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Editorial Note:
The Journal is now in its 6th volume and receives submissions from people around the world. The Editorial Team tries to make this Journal as inclusive as possible and we have been thinking about the best approach to respond to its increasing popularity and globalization, and how to maintain its quality and accessibility, in particular to clients and service-users whose first language is not English. We aim to keep this Journal free of charge and electronic so that it can be accessed by everyone. At times we may print editions for people who request it. We still need contributions from both therapists and clients, when appropriate, so that the purpose of this Journal is met in its integrity. If you are interested in contributing please see the “Instructions to Authors” at the end of the Journal. We welcome articles that are constructive and that may help people with psychological needs and on the advance of research and evidence-base practice.

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Abstract: Cognitive Behavioural Therapy (CBT) has demonstrated clinical utility as a one-to-one treatment approach for alleviating childhood psychological conditions. Less research, however, has focused on the efficacy of group-based CBT programmes for young adolescents with a wide range of psychiatric disorders. This service evaluation outlines the clinical outcome of five male adolescents who attended a 6-session CBT group programme within the Child and Adolescent Mental Health Service (CAMHS). Results revealed a significant increase in male adolescents’ self-concept after the 6-week programme. No significant differences were found in relation to depression or anxiety ratings. A qualitative component of this service evaluation highlighted a positive increase in the area of social relating. This service evaluation concludes that the benefits of group-based CBT may lie within group processes and the development of peer relationships, which may successfully improve the self-esteem of young male adolescents with mental health disorders.

Keywords: adolescent, cognitive behavioural therapy (CBT), group therapy, clinical psychology, self-concept, depression, anxiety.

1. Introduction

Cognitive Behavioural Therapy (CBT) is a structured, goal-orientated psychotherapy that has demonstrated clinical utility in the treatment of a wide range of psychological conditions (Vickers, 2002). Traditionally, CBT has been applied to the treatment of adult psychiatric disorders. Yet, more recently, research has suggested that CBT may be transferable to the
child and adolescent population (Bailey, 2001; Hirshfeld-Becker et al., 2010; Stallard et al., 2012). Such premise is further supported by the results of large-scale randomised control trials (RCTs) which have documented the effectiveness of CBT in alleviating symptoms consistent with diagnoses of adolescent depression (Wood, Harrington, & Moore, 1996), and anxiety disorders (Hirshfeld-Becker et al., 2010; Kendall, 1994). Applied to an adolescent population, the success of CBT is said to lie within the focus of deficits and distortions in thinking which are central to maintained psychological issues (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), rather than the amelioration of neurosis or behaviour, per se (Ronen, 1998). Unlike other therapeutic models, CBT views the adolescent as a collaborative partner, who works with the therapist to employ coping strategies to prevent relapse after the resolution of presenting psychological problems (Vickers, 2002).

Further research has also postulated that CBT techniques can be successfully implemented in a group environment (Vickers, 2002). Examining such notion, Garber et al. (2009) assessed the therapeutic potential of group-based CBT in the treatment of adolescent depression. Three hundred and sixteen adolescents presenting with subsyndromal depressive symptoms participated in group CBT over an 8-week period, followed by 6 monthly continuation sessions. Depressive symptoms were then re-assessed over a longitudinal period of 9 months. Results indicated that group-based CBT significantly reduced the risk of incident depression compared with usual clinical supervision, as well as significantly improving self-reported depressive symptoms. There are two points of interest here: First, this study highlights the effectiveness of group-based CBT in the amelioration of acute depressive episodes. Second, it suggests that group-based CBT programmes may present as a replicable, cost-effective treatment in the alleviation of depression, which can be coupled with psychiatric care or implemented as an individual form of psychotherapy.

On a smaller scale, Vickers (2002) examined the clinical outcome of 8 adolescents who attended a 12-session group CBT programme implemented by the Child and Adolescent Mental Health Service (CAMHS). This particular cohort presented with residual deficits but were all diagnosed with differential psychiatric conditions. Results revealed, on a measure of clinical change, that 75% of individuals showed a major improvement, with the remaining 25% of individuals showing moderate improvement, as well as a vast improvement in the area of social relating. As such, both Garber et al. (2009) and Vickers’ (2002) research suggests that group-based CBT can be successfully applied to an adolescent population, and may serve as a clinically valuable adjunct to other therapeutic models. Evidence suggests further that group-based CBT may successfully reduce a number of psychologically distressing conditions such as depression, anxiety, and deficits in social relating, which are prevalent in the child and adolescent population (Bailey, 2001).

Vickers’ (2002) study also advocates this intervention may be efficaciously implemented for adolescents presenting with diverse mental health issues. This is particularly important given research that states that receiving a mental health diagnosis can influence self-stigma (Corrigan, 2000; Corrigan, Larson, & Rüsch, 2009; Corrigan & Rao, 2013). Specifically, research postulates that the internalisation of negative stereotypes, which surround mental illness, may diminish feelings
of self-worth and inhibit an individual’s self-concept (Corrigan & Rao, 2013). Self-concept in this sense is viewed as everything that an individual knows and thinks about their self (Gazzaniga, Heatherton & Halpern, 2010). It comprises two components; self-esteem which is the evaluative aspect of self-concept (Shavelson & Bolus, 1982), and self-efficacy, which refers to one’s feelings of competency (Bandura, 1997). As such, if a group-based CBT programme can effectively increase an individual’s self-concept, it could be hypothesised that, as a result, this individual would be better able to cope with the self and public stigmatisation which accompanies their mental diagnosis (Corrigan & Rao, 2013; Sacca & Ryan, 2011).

In light of such research, the current service evaluation aims to evaluate the clinical utility of a group-based CBT programme for young adolescent males in a Tier 3 CAMHS. It employs a mixed methods approach, encompassing both a quantitative and qualitative measurement of clinical change. Building upon previous research by Vickers (2002), this service evaluation employs the Beck Youth Inventory (BYI-II; Beck, Beck, Jolly, & Steer, 2005) to provide a quantitative measure of pre and post clinical assessment. It also encompasses a qualitative component by assessing the views of the young adolescents and parents in the evaluation of behavioural change. Accordingly, it is hypothesised that after a 6 session group CBT programme, there will be a significant decrease in male adolescent’s self-reported depression and anxiety, and a significant increase in their self-concept. It is also predicted that group-based CBT will enhance these young male adolescents’ social interaction skills, with qualitative analysis revealing an improvement in the area of social relating.

2. Method

Participants
Six adolescent males aged 10 to 16 (Mage = 13 years, SD = 1.67) were referred to 6 week group-based CBT by their clinical psychologist at a Tier 3 child and adolescent mental health service (CAMHS). All 6 adolescents were considered suitable for the programme as they presented with low mood and negative thoughts. Three of the male adolescents also had a diagnosis of Autistic Spectrum Disorder (ASD), which was classified as mild to moderate in severity. These individuals were referred as they presented with anxiety and difficulties relating to their social and communicative skills. Previous research highlights the effectiveness of group-based CBT in reducing anxiety in children with high-functioning autism (Reaven, Blakeley-Smith, Culhane-Shelburne, & Hepburn, 2012). This formed the rationale to include individuals with a diagnosis of ASD in the current service evaluation. It was thought that this group-based CBT programme would provide a safe, familiar environment which would facilitate social and communication skills for adolescents presenting with differential psychiatric diagnoses. Out of these six adolescents, five successfully completed the group-treatment programme (83%), leaving usable data for five males.

Ethical Considerations
Ethical approval was sought by the clinical organisation before commencement of the 6-week group CBT programme. Informed consent was obtained from both the parents and adolescents upon referral. Parents were made aware that the programme's effectiveness would be evaluated. Additionally, they were informed that all collected data would only be reported in aggregate and anonymised form. Both the consent forms and questionnaire responses were filled in each adolescent’s personal psychiatric file. This file is confidential and can only be accessed by the adolescent’s care coordinator and clinical psychologist. Data was retained for a period of 4 weeks in which both parents and adolescents were given the option of withdrawing. An experienced clinical psychologist and nurse practitioner led the CBT sessions and also monitored the quality of the programme. The male adolescents were explicitly told that they were able to leave the group sessions at any time and were given the opportunity to withdraw from the programme at any given time. All the male adolescents who participated in the group CBT programme also had a care coordinator and care team who were updated with their progress throughout.

Setting

In accordance with Vickers’ (2002), the group was a ‘closed’ group therapy design, with group sessions held for one hour every week for a total of six weeks. Three healthcare professionals led the sessions, specifically, a Clinical Psychologist, Nurse Practitioner and an Honorary Assistant Psychologist. All three healthcare professionals were familiar with CBT and had implemented this intervention previously in individual therapy sessions. All group-CBT sessions were conducted in a large, open plan room within CAMHS, with a row of eight chairs directed towards a large whiteboard at the front of the room. The three healthcare professionals facilitated the group each week, alternating tasks and dividing the group into two when certain activities commenced. Group sessions were relaxed and informal, providing a place for the adolescents to learn and to develop new friendships.

Intervention

The group-based CBT programme was developed by two clinical psychologists at CAMHS and evaluated by a nurse practitioner and assistant psychologist before implementation. All healthcare professionals who worked and implemented the programme are experienced in both CBT and clinical practice. All group sessions followed the structured and collaborative approach typical of CBT (Vickers, 2002). Each session included setting the agenda and presenting a brief overview of the session, a statement of goals, a review of the preceding week and any home activities that were completed and therapist-assisted practice of the activities given. Homework was agreed, which involved various tasks practiced in the session, coping and relaxation strategies, and problem-solving skills. In line with Bailey’s (2001) recommendations, each session closed with a summary and feedback from the young adolescents.

In order to examine the effectiveness of the 6-week group-based CBT programme, all adolescents completed a self-report measure of anxiety, depression and self-concept (Beck et
al., 2005) at the start of the programme (session 1) and again at the end of the programme (session 6). A clinical psychologist was on hand to assist the adolescents when completing these measures, for example, answering any questions that arose, but was careful to not influence any responses. This evaluation comprised of a blind design. Specifically, the adolescent males were not aware that their responses of clinical change would be utilised to examine the effectiveness of the programme until all responses were finalised.

Sessions

Session 1 provided an overview of the group package, and aimed to introduce each individual to other members within the group. The group were then socialised to the model of CBT (Beck, 1976) and were informed that in order to benefit from the therapy they would have to be prepared to practice their newly learnt skills at home. Session 1 also defined the rules for group process, including confidentiality, turn taking, attendance and conflict resolution (Vickers, 2002).

Session 2 focused on emotional recognition. Accordingly, the group analysed the heterogeneity between thoughts, feelings and behaviours with each individual providing a real life example. This enabled the young adolescents to start linking emotions with thoughts and specific events. The therapist then gave an operational definition for each concept in order to resolve any discrepancies within the group. Individuals were then presented with a series of hypothetical situations and were asked to identify a thought, feeling and behaviour consistent with the given situation.

In session 3, individuals were taught the difference between feeling sad and feeling depressed and were taught to detect negative automatic thoughts (NATS). The group were then taught the process of cognitive restructuring, specifically, how to challenge their automatic negative thoughts and their underlying core beliefs and assumptions. Each individual then gave a specific example of a situation whereby they were confronted by their automatic negative thoughts and were taught coping strategies that they could employ in future situations. The group then discussed whether these thoughts were rational and provided alternative positive thoughts which could be implemented. In this respect, the young adolescents acted as co-therapists, supporting their peers and collaborating in group discussions.

Session 4 focused on anxiety, with individuals defining what anxiety was and giving a specific example of a situation where they have felt anxious. The physiological symptoms of anxiety were discussed and individuals were taught various anxiety management skills, such as applied relaxation and positive imagery. Specifically, the group listened to a relaxation CD, and were taught breathing techniques and how to relax. Each individual then received a copy of the relaxation CD to take home.

During session 5, the first recapped the homework given in session 4. Specifically, adolescents were asked whether they had listened to the relaxation CD and whether they had found it beneficial. The majority of the adolescents agreed that they had found the CD helpful and it had taught them how to relax in situations where they may not have the CD available to them. A few expressed their concerns that they would forget to use the CD in a stressful or anxiety-provoking situation as their thoughts and feelings would take over. The lead clinical psychologist explained that by
utilising relaxation strategies the adolescents would be able to overcome such negative thoughts and feelings. The adolescents were then taught an alternative strategy to employ. Here, the therapist modelled how to challenge negative thoughts by using a thought diary. The young adolescents were taught to self-rate distress or discomfort on a scale of 0-10. Consistent with Bailey (2001), the aim of this activity was to enable the child to recognise certain triggers and early signs of anxious arousal. Each individual then discussed various ways of coping with negative thoughts and how such negative thoughts could be turned into more balanced, rational thoughts.

Clinical Outcome Measure

Individuals completed three questionnaires taken from the Beck Youth Inventory (Beck et al., 2005), specifically the Beck Depression (BDI-Y), anxiety (BAI-Y), and self-concept inventory (BSCI-Y). These measures were administered prior to adolescents engaging in the group-CBT programme and once again upon completion. Each Beck Inventory questionnaire comprises 20-items based on a likert scale of 0 (never) to 3 (always). The Beck Depression Inventory (BDI-Y) identifies symptoms of depression, using items which reflect respondents’ negative thoughts about themselves, their life, and future, feelings of sadness and psychological indications of depression. The Beck Anxiety Inventory (BAI-Y) reflects the individuals fear and psychological symptoms associated with anxiety. The Beck Self-Concept Inventory (BSCI-Y) explores the individual’s self-perceptions, potency and positive self-worth.

In session 6, as means of relapse prevention, the group-treatment programme was recapped and each individual gave an example of what they had learnt. Each member of the group also received a booklet which summarised each session within the group-CBT programme. The booklet also consisted of activities that each individual could practice at home in order to reduce negative thoughts, feelings and anxiety. The final activity was for each adolescent, and the group facilitators, to write something positive about each other on a poster that each adolescent could take home, thus, further enhancing each their self-perception.

3. Results

Each Beck Inventory Youth measure was subjected to a dependent samples $t$-test. This statistical analysis was deemed appropriate in order to examine clinical change before and after completion of a 6-week group-based CBT programme (Field, 2013).

