own personal growth and development. However, it was felt by both tutors that it had been very challenging on their own ability to keep pupils motivated and actively engaged in activities. Both tutors felt that they would have liked to have received more intense training in the delivery of the SDP and on some of the mandatory activities required (i.e. massage, yoga, meditations and relaxation techniques).

Discussion

The purpose of this study was to determine the feasibility of providing an intervention involving massage and yoga, namely the Self Discovery Programme (SDP) in school specifically for male disadvantaged adolescents aged 11 to 16 years and who experience emotional and behavioural difficulties. Overall the SDP was well received by pupils. One important outcome was the positive change in pupils' reduced hyperactivity as reported by their teachers. This change is important in terms of social behaviour, group working, concentration, and integration into school life. Although no other statistically significant changes were noted there were trends (i.e. scores moving in the right direction) toward improvements in pupil's emotional symptoms and conduct, self and social confidence, communication with peers and teachers, self-control, attention span and eye contact with teachers.

It is unlikely that statistically significant changes would occur in such a short time among this group of pupils. It is more likely that the small incremental steps demonstrated in our findings are important over longer periods of time. For pupils with extra needs attending a special school these small steps

may be far more productive in the longer term than any immediate, sudden change that may be difficult to accommodate and assimilate.

The qualitative data demonstrates that pupils enjoyed attending the SDP with many pupils utilising the techniques learnt on the SDP that they felt comfortable with. They valued having the opportunity to take part in a Programme that was *fun* and gave them practical, pragmatic skills that are easily implemented into their daily life, as well as being something *different* for them to do. Of interest was the pupils liking of massage, breath work, and meditation. The introduction of massage via a male Sports Therapist may have contributed to the popularity of the massage.

Challenges and Limitations

The response rate was 64%. Even though parents initially indicated verbally to the Head Teacher that their son could participate in the SDP, it became apparent that the lives of the children and parents were too chaotic to give time to reading and filling in *non-essential* forms (i.e. reading information sheets and signing consent forms). Thus, gaining consent and assent from parents and pupils, respectively, was both a challenge and a limitation of the study. This limitation was also clear in that consent and assent forms had been photocopied two or three times before being returned to the researchers, suggesting that the original forms had been lost or mislaid by parents and pupils. Thus, it may be that the use of an *opt-out-consent* form may have given higher rate of return. Woods & White (2005) studied bullying and aggression levels in adolescents. They made use of an opt-out-consent form, whereby parents and guardians were sent a form, and asked to sign it only if they did not want their child to participate. This clearly would be for consideration in any future studies.

The small number of participants and the lack of a control group, blind scoring (i.e. teachers knew which pupils were taking part and when necessary helped pupils complete their questionnaire) suggest the results of this study should be treated with caution. However, the results demonstrate the value of the SDP as an intervention for this group of pupils. Although our findings do not show large amounts of change, they do show trends towards improvement in the main, both with positive overall changes, and a lessening of ranges (i.e. extreme responses). It is important to *sow the seeds* for positive change and provide this group of pupils with a range of practical, pragmatic skills that they can implement and utilised easily and comfortably as and when they feel a need. In this way, pupils become self-empowered. In addition, giving pupils such skills may serve to enhance their self-esteem and confidence in finding solutions to their often negative situations and emotions. Extending the length of the Programme may not be feasible, taking into account the demands of an academic year. Providing a rolling Programme and/or refresher or review Programmes may be future options to explore. Further, tutor training needs to be refined and improved with an accreditation to a continued professional development standard with a recognised professional body. These refinements will be explored prior to future delivery.

In conclusion, the SDP appears to be of value and a feasible intervention to this group of adolescents. Validation of the efficacy of the SDP is now required using a larger, wider randomised controlled trial.