Beck Depression Inventory for Youth (BDI-Y)

A dependent samples $t$-test was conducted to examine whether group-based CBT can successfully decrease depression ratings in young adolescent males. Results indicated no significant difference between adolescents depression ratings before group-based CBT ($M = 17.40, SD = 14.43$) compared to after group-based CBT ($M = 17.60, SD = 16.70$), $t(4) = -0.056, p > .05$. These results suggest that there is no significant evidence that this 6 session group-CBT programme can effectively reduce depression in adolescent males.
Beck Anxiety Inventory for Youth (BAI-Y)
To analyse whether group-CBT is effective in decreasing adolescent anxiety, adolescents self-reported anxiety ratings were subjected to a dependent samples t-test. Contrary to prediction, results revealed no significant difference between adolescents’ anxiety scores before group-based CBT ($M = 25.20, SD = 16.96$) compared to after group-based CBT ($M = 19.80, SD = 24.35$), $t(4) = 1.20, p > .05$. In accordance with depression, therefore, this 6 session group-based CBT programme was not successful in reducing adolescent anxiety.

Beck Self-Concept Inventory for Youth (BSCI-Y)
A dependent samples t-test revealed that adolescents self-concept significantly increased from before ($M = 32.80, SD = 16.42$) to after group-based CBT ($M = 40.60, SD = 17.95$); $t(4) = -2.80, p < .05, r^2 = .66$. In accordance with the hypothesis, these results suggest that this 6 session group-based CBT was effective in increasing adolescents’ self-concept and self-perceptions. See Figure 1 for the overall mean Beck Youth Inventory response scores.

**Figure 1.** Mean ratings of adolescent’s self-reported depression, anxiety and self-concept before and after a 6 session group-based CBT programme. Error bars indicate standard errors of the mean.

Social Relating: Qualitative Component
After participation, the young male adolescents and their parents completed a 5-item open-ended questionnaire that asked them to evaluate the 6-week group CBT programme. For example, adolescents were asked; “What aspects of this programme did you enjoy?” “What could be improved?” and “Would you like to see this programme continued for other children?” Parents were asked; “Have you seen a difference in your child’s behaviour since the start of this programme?” Upon analysis of this qualitative feedback, all of the adolescent’s parents reported that they had seen a positive increase in their child’s social relating skills over the course of the group-based CBT
programme. This is evidenced in the following transcripts:

- **Parent A:** “He was able to meet children he felt comfortable with and made friends. He now talks more about children in his own school”.

- **Parent B:** “He has enjoyed meeting and mixing with other children and the group has encouraged him to join social clubs”.

In a similar vein, all of the young adolescents who participated in the 6-session CBT programme reported that they had a positive experience. This is, again, evidenced within the following transcripts:

- **Adolescent A:** “The best part of the group was making friends”.

- **Adolescent B:** “I made friends with lots of the group, I am going to Sam’s* house next week for tea”. (*Name changed for confidentiality purposes).

A clinical observation supported these views, indicating that the group-based CBT programme had been effective in improving young male adolescents’ communication and social skills, with friendships also translating outside of the clinical environment. These qualitative responses therefore suggest that group-based CBT may provide a safe, contained environment that enables the development of social interaction skills, creates social cohesion and improves social relating.

### 4. Discussion

The aim of the current service evaluation was to investigate the efficacy of a 6-week group CBT programme for five young adolescent males in a Tier 3 mental health service (CAMHS). Upon completion of this 6-week programme, it was hypothesised that there would be a significant decrease in adolescents’ self-reported depression and anxiety, and a significant increase in their self-concept. Results revealed no significant decrease in self-reported depression or anxiety, but a significant increase in adolescents’ self-concept.

As a means of improving previous research, the current service evaluation encompassed Vickers’ (2002) recommendation for a measure of pre and post clinical change, using specifically the Beck Depression Inventory (Beck et al., 2005). Yet, this resulted in contrary findings in comparison with Vickers’ (2002) who concluded that, upon completion of a group-based CBT programme, 75% of individuals showed a ‘major improvement’, with the remaining 25% of individuals showing ‘moderate improvement’. In comparison to Vickers’ (2002) who conducted a 12-session group-based CBT programme, the current service evaluation examines the effectiveness of a 6-session group programme. As such, it may be that the current service evaluation was unable to replicate Vickers’ (2002) findings due to the short-term nature of this programme, which may have inhibited a successful outcome of clinical change.

A converse notion, however, suggests that the heterogeneity between these results may be due to the differential measurements used to assess clinical change. For example, Vickers’ (2002) categorised the effectiveness of group-based CBT in line with self-reported qualitative feedback from the adolescents, their carers and teachers. This raises questions regarding the reliability and validity of Vickers’ (2002) clinical classifications as the differentiation of major and moderate clinical change lacks clarity. Specifically, it is unclear
what constitutes as moderate or major clinical change and how this was validated. Arguably, this highlights the need for more objective measures of clinical change, such as the Beck Inventories for Youth questionnaires.

Utilising such recommended measures, the current service evaluation also hypothesised that there would be a significant increase in adolescents self-concept after the 6 week group-based CBT programme. Results confirmed this hypothesis, suggesting that group-based CBT may be an effective means to increase adolescents’ self-perceptions, potency and positive self-worth. Given research which highlights that individuals with a mental health diagnosis frequently experience self-stigmatisation and negative self-perceptions (Corrigan, Larson, & Rüsch, 2009) as a result of the public stigma surrounding mental illness (Vogel, Bitman, Hammer, & Wade, 2013), it is essential that healthcare professionals and researchers find effective ways to ameliorate the negative phenomenon of public and self-stigma. Existing research suggests further that individuals who experience self-stigma suffer from lowered self-esteem (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001; Priest, 1992), increased depression (Manos, Rüsch, Kanter, & Clifford, 2009) and hold negative attitudes towards psychological treatment (Conner et al., 2010). As the current group-based CBT programme was effective in increasing young male adolescent’s self-perception, it may be that such treatment package may have real world implications that translate outside the clinical environment. For example, by increasing the self-perceptions of individuals with a mental health diagnosis, this may result in less self-stigmatisation and allow these individuals to better cope with the public-stigma that surrounds them in everyday life situations (Sacca & Ryan, 2011).

Evolutionary theories regard feelings and emotions not just as intrinsic experiences (inside people’s minds) but as a form of information about the self in interaction with the environment; therefore, emotion, perception and action are inextricably linked (See Safran & Segal, 1996). Evolutionary psychology (see Stevens & Price, 2000) views the human mind as a product of evolution; it is concerned with identifying the problems that our ancestors faced and the adaptations that evolved to solve these problems. Emotional systems, which are often adaptive, survive through processes of natural selection whilst maladaptive systems are selected out of existence.

Evolutionary theorists see emotional systems as relatively independent systems of mental events and action potentials. Brains have a tendency to function as a set of semi-autonomous subsystems, almost as if a number of different and competing systems have the potential to operate and decide which system to use when faced with an emotional encounter. Emotional states, processes and systems which have been adaptive to human needs have been selected by our brains to use them more often in similar circumstances. However, this does not explain how depression, a non-adaptive emotional process, still is selected by our brains as an adaptive state in certain circumstances.

Beck and Emery (1985) postulates that depression does have an adaptive function. Historically when supplies of food were low, or when access to powerful figures may have been limited (e.g. in times of tribal conflict) depression may have acted as a type of hibernation behaviour to either conserve body energy levels or else to keep quiet and hidden. Hagen (2002) proposes a bargaining model of depression; following an aversive life event the
depressed person undergoes something akin to a ‘work strike’. This view suggests that depression, similar to a phobic response, at times has a useful function but often exists out of context with the existing social setup and takes on an exaggerated form out of alignment with current need.

**Limitations**

A limitation of the study was the relatively small sample size, which may have prevented any significant statistical change from being detected in the measures of anxiety and depression (Button et al., 2013). Nevertheless, this sample size represents the typical size group utilised in group-based CBT programmes and also highlights the amount of eligible participants who were recognised to benefit from this group package at the time of enrolment. It is argued that a larger group size would impact the quality of therapy that these individuals would receive and may impinge the potential success of group-based therapies. This is supported by Whitfield (2010) who states that “it is clear that the experience of attending an ‘intimate’ small CBT group of five will be very different from that of attending a large psycho-educational didactic group with little interaction between group members” (p. 221). In addition, the self-reported quantitative measures of anxiety, depression and self-concept (Beck et al., 2005) may have not been sensitive enough to detect clinical change over a 6-week period (see Allison & Abraham, 2001). In other terms, the male adolescents may not have been able to reliably self-report – via quantitative measures – that the group-based CBT programme influenced a change in any one of their psychological constructs (ibid). One solution to this issue would be to run numerous group-based CBT programmes across the 5 boroughs of CAMHS and collate data to provide a larger sample size. Furthermore, larger group sizes would allow for the investigation of moderating variables which may influence successful treatment response, such as age, gender, severity of core autistic symptoms, intellectual functioning and the presence of comorbidity (Reaven, 2012).

Of central importance, therefore, are the results gathered from the qualitative component of this service evaluation. Here, both the male adolescents and their parents reported that participation in the group-CBT programme had encouraged and improved social communication skills, enabling them to make friendships. From this perspective, the success of group-based CBT programmes may stem from the facilitation of group processes, which in turn may successfully improve the self-esteem of young male adolescents with mental health disorders. Furthermore, this promotes the group processes that differentiate group-based CBT from CBT provided as a therapeutic modality for individual patients (Vickers, 2002). From this perspective, the current programme may have provided a normalising and de-stigmatising environment for adolescents with mental health disorders to interact and socialise (ibid).

A second limitation concerns the format of measures utilised to evaluate this 6-week group-based CBT programme. For instance, self-report measures of depression, anxiety and self-concept (Beck et al., 2005) were utilised to measure pre and post clinical change. However, such measures may be problematic for adolescents with ASD because of social communication limitations (Little, Sideris, Ausderau, & Baranek, 2014). A solution, here, is to employ a parent-report measure or to
obtain both the adolescents and the parents reports regarding depression, anxiety and self-concept following the 6 week programme (e.g. Chalfant, Rapee, & Carroll, 2007; Vickers, 2002; Little et al., 2014). As such, both adolescents and parents responses could be correlated to examine whether the adolescent’s personal beliefs about clinical change also reflect their parents and to further examine any behavioural changes, which may have translated outside of the clinical environment. From this perspective, a 6-month follow up measure would have been beneficial in order to assess the long-term effectiveness of this group-based CBT programme. Whilst the results reflect statistically significant increases in self-concept, determining the clinical significance for this cohort is essential (Jacobson, Roberts, Berns, & McGlinchey, 1999). Specifically, improvements in self-concept and in the area of social relating may be contextually dependent. For instance, the safe and controlled environment of CAMHS may have promoted communication and social skills between the male adolescents, which in turn may have increased the adolescents self-concept. As such, these improvements may not be present in the school environment or in activities that reside outside of CAMHS.

5. Conclusion

This service evaluation assessed the effectiveness of a 6-week group-based CBT programme with five adolescent males. Results indicate that group-based CBT was effective in increasing self-concept, but did not significantly reduce self-reported depression or anxiety. The increase in the adolescents’ self-concept is of central importance here, as studies have revealed that self-stigmatisation can hinder timely psychiatric diagnosis, treatment, and recovery (Corrigan, 2004; Vogel et al., 2013). Therefore, if group-based CBT is effective in increasing an individual’s self-concept, and thus, their self-perception and potency, such treatment package may interest clinical organisations whose aim is improve the psychological wellbeing of individuals with a mental illness. Furthermore, the high completion rate (83%) of the current service evaluation suggests that group-based CBT may be a successful, replicable and cost-effective treatment package, and provides further confirmation that CBT is readily adapted for use in a group setting (Vickers, 2002). As such, group-based CBT programmes may present as a useful clinical adjunct to other forms of psychotherapy, which can be disseminated to individuals with a wide range of psychiatric difficulties.

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Potential Conflicts of Interest
The author declares no conflict of interest.
Author’s biography
Charlotte is a PhD candidate and Graduate Teaching Assistant in the Department of Psychology at Edge Hill University, Liverpool, United Kingdom. Charlotte is also a Honorary Assistant Psychologist for a Child and Adolescent Mental Health Service (CAMHS). Her predominant research interests lie within reducing mental health-related stigma and improving the psychological wellbeing of individuals affected by mental illness.

References


Research Report

**Prevalence of Alternative Therapies amongst Children with Cancer**

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**Abstract:** The objective of this research was to compare the use of alternative therapy (AT) in families of children with cancer with its use in those with routine pediatric conditions. We hypothesized that AT was used more frequently among the families of children with cancer. Using a prevalence survey design, we interviewed 81 parents of children with cancer attending a pediatric hematology/oncology clinic and 80 parents of children attending a continuity care clinic for routine check-ups and acute care. We explored the types of AT being used, the reasons for its use, and the frequency with which it was discussed with the patient's physician. Overall, 65% of the cancer group were using AT, compared with 51% of the control group. This was not statistically significant. Prayer, exercise, and spiritual healing were three AT practices most often used by the cancer group, and prayer, massage, and spiritual healing by the control group. Discussion of AT with the physician varied according to group, with 53% of the cancer patients discussing its use; income level, with 59% of parents in the higher income group discussing its use; and ethnicity, with 47% of whites discussing its use. Use of AT is not limited to the families of children with life-challenging illnesses, but is commonly used by those of children with routine pediatric problems. Pediatricians need to be aware that their patients may not tell them about AT practices they are using in addition to prescribed treatment.

**Keywords:** alternative therapies, prayer, children, cancer, continuity care
1. Introduction

Alternative therapy (AT), also known as complementary, non-allopathic, unconventional, holistic, or natural therapy, refers to healing practices that have become increasingly popular with the general public, but are not widely accepted by the medical profession. Examples of AT techniques include therapeutic massage, acupuncture, imagery, energy healing, prayer, and use of medicinal herbs. According to 1990 data, the number of visits to practitioners of AT was greater than the number of visits to all primary care physicians nationwide. Reasons patients use AT include a belief that it will cure or help a condition not treatable by conventional medicine, dissatisfaction with allopathic medicine, and a desire to use more natural methods of healing.

It is estimated that Americans spend >$10 billion a year on unproven cancer remedies. AT is thought to be used more frequently in patients with cancer than in patients with minor illnesses. According to Fletcher, between 20% and 50% of cancer patients use or consider using AT. Although much research has been conducted on its use by adults with cancer, only two previous studies have focused on its use by children with cancer and their families. In the first, Faw et al in 1977 investigated use of AT among families of 69 children with cancer at M D Anderson Cancer Center and reported a rate of 9% using, and an additional 6% having considered using, AT. A more recent (1994) Australian study by Sawyer reported that 46% of the 48 children and families studied had used at least one AT. Less than half the parents had informed their physician about it.

Neither of the two previous investigations included a control group of noncancer patients for comparison. Using a cross-sectional prevalence survey design, our study included a control group of children without cancer attending a continuity care clinic for acute care and routine check-ups. We hypothesized that the families of children with cancer use more AT than those of children without. We describe the AT techniques used in our study population, the reasons for its use, and the frequency with which AT was discussed with the patient's physician.

2. Materials and method

Subjects

The subjects of this study were 161 parents of children 0 to 21 years of age attending a university hospital outpatient clinic. Eighty-one were cancer patients attending the hematology/oncology clinic; the 80 control patients were attending the continuity care clinic for routine check-ups and acute care. A convenience sample comprising consecutive subjects seen at these clinics were asked to participate. Written informed consent was obtained.

Measures

The interviewers (T.F. and W.S.) described the study and our definition of AT to the parents. If any parents were confused about a specific AT, they could clarify the term with the interviewer. The parents completed a self-administered 30-item questionnaire that included socioeconomic and demographic items (sex, age,
race, income, marital status, education, and size of community). Parents of the children with cancer were asked about the specific malignancy/diagnosis, date of diagnosis, and cancer status at the time of the survey (currently in remission or with cancer recurrence). Both study groups were asked about their use of conventional therapies for their child and their satisfaction with them. The patterns of AT use were investigated, including reasons for use, sources of information about AT, parental satisfaction, and whether AT use was discussed with their medical care providers.

The questionnaire also asked whether parents used AT to treat their own medical conditions. Parents of the control patients were asked whether they would use AT if their child had a curable or incurable form of cancer. In addition to multiple choice and yes/no questions, parents were encouraged to answer open-ended items concerning comments about AT and about this study. Before completion, parents had an opportunity to discuss the questionnaire.

### Statistical Analysis

Statistical analyses were performed with the Statistical Analysis System (SAS Institute, Cary, NC). Contingency tables were constructed, and $\chi^2$ statistics were used to test the association between study group and categorical factors. To adjust for differences in the distribution of sociodemographic characteristics of the case and control groups, we performed multivariate analyses using logistic regression. The use of specific AT techniques were recorded as a set of dichotomous variables. Family income, ethnicity, and marital status were associated with AT use. We adjusted the group comparisons by ethnicity, family income, and marital status.

### 3. Results

#### Diagnosis

The control patients attended clinic most often for otolaryngeal (ear, nose, throat) or skin problems or for routine check-ups. Among the cancer patients, the most common malignancy diagnosis was leukemia (30%), followed by Ewing's sarcoma (22%) (Table 1).

#### Demographic Factors

The two groups were similar with regard to patient sex, parental education, or community size. The distribution for ethnicity, family income, and marital status, however, differed (Table 2). There were more white families in the cancer group than in the control group. Also, more than half of cancer families earned >$20,000, compared with only 25% of the control families in this same income bracket. Overall, 65% of the cancer group and 51% of the control group were using some form of AT. When prayer was excluded, 42% of the control group and 45% of the cancer group were using AT.

#### Table 1. Patient Visit Type
controls. Neither group used hypnosis as an alternative therapy.

Reasons for AT Use and Sources of Information

Parents gave several reasons for the use of AT, most commonly a faith in the healing powers of prayer or a belief in the specific therapy (Table 4). However, 60% (97/161) of parents did not provide specific reasons. Only 5 stated a dissatisfaction with conventional therapy. We found no association between parental dissatisfaction with conventional medicine and use of AT ($P = .38$). Among patients using AT, 59% (30/51) of parents of children with cancer and 56% (23/41) of control parents had most often obtained information about AT from family and/or friends (Table 5).

Communication With Physician

Parents were asked whether they informed their physician about giving their child alternative therapy (Tables 6 and 7). Among patients using AT, only 22% (9/41) of the cancer group and 5% (3/60) of the control group compared with the cancer group had discussed AT use with their physician. Families of controls with an income of <$20,000 or non-white controls were less likely to discuss the use of AT with their physician.
Table 4. Reasons for Use of AT

<table>
<thead>
<tr>
<th>Reason for Use of AT</th>
<th>Cancer Patients (N = 81)</th>
<th>Control Patients (N = 80)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>No reason given</td>
<td>47</td>
<td>58.0</td>
</tr>
<tr>
<td>Faith, spiritual</td>
<td>17</td>
<td>21.0</td>
</tr>
<tr>
<td>Supplement to conventional medicine</td>
<td>6</td>
<td>7.4</td>
</tr>
<tr>
<td>Dissatisfied with conventional medicine</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Lifestyle, general well-being</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Want to help</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Support, participation in illness</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Hope</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Belief in treatment</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Relaxation</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 5. Among Patients Using AT, Sources From Which Parents Received Information About AT

<table>
<thead>
<tr>
<th>Source</th>
<th>Cancer Patients (N = 51)</th>
<th>Control Patients (N = 41)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Friends and family</td>
<td>30</td>
<td>58.8</td>
</tr>
<tr>
<td>Other</td>
<td>15</td>
<td>29.4</td>
</tr>
<tr>
<td>Doctor</td>
<td>8</td>
<td>15.7</td>
</tr>
<tr>
<td>Health food store</td>
<td>5</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Table 6. Among Patients Using AT, Number of Parents Who Discussed Using AT With Physician

<table>
<thead>
<tr>
<th>Discussed With Physician</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer patients</td>
<td>53</td>
<td>27</td>
</tr>
<tr>
<td>Control patients</td>
<td>22</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 7. Among Patients Using AT, Number of Parents Who Discussed Using AT

<table>
<thead>
<tr>
<th>Discussed With Physician</th>
<th>&gt;$20k</th>
<th>&lt;$20k</th>
<th>White</th>
<th>Non-white</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Cancer patients</td>
<td>60.0</td>
<td>18</td>
<td>30</td>
<td>42.1</td>
</tr>
<tr>
<td>Control patients</td>
<td>55.6</td>
<td>5</td>
<td>9</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Other Factors

The number of parents using AT for their own ailments did not differ between cancer and control groups, but parents who themselves used AT were more likely to use it for their children. Seventy-three percent of parents in the cancer group and 92% of parents in the control group who used AT were likely to give their children AT. Of the control parents, 32% said they would
use AT if their child had cancer, regardless of whether the cancer was considered curable by conventional therapy.

4. Discussion

This study compares the use of AT between a cross-sectional sample of families of children with cancer and a population of children being seen for routine care. Our data show that use of AT is not limited to children with life-challenging illnesses, but is commonly practiced by those with routine medical problems.

The definition of AT is controversial. The word alternative is misleading, implying a therapy used instead of or in place of conventional therapies. It may also carry a pejorative tone, implying a therapy inferior to conventional treatment. Many AT techniques may be considered part of standard medical therapy. For example, relaxation techniques, imagery, and self-hypnosis are frequently taught by oncology personnel to assist children with painful procedures. Although some of these therapies are used in our hospital, it is interesting to note that massage therapy and relaxation techniques were used more often in our control group than in our cancer group. Many parents questioned the inclusion of prayer as an AT. We included it when it was being used specifically to treat illness, because few physicians prescribe prayer or consider it part of standard therapy. Religion and spirituality are not consistently addressed in medical school curricula, and even may be considered inappropriate teaching subjects. However, physicians are beginning to recognize the role of spirituality and prayer in the healing practices of their patients, as indicated by conferences sponsored by the National Institutes of Health.

In this study, we investigated use of AT as an adjunct to conventional therapies. By definition, none of our subjects had refused standard medical treatment, although we did no formal compliance assessment. We defined AT as any practice not prescribed by a physician or not considered a proven medical treatment. Different definitions of AT may explain different results across studies. Although we excluded over-the-counter medications, we did not limit our definition to specific AT techniques, as may have been the case in previous studies. We found that children attending a general pediatric clinic were using AT much more often (51%) than those in a 1994 Canadian study (11%) that defined AT as being provided by a practitioner, thus excluding home remedies, prayer and exercise, and other commonly used therapies. After excluding the latter from our analysis, however, 39% of our patients still were using AT, which remains a rate higher than that in the Canadian study.

There were also differences in types of AT practices in our study compared with others. The Canadian patients were more likely to use homeopathy, naturopathy, and acupuncture, and the Australians hypnotherapy, mental imagery, and relaxation. Our patients used prayer, massage, spiritual healing, and relaxation most often and acupuncture or homeopathy rarely. Whereas spiritual healing was often used by our cancer group, they were used by only a small percentage of Australian patients. These differences may be attributable to cultural or ethnic factors, and might be investigated further by cross-cultural surveys.
Prayer was used by many in both our groups, but significantly more in the cancer group. The ordeal of having a child with cancer may lead parents to embrace formal or informal spiritual practice for comfort and strength. Prayer as therapy has been studied widely, and the evidence is mixed. Marwick\textsuperscript{7} reviewed 115 articles on prayer and health outcome: 37 showed a positive effect, 47 a negative effect, and 31 showed neither. King and Bushwick\textsuperscript{6} found that many patients wished their physicians would ask about their spiritual lives. According to their results, 48\% expressed they would like their physician to pray with them, and 42\% believed that a physician should ask patients about spiritual experiences.\textsuperscript{6}

These findings suggest that many Americans use prayer and faith healing as a therapeutic adjunct. Discussions of spiritual practices may improve well-being and compliance. In a much reported study, Byrd\textsuperscript{10} conducted a randomized, double-blind study of 393 patients, in which patients on the University of California, San Francisco, coronary care unit were prayed for by various religious groups who had only their first name and a brief description of their condition.\textsuperscript{10} The test patients and families did not know they were being prayed for. Fewer patients in the prayed-for group died, and significantly fewer developed pulmonary edema, received antibiotics, or needed intubation. The researchers concluded that the prayed-for group endured less suffering. Although this study has been criticized for its design, it shows the important role that prayer may play in illness.\textsuperscript{8}

Given the high frequency of AT use, physicians should make a habit of asking their patients about it. Several studies have shown that parents fear telling their doctors that they are practicing AT. Although such discussions may seem difficult, Spigelblatt emphasizes an approach that may help physicians open communication lines.\textsuperscript{9} She suggests that 1) physicians inquire regularly about AT; 2) such inquiry be made in a nonjudgmental manner; and 3) the physician be knowledgeable about the implications of AT use. This means developing a working knowledge of a rapidly growing literature. Patients may have misperceptions about AT that the physician can clarify; doctors should also be prepared for patients to present literature and ask for advice.

About half of 120 US medical schools now include course work on AT and other integrative health approaches, thus new physicians will have a greater knowledge of this major trend in self-care by the public. Pediatricians need to realize that many children and their families are practicing AT, and that such use is not limited to life-challenging illnesses such as cancer. As its use continues to rise, only through scientific research and effective communication can caregivers serve their patients optimally.

Downer found that patients using AT were significantly more anxious than those using only conventional therapy.\textsuperscript{11} Patients may turn to AT out of anxious or hopeless feelings, perhaps from an unfavorable prognosis. Fletcher believes imparting hope is a professional responsibility of physicians,\textsuperscript{3} because pessimism may lead patients to seek AT out of a false sense of hope in its efficacy.\textsuperscript{3,11} This does not imply that physicians need be deceptive and so undermine trust in situations involving unfavorable prognoses. Parents in our study did not turn to AT because of dissatisfaction with conventional medicine, but rather because of beliefs in its efficacy. As with Sawyer's Australian study\textsuperscript{5} and Downer's English study,\textsuperscript{11} parents felt a strong urge to help their children in ways unique to them to counter their own feelings of helplessness.
A potential limitation of our study is that the control patients did not have serious illnesses. Future studies should consider matching cancer and control groups more closely in terms of illness severity and chronicity, perhaps comparing cancer with cystic fibrosis, diabetes, or transplant patients. Cross-cultural studies of patients with similar cancer diagnoses and treatment modalities are also needed. Studies should also compare patients who seek AT practitioners with those who self-administer AT.

Another limitation of our study was that it was cross-sectional. Large-scale longitudinal prospective studies would reflect changes in the use of AT as a function of changes in the patient's status. Our study also did not evaluate compliance or outcomes. Differences in both compliance and illness outcome among AT users and non-AT users are of obvious importance.

Potential Conflicts of Interest
The author declares no conflict of interest.

References
Clinical Case Report

**Behavioural Considerations Associated with Traumatic Brain Injury in childhood**

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*Florida, USA*

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**Abstract:** Children who sustain traumatic brain injury (TBI) can experience significant cognitive deficits. These deficits may significantly impair their functioning in the classroom, resulting in the need for academic and behavioural modifications. Behaviour and social problems can be the direct or indirect result of brain injury. Difficulties in paying attention, staying on task, and predicting the consequences of actions may be associated with behaviour problems (M. Ylvisaker, T. Feeney, & F. Szekeres, 1998). A neuropsychological evaluation provides information to parents and teachers about the extent of the child’s cognitive deficits and explains cognitive strengths and weaknesses. When teachers are provided with this information, they are able to develop appropriate strategies to optimize the child’s ability to learn and function in the classroom.

**Keywords:** School, failure, TBI, brain injury, behaviour

1. **Introduction**

Children who sustain traumatic brain injuries (TBI) have impaired functioning in many areas, including neurologic and endocrine, neuromuscular and orthopedic, neurocognitive, and neuropsychiatric (Guthrie, Mast, Richards, McQuaid, & Pavlakis, 1999). The extent of these deficits is not fully understood or evident immediately after the injury. Even after acute hospitalization and rehabilitation, it is difficult to know the child’s recovery process. Although the word “recovery” is used frequently during the healing process, the implication may be better
expressed with the word “improvement.” With recovery linked to a return to normal, parents may develop unrealistic hopes (Lezak, 1986). Immediately after the injury, parents are focused on whether the child will live, and they may not be able to think about any subsequent physical, motor, cognitive, and behavioural deficits that may result from the injury. In addition, there is little information about the recovery process or the time required to recover. Moreover, when information is provided in the acute setting, parents often are unable to hear or understand what is being said to them. All they know is that they want their child back. However, when the child enters an educational environment, many factors affect the way the child learns and behaves. Children who have obvious physical deficits associated with their TBI are most easily understood, and accommodations are readily provided. When a child enters the classroom in a wheelchair or with a walker, we as educators are quickly reminded that the child has sustained injuries. In contrast, when children are seemingly age-appropriate (e.g., walking and talking with no obvious physical deficits), it is easy to assume that they have made a complete recovery and require no academic or behavioural assistance. If the child had a cast on his or her head, that would serve as a reminder that the child will require modification, academically and behaviourally, for some time.