References

- Bandura, A. (1988). Perceived Self: Efficacy: Exercise Of Control Through Self Belief. In J. P. Dauwalder, M. Perrez & V. Hobbi (Eds.), *Annual Series of European Research In Behaviour Therapy* (Vol. 2, pp. 27-59). Lisse, The Netherlands.
- Bowlby, J. (1971). Attachment and Loss Volume 1: Attachment, Penguin Books, Harmondsworth.
- Colwell, J., & O'Connor, T. (2003). Understanding nurture practices – a comparison of the use of strategies likely to enhance self-esteem in nurture groups and normal classrooms. *British Journal of Special Education*, 30 (3) 119 – 124.
- Cooper, P., and Lovey, J. (1999). Early intervention in emotional and behavioural difficulties: the role of Nurture Groups. *European Journal of Special Needs Education*, 14 (2) 122-131.
- Cullen-Powell, L., & Barlow, J. (2005). Promoting inner stillness; the value of a self discovery programme for children with social, emotional and behavioural difficulties. *British Journal of Special Education*, 32 (3) 137-143.
- Diego, M.A., Field, T., Hernandez-Reif, M. Shaw, J.A., Rothe, E.M., Castellanos, D., and Mesner, M. (2002). Aggressive adolescents benefit from massage therapy. *Adolescence*, 37 (147) 597-607.
- Fox, L., Dunlap, G. & Cushing, L. (2002). Early intervention, positive behaviour support, and transition to school, *Journal of Emotional & Behavioural Disorders*, Fall, 10 (3), 149-157.

- Goodman, R. (1997). The Strengths & difficulties Questionnaire: A Research Note, *Journal of Child Psychology, Psychiatry, and Allied Disciplines*, 40 (5), 791-799.
- Goodman, R. (2001). Psychometric Properties of the Strengths and Difficulties Questionnaire, *Journal of the American Academy of Child & Adolescent Psychiatry*, 40 (11), 1337-1345.
- Hallam and Price (1998). Can the use of background music improve the behaviour and academic performance of children with emotional and behavioural difficulties? *British Journal of Special Education*, 25 (2), 88-91.
- Khilnani, S., Field, T., Hernandez-Reif, M., & Schanberg, s. (2003) Massage therapy improves mood and behaviour of students with attention-deficit/hyperactivity disorder, *Adolescence*, 38 (2003), pp. 623–638.
- Lopata, C. (2003). Progressive Muscle Relaxation and Aggression Among Elementary Students with Emotional or Behavioural Disorders, *Behavioural Disorders*, 28 (2), 162-172.
- McLean, P. (2001). Perceptions of the Impact of Meditation on Learning. *Pastoral Care in Education*, 19 (1) 31-35
- Powell, L. A., Barlow, J. H., & Bagh J. (2005). The Self-Discovery Programme for children with special educational needs in mainstream primary and secondary schools: An exploratory study, *Emotional and Behaviour Difficulties*, 10 (3), 189-201.
- Powell LA, Gilchrist M & Stapley J. (2008) A Journey of Self-Discovery: An intervention involving massage, yoga and relaxation for children with emotional and behavioural difficulties attending primary schools. *Journal Emotional and Behavioural Difficulties*, 113 (3), 193-199.
- Pritchard, C., and Cox, M. (1998). The criminality of former "special educational provision" permanently "excluded from school" adolescents as young adults (16-23): costs and practical implications, *Journal of Adolescence*, 21 (5), 609-20.
- Renwick, F., & Spalding, B. (2002). 'A Quiet Place' Project: an of Early Therapeutic Intervention within Mainstream Schools, *British Journal of Special Education*, 29 (3), 144–150.
- Spalding, B. (2000). The contribution of a 'Quiet Place' to early intervention strategies for children with emotional and behavioural difficulties in mainstream schools. *British Journal of Special Education*, 27 (3) 129-134.
- Spalding, B. (2001). A Quiet Place: a healing environment, *Support for Learning*, 16 (2) 69-73.
- Stueck, M., and Gloeckner, N. (2005). Yoga for children in the mirror of the science: working spectrum and practice fields of the Training of Relaxation with Elements of Yoga for Children, *Early Child Development and Care*, 175 (4), 371-377.
- The Office of National Statistics (2007). Retrieved 10th January 2008 from www.statistics.gov.uk
- Viarengo, T. (1998). Multicultural Education through Meditation, *Pastoral Care in Education*, 16 (2) 4-9.
- Wieczerkowski, W. (1974). *Handanweisung für die Durchführung, Auswertung und Interpretation des AFS* (Braunschweig, Westermann).
- Wolpe, J. (1958). *Psychotherapy by reciprocal inhibition*, Stanford, CA: Stanford University Press.
- Woods, S., & White, E. (2005). The association between bullying behaviour, arousal levels and behaviour problems, *Journal of Adolescence*, 28 (3), 381-395.