2. Psychosocial Effects of TBI

During the initial phase of recovery from the TBI, the primary focus of parents and family is on the recovery of the child, and there is little evidence to support family dysfunction (Anderson et al., 2001; Lezak, 1986). Although the family may experience stress and fatigue, they remain hopeful for a full recovery, with the stressors masking any significant family problems or dysfunction (Anderson et al.). They focus on minute signs of improvement, believing that when they take their child home, all will return to normal. Parents often assume that once their child is with family and friends, recovery will be quick. However, as time passes, the hope for a complete recovery becomes less evident, especially for the child who has sustained a severe head injury, and permanent difficulties become more evident. Lezak described stages in the evolution of family reactions when a child has sustained a TBI. During the six stages, the caregiver’s perception of the child is described initially as a little difficult (0–1 to 3 months postinjury), then progresses to not cooperating, not motivated, self-centered (1–3 months to 6–9 months postinjury), irresponsible, self-centered, irritable, lazy (6–9 months to 9–24 months postinjury), a different, difficult, childlike person (9 months or later postinjury to possibly indefinitely), and a difficult, childlike, dependent person (15 months or later postinjury to unknown). As recovery becomes less evident, caregivers are less hopeful, and reactions change from happy to discouraged to mourning the loss of the child that they had prior to the injury. After the family has reached this stage, they are, typically, more open to counseling and coping strategies to help their child.

According to Anderson et al. (2001), the stressors caused by the head injury do not specifically have an effect on one component of the family structure but on everyone involved, including the parents and children. Behaviour problems incurred by the child who has sustained the traumatic brain injury result both in poor sib-
ling outcomes and general family dysfunction (Swift et al., 2003). The poor sibling outcomes may be evidenced by negative sibling relationships, which are more prominent in mixed-gender dyads than same-gender dyads. Swift et al. indicated that mixed-gender dyads may have had more conflict before the injury, whereas same-gender dyads may have had a previous history of participating in joint activities and are thus more willing to make efforts to work together.

Family dynamics before the injury play a role in the child’s postinjury behaviour and family functioning (Anderson et al., 2001; Rivara et al., 1993). Good social support and family cohesion are reported to be predictive of good adaptive functioning, social competence, and global functioning 1 year after the injury (Rivara et al.). Children who have sustained a TBI are more dependent on a positive and supportive family to help them gain the required assistance they may need to meet their cognitive deficits. A supportive family provides behavioural adjustments and helps the child learn compensatory skills by providing an environment that includes great stimulation and appropriate support (Taylor et al., 2002). In summary, the findings of Taylor et al. indicate that “the development of behavioural and academic competence after TBI is better for children from more advantaged environments . . .” (p. 24).

In contrast, Taylor et al. (2002) explain that children from socially disadvantaged environments may exhibit more behaviour and academic problems than children from more advantaged environments. These problems may be related to the families’ limited resources to aid in the child’s recovery process or other personal stressors that distract from the need for remedial assistance.

Because family dysfunction, ineffective child management, negative parent–child interactions, and deviant models of behaviour are more common in disadvantaged environments, another possibility is that these characteristics mediated the effects of social disadvantage on child outcomes. (Taylor et al., 2002, p. 23).

### 3. Risks in the Developmental Process

A significant proportion of children who suffer a TBI are at risk for impairments in the developmental process. A wide range of factors interacts to determine the extent and nature of impairments following brain injuries in children. The type and severity of injury sustained are closely related to outcome (Lowenthal, 1998). Researchers have also found that developmental issues, including age at injury and preinjury abilities, have an impact or ongoing development postinjury (Anderson & Moore, 1995; Taylor & Alden, 1997). Children sustaining early injuries may present with similar patterns of impairment, but have poorer outcomes than do children sustaining their injuries later in childhood (Anderson & Moore; Wrightson, McGinn, & Gronwall, 1995). As a child matures and societal demands increase in complexity, problems with cognition and executive function may emerge (Guthrie et al., 1999). The full extent of the effects of brain injury in children may not be realized for some time because the long-term consequences may involve impairments in planning, execution of personal goals, and social behaviour.

The brain injury sustained by a child occurs concurrently with development and may create an incomplete collection of abilities (Brazzelli, Colombo, Della Sala, & Spinnler, 1994). When a child suffers a brain injury,
damaged brain cells cannot regenerate or repair themselves; however, new neural connections can form between the intact areas of the brain. These new connections allow areas of the developing brain to take over the functions of the injured brain cells (Lowenthal, 1998). However, this reorganization of brain functions usually results in a cost to the child’s overall cognitive capacity. For example, some research has indicated that the young child’s right hemisphere can assume the language functions of the damaged dominant left hemisphere (Keefe, Feldman, & Holland, 1989). Other studies, however, reported that general language functioning is compromised in young children when the right hemisphere has to take over language development (Hemphill et al., 1994).

Because the young child’s brain is incompletely developed, infants and toddlers who sustain a brain injury are vulnerable to significant and persistent neurobehavioural deficits following insult (Anderson et al., 1997). In the event of a brain injury, the skull of a young child is able to absorb more of the impact of the blow to the head; however, there is greater diffuse injury than would occur in the mature brain (Bruce, 1995). Adverse effects of brain injury often are not apparent in young children because there are limited cognitive skills established at a young age. However, as infants and toddlers mature, delays are more evident and children may “grow into” their deficits, with new impairments emerging as expected developmental gains are not achieved (Bannich, Cohen-Levine, Kim, & Huttenlocher, 1990; Dennis, Wilkinson, Koski, & Humphreys, 1995). Children who sustain a TBI during the preschool years are susceptible to later linguistic (Ewing-Cobbs et al., 1997; Wrightson et al., 1995) and motor deficits (Ewing-Cobbs et al.; Haley, Baryza, Lewin, & Cioffi, 1991). Young survivors of brain injury may exhibit delays in expressive vocabulary and rapid naming of objects. The acquisition of expressive vocabulary may be more difficult for these children than receptive vocabulary, because the former requires word retrieval and pragmatics, whereas the latter requires only word recognition (Hemphill et al., 1994).

In the area of motor skill development, timing of the injury in the maturation process is critical. If the brain injury occurs concurrently with the development of the neuroskeletal system in which motor skills are emerging, then current and future motor functioning may be compromised (Haley et al., 1991). In toddlers with moderate to severe brain injury, problems with gross motor coordination and balance are common. Other impairments that may occur later in development include deficits in gross and fine motor skills (Chaplin, Deitz, & Jaffe, 1993) and difficulties in planning and initiating body movements (Wilkening, 1997).

In young school-age children who sustain a brain injury, impairments are most evident in areas of nonverbal functioning, attention, memory, and learning. Postinjury performance IQ scores, which involve nonverbal functioning, visuomotor ability, and processing speed, are a more sensitive correlate of severity of injury than verbal IQ scores (Max et al., 1998). Perceptual difficulties may persist for many of these children. After suffering a TBI, children may have difficulties with spatial concepts and often have difficulty navigating around the hospital, school, and neighborhood (Guthrie et al., 1999). School-age children who suffer a brain injury often exhibit problems with attention that hinder new learning in the classroom. Anderson et al. (1997) found that children who had moderate to severe brain injury displayed greater impairment in sustained and divided attention, whereas focused attention was relatively intact. In the areas of memory and learning, children with brain injuries often retain older, overlearned
information; however, they have problems with encoding, storing, and retrieving novel information (Reid & Kelly, 1993).

Slower recovery on motor and visual–spatial tasks has been found in younger adolescents than in older adolescents who experienced a similar head injury (Thompson et al., 1994). Repeated neuropsychological assessment of motor, visual–spatial, and somatosensory skills revealed that younger children with severe injuries recovered more slowly than older children with similar injuries, and also children of the same age with milder head injuries. These results support the belief that neurological development continues until at least 12 years of age, and that the frontal lobes are the last neurological structure to mature, at around 12 to 14 years (Lord-Maes & Obrzut, 1997). As children with brain injuries mature and cognitive demands increase, executive functioning skill deficits emerge and may include problems with (a) planning and organization, (b) initiating tasks and/or inhibiting behaviour, (c) concept formation, (d) cognitive flexibility, and (e) problem-solving (Lowenthal, 1998; Rutter, 1982).

4. Risks Commonly Faced by Children/Adolescents With TBI

Following TBI, behaviour patterns that emerge are unique to each child or adolescent. Although some children and adolescents are able to successfully return to school and reestablish previous friendships with ease, other children struggle when they attempt to resume their previous activities and subsequently exhibit behaviour problems. Fletcher et al. (1996) reported postinjury problems in approximately 30% of children with severe brain injury. Common consequences of brain injury include problems with impulsivity, inattention, and restlessness. Preschool and elementary school-aged children often exhibit hyperactivity, distractibility, impulsivity, and temper tantrums after brain injury. However, this is not always the case, and some young children with brain injuries exhibit reduced initiative and sparsity of behaviour. Older children and adolescents have more problems inhibiting behaviour that may be expressed through impatience, irritability, agitation, and inappropriate comments. A child may act on an impulse that he or she could have ignored before the injury.

Examples of common impulsive behaviours include grabbing at something without permission, running from a person he or she would rather avoid, or making foul, insulting remarks. Some children with severe brain injury may seek out sensory stimuli, and common behaviours may include picking at skin lesions, rocking, or biting (Guthrie et al., 1999). In extreme cases, behaviour in adolescents with brain injury can include conduct problems, temper outbursts, inappropriate sexual behaviour, and an increased possibility of dropping out of school (Deaton & Waaland, 1994). For adolescents with brain injury, substance abuse increases the risk of seizure activity, poor impulse control, and further injury. The emergence of challenging behaviours after a brain injury may be consistent with or an exaggeration of preexisting behaviours. There is a disproportionate number of children and adolescents who sustain traumatic brain injuries because they were participating in at-risk behaviours associated with a history of maladaptive or risk-taking behaviours, abuse of alcohol or drugs, or an inability to self-regulate behaviours (Ylvisaker, Feeney, & Szekeres, 1998).
In the early weeks and months after a severe brain injury, challenging behaviours may be a direct result of the injury. Damage to the prefrontal areas of the brain, the most common site of lesion in closed head injury (Levin, Goldstein, Williams, & Eisenberg, 1991), can result in disinhibition, impulsiveness, reduced anger control, aggressiveness, and poor social judgment (Stuss & Benson, 1987; Varney & Menefee, 1993). Furthermore, prefrontal injury may reduce an individual’s ability to associate normal feeling states with memories for events. This lack of association may reduce the child’s ability to learn from consequences (Damasio, Tranel, & Damasio, 1990). In addition, a child may be unaware of the error in social judgment and, therefore, do nothing to correct it (Lezak, 1986).

Behaviour and social problems also can be an indirect result of a brain injury. Difficulties in paying attention, staying on task, and predicting the consequences of actions may be associated with behaviour problems when caregivers expect preinjury levels of performance (Ylvisaker et al., 1998). A normal physical appearance can mask underlying cognitive deficits; however, children and adolescents often are aware that they have altered abilities after brain injury. Many children act out or withdraw as a reaction to the changes in their life associated with the injury (Ylvisaker et al.). A child or adolescent who cannot perform as he or she did before an injury may struggle at school and in social interactions and subsequently lose friends. This loss, in turn, easily results in depression, anxiety, and anger, which are associated with social withdrawal and acting-out behaviours (Deb & Crownshaw, 2004; Rosenthal, Christensen, & Ross, 1998).

As one might expect, preinjury functioning plays a major role in postinjury behaviour. The results of previous research have identified premorbid vulnerabilities as significant risk factors following a TBI (Anderson et al., 2001). Some researchers indicate that a disproportionate number of children and adolescents who experience a TBI are at risk for injury because of challenging environmental circumstances (i.e., poor family functioning or economic difficulties) or personal characteristics that placed them at risk (Asarnow, Satz, Light, & Neumann, 1991). For example, children with preexisting Attention-Deficit/Hyperactivity Disorder (ADHD) are at increased risk for head injury (Max, Smith, Sato, & Mattheis 1997; McGuire, Burright, Williams, & Donovick, 1998). A study by Gerring et al. (1998) found that children with a premorbid diagnosis of ADHD accounted for 20% of the children in a group with moderate to severe head injury. Because ADHD is found in approximately 3–5% of the general population, results of a study by Guthrie et al. (1999) suggest that children with ADHD are more likely to suffer a head injury than children in the general population. The frequency with which predisposing psychiatric disorders and environmental circumstances are discovered should motivate a thorough exploration of all aspects of the child’s life in developing a comprehensive treatment plan to assist with recovery and rehabilitation (Ylvisaker et al., 1998).

Children and adolescents who did not exhibit behavioural difficulties prior to injury are sometimes less likely to develop behavioural difficulties following a traumatic brain injury than are those children who had behavioural difficulties before the injury. However, it is important to remember that behavioural problems related to brain injuries often do not appear until several months or years following an injury (Deaton & Waaland, 1994). Children and adolescents who suffer more severe head injury tend to develop behavioural difficulties earlier in their course of recovery than do those who suffer
a mild to moderate brain injury (Guthrie et al., 1999).

5. Interventions

Many of the behavioural problems that are exhibited in the classroom are directly related to cognitive deficits. Children with TBIs may exhibit cognitive deficits related to attention, memory, expressive and receptive language, visual and visual–spatial problem solving, and processing speed, which is directly related to new learning. Children with severe head injuries have difficulty retrieving newly learned information and have impaired capacities for control, regulation, and adaptation of complex behaviours (Lezak, 1986). Impaired executive functioning includes the inability to plan, organize, initiate a task, inhibit responses, and self-monitor behaviours. Deficits in these areas are common after a head injury, especially if the frontal lobes are affected. A neuropsychological evaluation provides information about the extent of the cognitive deficits to parents and teachers, and explains cognitive strengths and weaknesses. When teachers are provided with this information, they are able to develop strategies to optimize the child’s ability to learn and function in the classroom. An effective behaviour management program provides caregivers and educators with the tools necessary to promote positive behaviour in children with TBIs. Several recommendations to assist with behaviour management are listed below.

In a behaviour management program, being able to determine the antecedent prior to the behaviour is critical. Children with severe head injuries may not be able to inhibit responses or self-monitor behaviours. Ylvisaker et al. (1998) have recommended setting up antecedent control procedures, realizing that the child may not be able to control his or her reaction to stimuli. This may include (a) removing triggers from the environment, (b) setting up a schedule or routine, (c) preparing the child in advance for any changes in the routine, (d) being aware of the child’s psychological status and his or her ability to cope with the demands, and (e) redirecting the child at the first stage of disruptive behaviour.

Some children may fail to respond appropriately in the classroom because they do not have an understanding of rules, roles, routines, or social scripts (Ylvisaker et al., 1998). Educators should provide short, concise instructions. They should explain the rules that provide specific rewards and consequences for behaviours. Children with head injuries may not generalize from one situation to another. Providing verbal feedback for appropriate or inappropriate behaviours will help classify a child’s behaviours and process generalizations. In addition, providing role-play social situations will help develop a script for behaviour and allow the child to rehearse appropriate responses.

Children may have difficulty self-monitoring their behaviour and, therefore, may not be able to distinguish between when their behaviour is appropriate or inappropriate. It is important to focus on appropriate behaviour. One way to do this is to tape a 3- x 5-in. index card on the corner of the child’s desk. The teacher explains to the child that they are working as a team to correct a behaviour, such as talking out in class. Every time the child raises a hand, the teacher places a check on his or her card. At the end of the day, the teacher rewards the child either verbally or with a point system for talking at appropriate times. The child then takes the card home, and the parents are able to reinforce the positive behaviour.
Children who have sustained a frontal lobe injury may have a lack of initiation. This means that the child may fail to do what the teacher wants him or her to do based on an impairment of activation or initiation (Ylvisaker et al., 1998). It will be important for the teacher to monitor whether a child has initiated a task. Children with TBIs may require additional explanation or demonstration to begin the task. Avoid providing too many directions, as the child may have difficulty beginning the task if he or she is overwhelmed. If multiple steps or instructions are needed, provide the child with a list so that he or she may check off the steps as they are completed.

Activities that many children may perceive as enjoyable may be overstimulating to the child who has sustained a TBI. The lunchroom, music class, gymnasium during physical education, or the playground during recess may be overwhelming. As the child becomes overstimulated, he or she may overreact to the environment and experience a fight or flight reaction. It may be difficult for the child to explain his or her response, but he or she may voice a need to be removed from the busy environment. The overstimulation may manifest in crying, anger, or anxiety. Allowing the child to go to a quiet place away from the overstimulation will allow the child to become calm and relax.

The child who has sustained a head injury may experience confusion and disorientation (Ylvisaker et al., 1998). Creating a routine and preparing the child for any deviation in routine will be important. A buddy system may be useful to help the child maneuver between classes. Allowing time in the morning for the teacher or the buddy to help the child gather all required materials for morning classes might be necessary. The child will need to repeat this activity at lunch and at the end of the day. Again, a peer may help with this activity. This will help eliminate frustration and facilitate the learning process.

Children may continue to experience physical complaints after they return to the classroom. It is necessary to monitor for headaches or other physical symptoms. These problems are often exacerbated as the child fatigues. Providing breaks during the day can help with fatigue. Children with a TBI may need to rest or nap during the school day. In addition, having the schedule alternate between academic and nonacademic classes will decrease fatigue and increase productivity in the classroom.

Many children with right hemisphere injuries may have a lack of insight into the extent of their injuries or may deny their disabilities. Speak to the child in light of his or her cognitive strengths and weaknesses rather than deficits. Help the child verbalize his or her needs and teach to the child’s strongest learning modality (visual, auditory, tactile; Deaton & Waaland, 1994).

The child with a TBI may experience poor emotional control. Tasks that the teacher considers to be easy may be difficult for the child, and this may result in an overreaction, such as crying. Whenever possible, redirect the child and refocus on another aspect of the assignment. Be sensitive to nonverbal cues by the child when he or she is overwhelmed. Be aware of mood swings, reorient students to positive goals, and provide realistic encouragement (Deaton & Waaland, 1994; Ylvisaker et al., 1998).

Should a child become aggressive in the classroom, it is important to realize that this behaviour could have been precipitated by a number of events, including fatigue, overstimulation, or frustration. Remove the child from the situation and provide him or her with a quiet place to calm down. One should speak quietly to the student and remain calm. Help him or her state the problem and determine an
appropriate coping behaviour. If the child is fatigued or overstimulated, provide a quiet rest period. Enlist the help of the school counselor or psychologist to provide ways for the child to learn to self-monitor behaviours and realize when he or she is becoming agitated or irritable. In learning to self-monitor behaviours, the child can remove himself or herself from the situation (Deaton & Waaland, 1994).

Teachers should maintain communication with parents, and both parties should work together as a team to provide support for the child. Teachers inform the parents of the child’s behaviour and progress in learning. Teachers also need to keep parents informed about assignment due dates and pertinent information regarding activities in the classroom. Parents need to provide the teacher with feedback as to what the child is doing when he or she comes home from school in reference to fatigue, emotional status, and ability to complete work.

Potential Conflicts of Interest

The author declares no conflict of interest.

References


Clinical Case Report

Complementary and alternative medicine for children: does it work?

Karen Jane Kemper
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Abstract: Paediatric use of complementary and alternative medicine is common and increasing, particularly for the sickest children. This review discusses the various options available including dietary supplements, hypnosis, massage, chiropractic, and acupuncture.

Keywords: Children, complementary, therapies, holistic, hypnosis, acupuncture

1. Introduction

The use of complementary and alternative medical (CAM) therapies is increasing considerably in paediatric as well as adult populations, particularly among the affluent and educated. Approximately 20–30% of general paediatric patients have used one or more CAM therapies; use among adolescents ranges from 50% to 75%. Rates among patients with chronic, recurrent, or incurable conditions, such as those with cancer, asthma, rheumatoid arthritis, and cystic fibrosis range from 30% to 70%. Parents of hospitalised children, particularly those in neonatal and paediatric intensive care units, report keen interest in providing CAM to their children during hospitalisation, but often have not discussed their interest in or use of CAM with their child's physician.

Paediatricians and medical institutions have struggled to adapt quickly to these rapid shifts in culture and patient demand. Most medical schools in the USA and Canada now offer at least one course in holistic/complementary/alternative medicine, and the numbers and depth of these courses are increasing rapidly. Physicians, including paediatricians, report a high (over 50%) rate of using CAM therapies themselves, and most physicians provide CAM therapies themselves or refer patients to CAM providers.
physicians pandering to patient demands? Or are there data to suggest that at least for some conditions and some therapies, integrative medicine offers real benefits?

2. Definitions

The terms “holistic medicine” and “integrative medicine” describe approaches to patients and therapies, respectively. Holistic medicine refers to caring for the whole patient—body, mind, emotions, and spirit—in the context of the patient's and family's values, culture, and community; this is simply another way of stating the highest ideals of conventional medicine. “Integrative medicine” refers to considering a broad range of therapies and selecting those that have the best evidence of safety and effectiveness in the context of holistic care. Integrative medicine takes evidence based medicine one step further by including consideration of all potential therapies, not simply those that have been part of mainstream medical practice.

3. Treatment goals

Nearly every study of the epidemiology of CAM has underscored the fact that only a minority of patients and families talk with their physicians about their use of CAM therapies. If physicians want to know what families do and what they value, a systematic approach is necessary in taking a history about patients' goals. We consider therapeutic goals in five major categories:

- (1) Curing disease
- (2) Managing or minimising symptoms
- (3) Preventing disease
- (4) Promoting wellness/resilience and minimising stress/toxins
- (5) Achieving inner peace and harmony.

All of these goals are legitimate. To assess in a meaningful way whether or not a therapy is useful, both clinicians and patients must explicitly understand the goal or goals of treatment. For example, in treating paediatric oncology patients, acupuncture may be used, not to cure the cancer (goal 1), but to help manage pain and nausea symptoms (goal 2) or to promote a sense of well-being (goals 4 and 5).

4. CAM options

The term CAM encompasses a wide range of disparate therapies that often rely on different philosophies, beliefs, assumptions, and practices. Visits with a homeopathic practitioner typically are lengthy and focus on taking a very extensive history, while visits with a chiropractor may be quite brief and focused on physical examination and adjustment procedures. In order to understand and remember the range of potential therapies in a clinically useful fashion, we consider the range of therapeutic options in four major domains: biochemical, lifestyle, biomechanical, and bioenergetic (table 1). Each domain contains several kinds of therapies. For example, biochemical therapies include medications as well as vitamins, herbs, and other dietary supplements. Biomechanical therapies include massage and chiropractic as well as surgery.
5. Specific conditions and therapies

Few clinicians would argue with the tenet that patient focused, humane, holistic care is the ideal of medicine. Nor would modern physicians disagree on the importance of considering a range of treatment options and using an evidence basis to select those most likely to be beneficial and least costly or harmful. Questions about the effectiveness of complementary and alternative medicine tend to be focused on the merits of individual therapies for specific conditions and patients rather than the overarching philosophical orientation to patient care.

For the most part, a great deal more evidence is needed to evaluate claims of safety and effectiveness of natural therapies compared with more synthetic medications and surgical approaches. In practice, most paediatricians do not demand rigorous scientific evidence of safety or efficacy before recommending home remedies such as chicken soup, peppermint tea, or vapourisers for children suffering from mild, self-limited conditions such as upper respiratory infections. On the other hand, common sense demands that more stringent evidence is required for evaluating the effects of more toxic or costly treatments for life threatening conditions, particularly if effective treatments are already available. As scientific evidence accumulates, therapies considered as CAM may cross the line into mainstream care; this transition appears to be especially easy if financial support and professional advocacy are involved, for example, marketable products or well organised practitioners.

6. Dietary supplements

Probiotics (for example, yoghurt) have proven effective in reducing the severity and duration of diarrhoea in healthy children; many paediatricians have begun recommending increased yoghurt intake for children suffering from diarrhoea and as prophylaxis for those children assigned to antibiotic therapy. Health food stores are replete with medicinal products (capsules, tablets, and liquids), containing lactobacillus bacteria, that claim to “support healthy intestinal function” or “maintain a healthy balance of intestinal flora”. The effectiveness and optimal dosing of such products for children remains unknown.
For many other dietary supplements (such as using St John's wort to treat depression and echinacea to treat the common cold), there are no published studies on effectiveness for children. Despite the absence of data on paediatric safety and effectiveness, tremendous efforts are being made to market paediatric herbal products, enticing parents and pressuring paediatricians. Pediatricians are especially likely to be cautious about the hazards of the chronic use of herbs. Over the past 40 years, increasing data about the cumulative toxicity of a herb that had been widely used for medical, religious, and recreational purposes for centuries—tobacco—support this cautious approach. Recent studies evaluating herb–drug interactions with St John's wort (leading to notable declines in serum concentrations of digoxin and other medications) also suggest the need for careful review of scientific data before casually reassuring patients about using herbs.

7. Lifestyle therapies: mind–body medicine

Hypnosis is an effective preventive therapy for paediatric migraines, chemotherapy associated nausea and pain, as well as several behavioural conditions, yet hypnosis and similar mind–body therapies have not been widely disseminated from behavioural paediatrics to general paediatric practice nor into specialty areas in which it might be quite useful in reducing procedure related anxiety and pain. Currently there are no significant market forces (other than some patient demand) promoting the use of mind–body therapies. Teaching such practices demands substantial clinician time which may be worthwhile over the long term, but poorly reimbursed in some health care systems. Additional research is needed on evaluating the long term cost effectiveness of mind–body therapies and developing the most effective strategies for disseminating proven therapies into practice.

8. Biomechanical therapies: massage and chiropractic

Like hypnosis, massage has proven helpful in treating several paediatric conditions. These include low birth weight, pain, asthma, attention deficit hyperactivity disorder, and depression. Moreover, massage is enjoyable, safe, and sought after by patients. Yet, it is seldom among the therapeutic options considered first by paediatricians. Historically, massage has been tainted by its link with the adult entertainment industry, and it may be viewed as self indulgent rather than medically indicated. Furthermore, as with mind–body therapies, the time required to provide services, personnel costs, and questions about long term benefits are significant barriers to widespread use of massage therapies for children.

On the other hand, despite the fact that chiropractic is one of the most common alternative therapies sought by families, there is a remarkable absence of randomised, controlled clinical trials suggesting that it is a significantly helpful or cost effective therapy for any major paediatric disease. Unlike hypnosis and massage therapy, chiropractors have formed a strong professional community that has effectively persuaded the public to pay for their services.
9. Bioenergetic therapies: acupuncture

Research on acupuncture is finally penetrating into paediatric practice. Recent studies suggest that certain children readily accept acupuncture as a potential treatment option, and that some acupuncturists specialise in treating children. It remains to be seen whether the benefits noted in adult patients (for example, in treating pain and nausea) are also found in children. Although it markets no unique product and has not formed an effective professional guild, acupuncture has made intriguing inroads into mainstream medicine, and is now provided as a treatment option in approximately one third of paediatric pain treatment programmes at academic medical centres in North America. The vast majority of paediatric patients/families pay out of pocket for acupuncture services, but third party payment for acupuncture is gradually gaining ground.

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10. Costs and benefits

There is a widespread assertion that CAM practices are less expensive than mainstream medicine and that using such therapies will lower overall health care costs. This assertion posits that CAM therapies would replace more expensive mainstream therapies rather than being used in addition to mainstream medicine. This assertion has not undergone rigorous testing. In fact, recent data suggest that including complementary therapies as treatment options increases overall health care costs for adults because CAM therapies are used as “add ons” rather than replacements. Similar studies have not been reported for children.

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11. Summary

Paediatric use of complementary and alternative medical therapies is common and increasing, particularly for the sickest children. In order to answer the question of whether or not such therapies work, it is essential that paediatricians systematically elicit families' goals and expectations of treatment, be aware of the range of therapies used, be systematic and specific when asking about them, and be aware of the complex interplay among scientific evidence and market forces governing availability of and payment for CAM therapies. These are the elements, not just of complementary or alternative care, but of good paediatric care in the modern era.

Potential Conflicts of Interest

The author declares no conflict of interest.

References


Clinical Case Report

“Am I dead or alive?”
Integrative Cognitive and Behavioural Therapy with a 15-year old experiencing Obsessive Compulsive Disorder

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Abstract: Obsessive compulsive disorder (OCD) is a complex anxiety-related condition (Zucker, 2011) which can be a major source of distress for anyone experiencing it, in particular for children or young people and their families (Carr, 2006). The following report accounts for the personal story and therapeutic journey of “Joel”1, a 15-year-old, who attended a course of cognitive behavioural therapy (CBT), integrated with other techniques from mindfulness and metacognitive therapy, to attempt to overcome his obsessive and compulsive difficulties. Joel made good progress to overcome his intrusive thoughts of being dead, and he experienced some reduction in compulsions and avoidance behaviours associated with his obsessions. Results and limitations are discussed based on objective and subjective data collected from Joel and family.

Keywords: Obsessive compulsive disorder (OCD), Exposure and response prevention (E/RP), Cognitive & Behavioural Therapy (CBT)

1. Introduction

Obsessive compulsive disorder (OCD) is a common psychological difficulty affecting around 1-3% of children and young people (Heyman et al., 2001; Moore, Mariaskin, March, 2006).
Onset is usually during late childhood and early adolescence (Carr, 2006), and can go under-reported until it becomes unmanageable for clients (see Krochmalik & Menzies, 2003). Academic progress and family/social relationships can be affected by OCD, likely to increase further stress and anxiety (Rasmussen & Eisen, 1992).

“Having OCD was restrictive and stressful. Because of the worries of having responsibility I was anxious and worried a lot of the time about bad things happening”

Young person, in Williams & Waite, 2009:1

Echoed within the above quote, OCD’s main characteristics are distressing and intrusive thoughts (obsessions) and/or repetitive behaviours (compulsions) that confound the person into believing that conducting rituals will reduce the anxiety originating from the obsessions (Carr, 2006). Other features may include avoidance of stimuli that trigger compulsions or obsessions, fear of disastrous consequences, mind-reading and premonitions, and reassurance-seeking that may only produce short-lived relief (de Silva, 2006). Obsessions and compulsions may not need to co-occur for a diagnosis, even if co-present in about 60% of all OCD cases (Carr, 2006), but they must be distressing to the person experiencing it, interfere with normal biopsychosocial functioning, and cannot be explained by other psychiatric disorder or substance misuse (DSM-IV-TR, APA, 2000; ICD-10, WHO, 1992, 1996).

It is often accepted that at times young children may not present with, or be aware of, specific obsessions that may lead to the compulsions (Carr, 2006). Comorbidity may also be present in OCD, in particular with other anxiety and/or mood problems (Zucker, 2011), and at times with eating disorders (Diniz et al., 2004; Carr, 2006).

## 2. Cognitive model of OCD

The current cognitive and behavioural model (Salkovskis, 1999; Salkovskis & McGuire, 2003) proposes the role of early experiences and the importance of critical life events that may trigger the onset of OCD. As such, the development of dysfunctional schemas and core beliefs lead to unique appraisals and rules about the self, others, and the world/future, which maintain the problem (i.e. Beck, 1976). A person with OCD may live by negative rules and appraisal, and may carry out rituals and compulsions that only provide temporary relief (de Silva, 2006). Compulsions then lead to further reinforcing original core beliefs and negative appraisal about the self (inflated responsibility) and the OCD (as being uncontrollable and truthful) (Salkovskis, 1999; Clark, 2004).

Recent developments in cognitive theory also suggest the role of metacognitions as the primary attentional process that regulates the amount of consciousness that people give to life experiences, thoughts and emotions about those same experiences (Wells, 2009). Metacognitions inform meta-worry, or worry about worry, which can be maintained by a person’s meta-belief system stored in one’s long-term memory (Wells & Matthews, 1994, 1996). This maintenance of
distress activates the Cognitive-Attentional Syndrome (CAS), a particular cognitive style responsible for the cyclic worry and rumination, as ways of coping with danger (Wells, Fisher, Myers, Wheatley, Patel, & Brewin, 2009). So, life experiences often trigger two major metacognitive beliefs: positive and negative. These beliefs, partly responsible for activating the CAS, are respectively determining rumination and threat monitoring, and the uncontrollability and significance of feelings and thoughts (Wells, 2009). The interaction of positive and negative meta-beliefs and the activation of the CAS maintain the cycle of rumination, whilst keeping the person unaware of such processes and unable to terminate the cycle (Wells et al., 2009).

Some ‘fusion beliefs’, may also be triggered. For instance: ‘thought-event fusion’, or the belief that events are caused by thoughts; ‘thought-action fusion’, or the belief that actions are caused by thoughts and feelings; and ‘thought-object fusion’, or the belief that thoughts can be transferred to inanimate objects thus causing harm to people accessing those objects (Wells, 2009). The focus of this model is to change a person’s relationship with their intrusive thoughts and challenge their beliefs about obsessions, rather than challenging such beliefs and intrusions. Patients may be able to engage in rituals whilst being mindful to the meta-thoughts throughout the compulsive experience, accepting OCD without feeling distressed by it (Fisher, 2009).

3. Treatment of OCD in childhood

Carr (2006) suggested a multi-modal treatment of OCD in children and young people in order to maximise efficacy, which may include psycho-systemic therapy perhaps combined with pharmacology, such as a selective serotonin reuptake inhibitor (SSRI), if psychological interventions alone are ineffective or if symptoms are of greater severity. The most accepted psychological intervention for this client group is informed from the cognitive-behavioural model and systemic theories (Creswell & Waite, 2009; Watson & Rees, 2008). The National Institute for Health and Clinical Excellence (NICE, 2006) seems to support empirical evidence around such interventions, and they propose a clear stepped pathway to include psychoeducation, exposure and response prevention, cognitive restructuring, mindfulness and relaxation, and worry postponement, as part of individual and/or group treatment protocols. However, there is emerging evidence of other therapies, such as metacognitive and mindfulness-based cognitive therapy, proposing faster and longer-lasting outcomes (Fisher, 2009).

4. Referral information

Joel was a 15-year-old white British male originally referred to Child and Adolescent Mental Health Services (CAMHS) by his General Practitioner (GP) after his mother (Diane) noticed ‘odd’ behaviours and queried Asperger’s Syndrome (Appendix A). Joel’s referral was accepted by the “0-16 CAMHS team” and he was initially assessed by a consultant psychiatrist. Afterwards, Joel was referred to psychology to address issues related to OCD. The case was accepted by the trainee clinical psychologist on placement at this service, under the supervision of a clinical psychologist.
Service provision in “0-16 CAMHS team”

The aim of “0-16 CAMHS team” is to accept clinical cases that involve children and young people up to 16 years old and their families, with chronic, complex and severe mental health needs that have been present for longer than six-months and not resolved through other low-intensity approaches. The team is classified as a tier 3 community-based multi-disciplinary service. The background of most therapists varied from social work, mental health nursing and occupational therapy, thus bringing to the team a wide range of experiences, theoretical frameworks, and practice-base knowledge. Referrals to this team can be made from external sources, i.e. teacher or GP; or internally, e.g. Primary CAMHS or psychiatry. The team’s primary working model is using the Choice and Partnership Approach (CAPA; York & Kingsbury, 2009; CAMHS Network, 2010).

Suitability for treatment

One of the tenets of CBT is collaboration between client(s) and therapist(s), including clients’ active involvement in sessions and the completion of homework tasks, to monitor cognitions and mood, and to complete behavioural experiments in between sessions (Gallop, 2009). Joel acknowledged his readiness and motivation, thus appearing psychologically-minded to engage in CBT. Joel also had the support of his immediate family.

5. Initial assessment

Joel came into his first psychology session accompanied by his mother Diane appearing subdued but verbally interactive. Diane explained that ‘his behaviour’ was affecting her own daily routine and her ability to focus on other aspects of their family. An initial interview involved the collection of important information about current difficulties, onset, family/personal history, and strengths.

Current difficulties

Joel and Diane identified compulsions around checking doors, light switches, plugs and seeking reassurance from people. Joel linked these behaviours to intrusive thoughts of being dead and feeling unsure about his environment. Joel reflected on specific situations where he became extremely distressed after spending enormous amounts of time getting through doors and switching on/off electrical appliances. Joel also engaged in some avoidance behaviours, and asked relatives to perform tasks on his behalf, to prevent OCD symptoms (see Carr, 2006). This often led to family members feeling resentful with his requests and overdependence on them, which would trigger his anxiety and further reassurance-seeking from Diane. Joel neatly described his problem as ‘worrying about worry’, and on how worry could prevent the ‘worst case scenario’ and appease his OCD (Wells, 2009).

Joel stated that his OCD was worse at home, in particular before going to school and before going to sleep at night. Neither his sleep pattern nor appetite had been affected. When out of the house, either in school or when in his farm with his horses, he would not worry about things as much and did not often perform rituals. Diane said that when Joel had a set routine, such as school or farm, he felt busy, safe, and more confident, but at home his environment was less structured and unpredictable.
Onset

Joel’s intrusive thoughts about death started 18 months prior to therapy when Joel was in a fairground “big wheel ride” with his older sister and there was a mechanical fault. Many people were fearful but there were no physical injuries. Some people, including Joel and his sister, were trapped in the wheel and it had to be manually overridden. The fairground staff reassured customers and when the wheel was ‘fixed’ Joel returned to it, but it faulted again. This time he felt “afraid, and had thoughts about scenes from the movie Final Destination”. In this movie, “when people don’t die then death will chase them up until they die horrific deaths”, so Joel started to believe that at some point soon he would die.

Personal and family background

Joel came from a large catholic family originating from the north of the country. They maintained contact with a large network of friends, relatives and extended family, with whom they had established a supportive relationship and often relied upon for childcare support when this was needed. Joel’s immediate family, as depicted in the genogram (Figure 1), consisted of four children, parents, grandparents, a dependant uncle, and a few pets. The genogram was completed with Joel and his family, and also included other relatives that were important for Joel, but the family extended beyond this brief description.

Diane was the main carer of the family, including of her brother with severe Learning...
Disabilities (LD) and/or Autism Spectrum Disorder (ASD). Joel’s father (Tom) was described as being ‘perfectionist and asking family members, including Joel to check things in the house’, i.e. plugs and doors. The family appeared to have a strong trait of OCD and LD/ASD characteristics, and apart from the older sibling, all other three children had been diagnosed with either disorder.

From a young age, Joel had ‘always’ been a very neat child, keeping his room ‘immaculate’, liking things aligned in certain patterns, and having routines when coming through doors and down the stairs. Joel was delayed in his speech and received therapy and “struggled to understand humour and sarcasm, and sometimes body language”. Joel was described as being ‘perfectionist’ and having a ‘black and white’ thinking style. Joel only realised he was different from other people outside his family about a year ago, and until to that moment he though other people were the ones who “were different”.

Protective factors and activities

Joel had a healthy range of supportive mechanisms and activities that gave him the chance to experience life without OCD, including school, farm, horses, and work experience. Joel had extensive applied knowledge about techniques to train unbroken (untamed) horses and make them ready to be ridden. Joel was training to one day either become a Ferrier or a Jockey. Sometimes he would worry about whether OCD would interfere with his future career choices. We often used horse training analogies throughout CBT to make it more accessible to him. Joel seemed to be well-liked by his peers and relatives, and he came across as a mature and intelligent person. Joel actively avoided displaying OCD outside his home, thus appearing to have greater control and attributing this to “forgetting to worry about things” when he was busy.

Risk

Joel did not seem clinically depressed, and most of his fears/doubts of being dead were presented as intrusive thoughts/images related to his OCD. Joel denied suicide ideation/intent and self-harm, and he had a positive outlook on life and future.

Medication

At the time of seeing the psychologist Joel was being prescribed Sertraline. This is a SSRI, or a type of antidepressant, most commonly used for the treatment of some anxiety and mood disorders, including OCD, in both adults and children (BNF; Paediatric Formulary Committee, 2012). Medication had increased from 50mg to 150mg before starting therapy, but there were no further increases since.

Standardised psychometric measures

Joel and/or Diane completed several measures to evaluate their goals from therapy and also to assess current difficulties. These measures were routinely used within the services as part of a pack that was given to clients referred for therapy for OCD (tool description Appendix B). These were the ‘Child Obsessive-Compulsive Inventory’ (COCI; Salkovskis & Williams, 2004) and the ‘Spence Children’s Anxiety Scale’ child and parent versions (SCAS; Spence, 1997; 1998; Spence, Barrett, & Turner, 2003; Nauta, Scholing, Rapee, Abbott, Spence & Waters, 2004). Results suggested that Joel was scoring high in certain dimensions (Table 1).
Table 1. Breakdown of pre-therapy scores for Joel and his mother

<table>
<thead>
<tr>
<th>Measure/tool</th>
<th>Subscale/themes</th>
<th>Joel</th>
<th>Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Obsessive-Compulsive Inventory (COCI)</td>
<td>Washing</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Checking</td>
<td>28</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Doubting</td>
<td>12</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Ordering</td>
<td>5</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Obsessionality</td>
<td>15</td>
<td>--</td>
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<tr>
<td></td>
<td>Hoarding</td>
<td>0</td>
<td>--</td>
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<tr>
<td></td>
<td>Neutralising</td>
<td>12</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td><strong>Sum total (0-168)</strong></td>
<td><strong>72</strong></td>
<td>--</td>
</tr>
<tr>
<td>Spence Children’s Anxiety Scale (SCAS)</td>
<td>Separation Anxiety</td>
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<td>7</td>
</tr>
<tr>
<td></td>
<td>Social Phobia</td>
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</tr>
<tr>
<td></td>
<td>Obsessive Compulsive</td>
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</tr>
<tr>
<td></td>
<td>Panic/Agoraphobia</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Physical injury fears</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Generalised Anxiety</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Sum total (0-114)</strong></td>
<td><strong>30</strong></td>
<td><strong>40</strong></td>
</tr>
<tr>
<td></td>
<td><strong>T-score (30-100)</strong></td>
<td><strong>58</strong></td>
<td><strong>64</strong></td>
</tr>
</tbody>
</table>

The COCI score appeared to be clinically significant and above the cut-off point (≥60). There was a presence of ‘Checking’, ‘Doubting’, ‘Obsessionality’, and ‘Neutralising’ traits. However, the SCAS scores were ambivalent; while Joel’s total score was just under the clinical cut-off, Diane’s score was within the limits of clinical significance (T-Score ≥59.5). Joel’s subscores in ‘Obsessive Compulsive’ and ‘Generalised Anxiety’ were both above the clinical significance range. Diane rated ‘Obsessive Compulsive’, ‘Separation Anxiety’, and ‘Social Phobia’ within the clinical range. Joel and Diane also felt somewhat unsure about therapy, due to the frequency of compulsions and the distress these were causing.

OCD Monitoring Sheet

After the first session Joel was asked to keep an ‘OCD monitoring sheet’ for seven days (Appendix E). Certain compulsions were occurring more frequently than others, but the family lost track of counting them at times. These were: a) asking mum for reassurance (total=67); b) checking light switches (total=41); c) checking doors (total=33); d) checking clothes are tidy (total=26).

Treatment goals

Joel and Diane also completed the ‘Goal Based Outcomes’ (GBO; Law, 2006; 2011) which identified goals for therapy (themes) (Table 2).

Table 2. Agreed goals for therapy within the GBO

<table>
<thead>
<tr>
<th>Measure/tool</th>
<th>Goals</th>
<th>Joel</th>
<th>Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal Based Outcomes (GBO)</td>
<td>Managing (or supporting child to manage) OCD symptoms</td>
<td>3</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Being able to control self and deal with it; shut door and go out and not worry about it.</td>
<td>4</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Reduce ‘asking mum’ to 2-5 times a day.</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Reduce checking light switches twice a day.</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

* Mother refused to answer this question, instead commented: “can’t control him, can’t reason with him, can’t answer”.

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Treatment rationale and aims

As Joel seemed psychologically-minded, and there was some understanding of the process behind his OCD, in particular the ‘worry about worry’, he was offered CBT whilst integrating newer components from other therapies, like metacognitive and mindfulness. The aim of such intervention would encourage Joel and his family to understand the cyclic relationship between thoughts, feelings and behaviours, but also systemic influences on these. Joel would learn exposure and response prevention techniques, while searching for evidence for his thoughts and worries, even if to promote more resilience to OCD and related anxiety, to accept the presence of thoughts, and to live mindfully in the present.

6. Formulation (session 3)

There is growing evidence that a systemic and contextual understanding of cognitive-behaviour difficulties, in particular in paediatric mental health, can produce better outcome in therapy (Dummett, 2010). Joel’s difficulties and strengths have been formulated using a longitudinal CBT formulation (Kuyken, Padesky & Dudley, 2009) with systemic factors (Dummett, 2010) (Figure 2). Many of these issues have been discussed in previous sections. This formulation has been construed collaboratively with Joel and Diane.

Based on Joel’s life history, presentation and psychometric findings, he seemed to be experiencing obsessions and thought-ruminations in the form of mental images and self-verbalisations of being dead that triggered and maintained his compulsions around checking, doubting, and avoidance. These difficulties were highly connected to how people responded to him, and in particular his avoidance and checking seemed to trigger responses in others, to soothe his anxiety, by carrying out his compulsions vicariously, and later feel resentful about this. Although there were bio-genetic and contextual links with Joel’s OCD, this seemed not to be generalised to many areas of daily routine. When Joel was out, he would ‘forget about his OCD’ and was able to be more independent. Joel felt as if people did not trust him, thus feeling less confident about his skills. In particular, Joel’s OCD was likely to increase when he was in unpredictable situations, i.e. leaving the house to go to school or go to sleep. This is when he felt the need to ask for reassurance that things were alright. There was a subjective sense of underachievement, perhaps perpetuated by his family’s higher standards and perfectionism, but Joel was managing a good academic record and many extra-curricular activities.

7. Interventions (sessions 4-11)

Joel attended a total of 13 sessions, either with his mother or his older sister. Therapy with Joel followed a multi-modal protocol (Carr, 2006) to incorporate validated and efficacious CBT features (i.e. March & Benton, 2007; Waite, Gallop, & Atkinson, 2009; Zucker, 2011) and other elements that belong to more recent developments in cognitive and behavioural therapies, i.e. metacognitions and mindfulness.

Earlier sessions (1 to 3) had focused on assessment, establishing a therapeutic alliance, formulation, and socialising Joel and his family.
into the CBT model. Also, a range of self-help materials had been provided to the family about both OCD and CBT, in order to make an informed decision about opt-in or -out of therapy, thus following the CAPA model (York & Kingsbury, 2009; CAMHS Network, 2010). Interventions are being presented thematically, since from first contact any work was interventionist.

**Figure 2.** Idiosyncratic formulation with CBT (adapted from Kuyken, Padesky & Dudley, 2009) and systemic features adapted from Dummett (2010)
Psychoeducation

Psychoeducation alongside normalisation and socialisation to therapy were core features throughout therapy. These were used to guide Joel and his family to understand OCD but also to accept that recovery can have many meanings to different people. We often used metaphors of ‘taming’ OCD as Joel tamed his horses. Joel related easily to this concept, on how to ‘tame’ chaotic and wild horses with desensitisation, exposure and calming techniques. Joel learned to accept that he was not a ‘strange person’ with ‘mental problems’ but rather see OCD as an intruder into his life. Joel understood the purpose of CBT and could make the links between his behaviour, feelings and thoughts.

Externalising OCD

OCD was externalised from the onset of therapy, by using techniques from March and Benton (2007) and Zucker (2011). Joel needed to believe that OCD was not intrinsic to his personality, but rather a non-fatalistic feature that could be changed (Carr, 2006). Joel’s story often transpired a ‘faulty person’, whose family and personal traits made him vulnerable to OCD. Despite this persisting narrative about his OCD, it was possible to allow Joel to believe that even such OCD could be ‘tamed’, just like ‘the most wild of all horses’. This also allowed identifying situations that triggered OCD and how we would manage these through therapy. Whenever family doubted this externalisation, we required further psychoeducation around OCD and accepting small changes, even if at first sight Joel still displayed OCD (Waite et al., 2009).

Mapping OCD

The process of mapping OCD started early on, as suggested by several authors (Carr, 2006; Zucker, 2011). Joel’s main compulsions had been identified in session one. Joel rated these symptoms in terms of difficulty and distress it provoked to him and others. After identifying a hierarchy of compulsions, Joel agreed that some of these were more distressing than others and required more attention in therapy. Joel monitored some of these compulsions further to elicit other contextual and protective factors about how he managed OCD (Appendix G). These compulsions would be the ones to address through further interventions.

Reformulation

At this stage we required an adaptation of Joel’s initial formulation, in presence of new evidence and on his ability to process metacognitions. An adapted reformulation incorporating metacognitive (e.g. Wells, 2009) and systemic factors (e.g. Dummett, 2010) was construed in order to include Joel’s meta-beliefs and appraisals about cognitions and rituals that could be maintaining his difficulties (Figure 3). Joel, his mother and sister agreed with the cyclic features of this reformulation. There was evidence that Joel was presenting with positive and negative meta-beliefs about his OCD. If on one hand he firmly believed that thoughts had a function to warn him of potential danger; on the other hand his thoughts also provoked much distress because he wanted to control them. Joel had beliefs about rituals, which were meant to protect him from bad events and “proof” that he was alive. Joel’s meta-beliefs were further activated by his family’s meta-beliefs of their own difficulties and Joel’s OCD. They were likely to maintain this cycle by sympathising with Joel and performing his compulsions on his behalf or by encouraging him to ‘stop thinking’ and ‘to stop worrying’, which provided him with opportunities to fail and reinforce his belief that he was incapable of doing things right.
**Figure 3. Idiosyncratic metacognitive formulation with systemic features**

**Daily triggers**
- **Situational:** Preparing to leave the house to go to school, setting up things at home, i.e. TV, x-box, DVD player, preparing to go to bed.
- **Cognitive:** Am I dead or alive? How can I know? Are things the same?

**Meta beliefs**
- If things have changed around me it means I am dead. So I need to make sure things are done the same way.
- If I think, then it must be true.
- I can’t make mistakes, or bad things can happen.
- **Thought-action fusion:** If I have these thought it’s because it has happened already without me noticing it.

**Appraisal of intrusion**
- Bad things can happen if I don’t have these thoughts as warnings.
- I’ve always been like this and OCD is in my family.

**Belief about rituals**
- If I check things or ask people to check I will know that bad things have not happened.
- If I avoid doing things I can stop my thoughts from haunting me. People can always reassure me later.

**Behaviours**
- Repetition of tasks
- Checking for problems and inconsistencies
- Reassurance seeking from people
- Avoidance of tasks

**Emotions**
- Anxiety increases
- Worry increases
- Distress increases
- Shame
- Low self-esteem

**Physiological responses**
- Rumbling in stomach
- Weakness in legs
- Blurred vision
- Sweaty and damp

**Impact on family**
- Meta-beliefs about rituals and thoughts
- Taking too much time to do things
- Feeling frustrated and fed up
- Having to replace broken objects
- Too much noise in the house

**Family response**
- Mum complies with requests
- Dad tells him off
- Dad asks him to check things
- Siblings either comply or not
- Family take over tasks, to be faster
- Arguments in the house
- Inconsistencies in responses

**Activates family’s cognitive processes**

**Graded exposure and response prevention**

Exposure and response prevention (E/RP) was presented to Joel and his family as a way for him to positively experience more situations where he and not OCD would be in control (Carr, 2006). Each session we monitored this progress and we would set homework tasks for Joel to carry out, for instance to plug his x-box or switch...
off the TV and monitor his anxiety levels and thoughts, without reacting to the need to re-check them. While initially he would either ask others to do these tasks for him to prevent checking or repetition, he gradually felt more confident that his anxiety was not as severe as he initially predicted. Joel then attempted other techniques to address several coping strategies when embarking in the E/RP approach.

**Worry postponement**

Joel was introduced to the concept of worry postponement, by delaying his worry to a later time of the day (see March & Benton, 2007; Wells, 2009) and giving himself the opportunity to think and worry about OCD. Joel attempted this a few times but found that he could not worry ‘on purpose’ and did not see the need to worry at the allocated time. Joel ‘felt bored with the task’ thus engaging in other more useful activities. With this, Joel learnt that worry could be controlled and managed more efficiently than he had previously believed.

**Mindfulness and relaxation techniques**

Joel experienced different levels of relaxation and mindfulness techniques: progressive muscle relaxation (Appendix H); mindful breathing (Appendix J) and mindfulness relaxation (Appendix K). Mindfulness techniques with children and their benefits have been explored by Hooker and Fodor (2008). These aimed at helping Joel revisit his current relationship with his intrusive thoughts and find more adaptive ways to relate to them, such as to accept them rather than attempting to challenge or suppress them (Wells, 2009; Zucker, 2011). Attempting to suppress thoughts increased the likelihood of their maintenance and intrusiveness (see de Silva, 2006). Joel was encouraged to practice one of these daily for 10 minutes, however, this was not always possible due to his tight schedule and home priorities. Joel was able to explain how he felt during the exercise and compared it to situations where felt worried and fearful, thus believing he could relax in those situations.

**Thoughts and beliefs restructuring**

Joel was introduced to a process of verbal reattribution and challenging irrational thoughts/beliefs about OCD (Carr, 2006). Since he had early on externalised OCD, Joel was able to detach himself from ‘the problem’ and ‘talk back’ at OCD, and doubt the need to perform rituals to pacify his obsessions (March & Benton, 2007). At the same time Joel was asked to delay the rituals, as this would eventually disprove OCD, that performing rituals was needed to give him peace of mind. This would help Joel to also address his beliefs about feeling over-responsible and over-estimating danger. Joel started to look for evidence that things were alright, that he was alive, and that ‘talking-back’ to OCD was acceptable and encouraged.

**Family involvement**

Diane and daughter alternated to attend all sessions with Joel. Viewpoints were discussed and evaluated, and Joe felt supported throughout. The rest of the family, although not present in therapy, were supportive of Joel’s therapeutic homework, in particular around avoidance and reassurance-seeking. Diane was vital in restricting her reassurance-giving to Joel, tolerating her own anxieties, and encouraging family members to refrain from carrying out his requests (Creswel & Waite, 2009). She was asked to praise him for his attempts and recognise small achievements (Carr, 2006).

Working with Diane also uncovered features in their family relationship where responsibility was easily given and taken away without clear justification, and Joel was confused.
with unclear guidance of what constituted ‘doing things right’ and by whose standards (Salkovskis, 1999). Joel was exposed to rigid home ethos, where mistakes would not be tolerated, so he felt the need to make sure that things were ‘right’, or even avoiding them altogether to prevent any anxiety from potential mistakes. Family was asked to rethink their rules and expectations upon Joel and other children, and make a more egalitarian distribution of chores at home and in the farm. At one point, family suggested that Joel took photographic evidence to reduce his anxieties, but this perpetuated his OCD to check his photos on his mobile phone. Pros and cons of this approach were discussed in therapy, in particular on the ambiguous nature of ‘doing things properly’, or not to make ‘any’ mistakes (see Libby, Reynolds, Derisley, & Clark, 2004).

8. Ending therapy (sessions 12-14)

Relapse prevention

Relapse prevention aimed at preparing Joel for future difficulties with OCD, and in particular recalling triggers, cycles, and strategies to manage these (Appendix L). Joel was aware that it was likely that OCD would try to upset him in situations of stress or uncertainty, like doing school exams or when horses were ill (see Carr, 2006; Creswel & Waite, 2009; Zucker, 2011). Diane was also involved in this process, and Joel took a copy of the plan home for future reminder, which was included in his discharge letter (Appendix M).

Graduation from therapy

Recognition of achievement was an important feature for Joel and perhaps a modelling process for his family to recognize that small steps and effort are important and need to be praised/acknowledged (see March & Mulle, 1998; Zucker, 2011). Joel received a certificate for his achievement (Appendix N), which was jointly presented by Diane and the trainee.

Follow-up with consultant psychiatrist

Joel met the trainee and the consultant psychiatrist to evaluate progress and to agree further medication reviews and follow-ups. We discussed potential future top-up CBT sessions with a clinical psychologist, as required, and Joel felt able to move on with his life.

9. Evaluation of therapy

Therapy goals

Joel had set goals at the start of therapy. These were rated at the start, mid (Appendix O) and end of therapy (Appendix P). Results are shown on Table 3.

Joel’s sense of achievement of his goals increased over time, in particular the greatest change was on ‘reduce asking mum to 2-5 times a day’. Joel felt that he was not doing this as much ‘in an OCD way’ and Diane agreed that he was now thinking more before seeking her reassurance. Diane also felt more able to deal with this, by learning not to reinforce his reassurance-seeking.

Psychometric results

Joel and/or Diane also completed several measures to evaluate change from pre- to post-therapy (Table 4).
Table 3. Results for GBO pre-to post-therapy

<table>
<thead>
<tr>
<th>Measure/tool</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal Based Outcomes (GBO)</strong></td>
<td></td>
</tr>
<tr>
<td>Scoring range:</td>
<td>0=goal not at all met; 10=goal reached. Aim is to increase score.</td>
</tr>
<tr>
<td><strong>Mother refused to answer this question. Instead commented “can’t control him, can’t reason with him, can’t answer”; ¹ Increase of scores represents improvement.</strong></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>Mid</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Managing (or supporting child to manage) OCD symptoms</td>
<td>3</td>
</tr>
<tr>
<td>Being able to control self and deal with it; shut door and go out and not worry about it.</td>
<td>4</td>
</tr>
<tr>
<td>Reduce ‘asking mum’ to 2-5 times a day.</td>
<td>2</td>
</tr>
<tr>
<td>Reduce checking light switches to twice a day.</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 4. Breakdown of pre-to post-therapy scores for Joel and his mother

<table>
<thead>
<tr>
<th>Measure/tool</th>
<th>Subscale/themes</th>
<th>Joel</th>
<th>Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child Obsessive-Compulsive Inventory (COCI)</strong></td>
<td>Aim is to reduce score.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Appendix Q</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Child Obsessive-Compulsive Inventory (COCI)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Checking</td>
<td>28</td>
<td>9</td>
<td>-19</td>
</tr>
<tr>
<td>Doubting</td>
<td>12</td>
<td>3</td>
<td>-9</td>
</tr>
<tr>
<td>Ordering</td>
<td>5</td>
<td>3</td>
<td>-2</td>
</tr>
<tr>
<td>Obsessionality</td>
<td>15</td>
<td>4</td>
<td>-11</td>
</tr>
<tr>
<td>Hoarding</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Neutralising</td>
<td>12</td>
<td>2</td>
<td>-10</td>
</tr>
<tr>
<td><strong>Sum total (0-168)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>21</td>
<td>-51</td>
<td>--</td>
</tr>
<tr>
<td><strong>Interpretation of scores</strong></td>
<td>*</td>
<td>**</td>
<td>Change</td>
</tr>
</tbody>
</table>

| **Spence Children’s Anxiety Scale (SCAS)** | Aim is to reduce score. | |
| **Appendix R** | | |
| Separation Anxiety | 3 | 3 | 0 | 7 | 7 | 0 |
| Social Phobia | 5 | 9 | +4 | 10 | 12 | +2 |
| Obsessive Compulsive | 12 | 12 | 0 | 16 | 10 | -6 |
| Panic/Agoraphobia | 2 | 1 | -1 | 1 | 2 | +1 |
| Physical injury fears | 0 | 0 | 0 | 0 | 0 | 0 |
| Generalised Anxiety | 8 | 4 | -4 | 6 | 7 | +1 |
| **Sum total (0-114)** | | |
| 30 | 29 | -1 | 40 | 38 | -2 |
| **T-score (30-100)** | | |
| 58 | 58 | 0 | 64 | 62 | -2 |
| **Interpretation of scores** | ** | ** | No change | * | * | No change |

¹ Decrease of scores represents improvement; * Score represents clinical caseness; ** Score within average range, non-clinical caseness.
Joel’s COCI scores reduced significantly to non-clinical levels (<60; Foa et al., 1998), in particular around ‘Checking’, ‘Doubting’ and ‘Obsessionality’. Interestingly, the SCAS scores, for both Joel and Diane, only showed slight decrease. Joel’s score remained subclinical, while Diane score was still slightly above clinical significance ($T$-score ≥59.5; Spence et al., 2003). Joel also completed an OCD monitoring sheet (Appendix S) and results were compared to those at the start of therapy (Figure 4). An overall reduction of compulsions is acknowledged, despite an increase in ‘checking plugs’.

**Subjective accounts**

Joel remained positive about his progress in therapy. In the penultimate session he stated: “if I had to go now and never receive any more therapy for my OCD I would be able to deal with it”. Joel stated that he felt more able to deal with the intrusive thoughts, to relax in stressful circumstances and to ‘talk back’ at OCD. Joel’s mother, although somewhat reticent about his progress, in particular as he had not reduced completely his checking and reassurance-seeking, also agreed that she was now more able to support him and had hopes for a positive future. Diane also seemed less stressed and was more able to focus on other parts of their family that required more of her energy and attention. They both agreed that Joel was enjoying life more positively and recounted a recent experience where Joel went on holiday for a week with relatives, without his mother. This was a surprise for the family and he was able to go on a fairground big wheel, and rides, without having intrusive thoughts about death or dying. Joel had not had these thoughts for many weeks and felt able to deal with unpredictable situations.

**Figure 4.** Total frequency of compulsions at start and end of therapy
10. Discussion

Joel attended a total of 13 sessions of integrative CBT, including E/RP, cognitive restructuring and mindfulness techniques to address the formulation, as recommended (e.g. NICE, 2006; Watson & Rees, 2008). Joel was highly motivated to attend therapy, even when he would at times not perform homework tasks agreed in therapy. Subjectively, Joel disclosed great improvement throughout therapy, such as dealing with intrusive negative thoughts of being dead, resist the urge to perform compulsions to check he was alive, and restrict avoidance behaviours (Carr, 2006). Objectively, Joel’s scores from the measures he completed pre- to post-therapy also demonstrated some positive change. Results within the COCI represented most of the change, thus decreasing 51 points to non-clinical levels of significance. The least change was within the SCAS scores, with only 1-point decrease. Diane also showed a 2-point decrease on a similar scale. Although Joel’s SCAS score remained non-clinical, Diane’s score remained at clinical range. In particular, both Joel and Diane felt that his reassurance-seeking and avoidance behaviours had reduced. There were still some situations where Joel would seek reassurance from Diane, but she realised her role in maintaining this problem.

Limitations

Due to the systemic nature of Joel’s OCD, the intervention potentially required a systemic-oriented intervention to include other family members, in order to produce more long-lasting outcomes (Karver, Handelsman, Fields, & Bickman, 2006). In particular it became clear that Joel’s father projected his own anxieties to his children, thus asking them to perform rituals on his behalf. Tom never came to a session, so this treatment focused mainly on working directly with Joel, and intermittently with his mother and older sister to support Joel’s progress in therapy and at home (Creswel & Waite, 2009).

Although Joel was motivated and engaged in therapy, his therapeutic homework performance varied, perhaps due to his busy schedule but also due to poor monitoring, or interference from his family. The trainee felt that exploring this issue in more detail would have been beneficial perhaps through Socratic questioning or downward arrow technique (Burns, 1999). It became clear that family presented with doubts around exposing Joel to anxieties and they attempted to minimise these by reassurance-giving or encouraging him to avoid anxiety-provoking situations.

Another limitation was the use of the COCI as an outcome measure, which perhaps overestimated outcome. During the write-up of this case report it emerged that a new version had been recently developed (e.g. Foa, Coles, Huppert, Pasupuleti, Franklin, & March, 2010). This new version is much shorter than the COCI, with 21 items, and was found to be strongly reliable and valid for the younger populations, with strong internal consistency (coefficient alpha's ≥.81) and to be sensitive to change throughout therapy. Unfortunately, this tool was not used to measure outcomes for the current study, but we have suggested its implementation into the services, to replace the COCI, based on these recent research developments.

Supervision and reflections

Supervision was an invaluable resource throughout this study, in particular due to the potential interference from the family on Joel’s therapeutic success, which often elicited feelings of inconsistency and incompetence during sessions, in both trainee and Joel. The trainee
recognised these as transference processes played out in session. At times the family appeared attempting to undermine Joel’s therapeutic achievements by revealing daily examples of OCD. Perhaps due to his life story and personal circumstances, Joel never intended to eliminate OCD completely, rather learn how to cope with it; so, there was a need to constantly remind his family about recognising small achievements and progress, rather than expecting an unrealistic ‘cure from OCD’.

**Potential Conflicts of Interest**

The author declares no conflict of interest.

**Acknowledgements**

I would like to thank the service-user and family who attended therapy and consented to the usage of their case material for the compilation of this report. I would also like to thank the staff at the CAMHS service, i.e. mental health practitioners, psychiatrists and nurses, who provided me with priceless insight into working with this case. Finally, and equally important, I would like to thank my clinical supervisor for an invaluable guidance and support throughout this case and during the write-up stage. Without the support and participation of any of these people this report would not have been possible.

**References**


**Children’s drawings: what can we infer from them?**

**Mikao Yamakuro**

*New Zealand*

**Article history:** Received 4 May 2014, Received in revised form 27 May 2014, Accepted 5 June 2014, Published 30 September 2014.

**Abstract:** Children’s drawings are a useful method to monitor the development a child goes through. As the child ages, these marks become more representative and often more realistic. This article will explore the pattern of development for drawing, and also explain what can be inferred from a child’s drawing used as case example.

**Keywords:** Children, drawing, development

**1. Introduction**

Children are developing constantly. We develop more in the first eighteen years of life than the following (hopefully) fifty or sixty.

Children’s drawings are a useful method to monitor the development a child goes through. From about the age of 12-18 months, the average child will be capable of making marks on paper (Cox, 1993; Thomas & Silk, 1990). At first the child may not intend their scribbles to represent anything, but this may change with age.

As the child ages, these marks become more representative and often more realistic. This article will explore the pattern of development for drawing, and also explain what can be inferred from a child’s drawing.

Luquet developed three set of stages that children follow when developing their drawing skills:

- Scribbling (2-4 years)
- Pre-Schematic (4-7 years)
- Schematic (7+ years)

These will now be explored in further detail.
**Scribbling Stage**

The scribbling stage appears at about eighteen months to two years of age.

As can be seen in figure 1, there is no realism in the picture. Nothing visible there can be compared to something in the real world that the child may have wished to represent. The scribbles appear random and unplanned.

According to most researchers, this scribble is not just aimless motion created at random by the child, but demonstrates an awareness of pattern and growing hand-eye coordination. (Silk & Thomas, 1990; Lowenfeld & Brittain, 1987).

Soon after children start scribbling, they will start to name what it was they drew after they have finished drawing it. Around two years of age, towards the end of the stage a phenomenon described as “fortuitous realism” occurs, children will sometimes label their drawing before they have started working on it, but if the drawing looks like something else to them, they may just change the label. For example, they may see a car where they’ve drawn a mass of lines. Studies have actually attempted to identify the different kinds of scribbles that appear to be universal among children. Their scribbles progressively become more recognizable and separate shapes appear on the same page. At around three and a half years, children begin incorporating details like fingers on hands (Silk & Thomas, 1990; Lowenfeld & Brittain, 1987).

**Pre-Schematic Stage**

The next stage of drawing, identified by Lowenfeld as the "Pre-Schematic" stage, typically occurs between four and seven years. In the emergence of this stage, children may draw a human figure with a circle and two dangling lines for legs (figure 2). Sometimes they include a rectangular shape for trunks of bodies, and often little marks inside the circle to represent facial features. This tadpole schema is used for animals as well as people. Drawings at this level are often described as symbolic realism because a child is perfectly happy with a simple symbol of an object (Silk & Thomas, 1990; Lowenfeld & Brittain, 1987).

By now, the child is attempting, with varied success, to represent real things in the world (known as “synthetic incapacity” or “failed realism”). The focus tends to be on humans, plants/trees and houses/buildings. Salient features of the subject are depicted, but may not always be accurate (Figure 2). A very common error children make early in this stage is the merging...
of the head and body without evidence of a neck; the head and body are one entity. Details of many features are usually lacking, for example fingers, pupils and realistic lips.

Towards the end of this stage, the drawings become slightly more realistic, and some features that were previously missing may be added. At this stage, "intellectual realism" occurs; the child depicts real objects much more accurately from their knowledge of the world. The child also fails to draw from one single perspective. For example: if they draw a man holding a cup, the full hand and cup would be drawn, whereas in reality you would not perceive the whole cup, as part of the hand would mask it from view. Towards the end of this stage, clothes may also be shown.

**Schematic Stage**

The "Schematic" stage of drawing generally occurs at ages 7-9. Some characteristics that commonly occur in this stage are indicative of what the child is thinking versus what is actually seen by the child. An interesting phenomenon that occurs in many children's drawings during this stage is called "x-ray drawing". In these, a child will draw things that aren't really visible in life. A good example of this is a man on a horse with both legs showing, even though we would really only see one. Pregnant women are often shown with a visible baby in their abdomens. Details like hands, fingers, and clothing are added with greater and greater frequency (Silk & Thomas, 1990).

As they progress further, overlapped objects, such as a tree partially obscured by the edge of a house, also emerge. The farther away something is, the smaller it will be portrayed, regardless of the real relationship in size between the objects. This indicates a growing comprehension of perspective. In many cases, children have begun using one-point perspective (Silk & Thomas, 1990; Lowenfeld & Brittain, 1987).

![Figure 3.](image)

By now many detailed features of the object are present (Figure 3). There is much more meaning to the picture, and the evidence of schema are present. This means that a child drawing the sea may incorporate fish, shells, sand and other relevant images to match their 'idea' of what a sea should involve. Clever replacements of images may be used, for example “V” shapes for seagulls. Words and symbols may also be used to add further meaning to the image. Pictures of humans will usually include much detail, such as clothes, pupils, freckles, lips etc..

A main indicator of a child reaching the schematic stage is the drawing being realistically drawn from a single viewpoint, without the transparency mentioned in the previous stage. There is often depth and a sense of spacial awareness – this is known as "visual realism"; the image is (mostly) realistic.

Later on, Viktor Lowenfeld added more stages to the three mentioned above. These are:

- The gang stage
- The Pseudo-Naturalistic Stage
- The Period of Decision
Around the age of nine or ten, children's drawings become increasingly standardized. An emphasis on depicting how things really look can begin to frustrate them. This is referred to as the "Gang Age" or "Dawning Realism." Children will often bring comic strip figures or commercial logos into their drawings and it is at this point that many children lose interest in drawing, as they become dissatisfied with their results. Adults often draw at this level or slightly below because this is where they ended their art education.

A Typical Art Therapy Assessment

Typically, an Art Therapy assessment involves the therapist's giving the client a series of five or six art tasks, using a variety of media. These tasks relate to the student's perception of self, his or her family, and school, or other aspects of their environment. These drawings and the student's behaviour while approaching this task are then evaluated along with developmental, family, and academic history. It is important to note that children's progress in drawing differs significantly across the cultural spectrum. A person who uses art as an assessment tool needs to be familiar with the art children are exposed to and the culture they are from, before making an evaluation.

Because children's drawings can be segmented into specific stages, it is possible to distinguish when a child is specifically behind age level, or in rare cases such as with certain types of autism, significantly ahead. In the case of learning disabled children whose intelligence may not be fully measured on standardized tests, it is sometimes found that they have significantly advanced creative and visual intelligence in drawing tasks. (Silver, 2001) Those students may benefit from a visual component to enhance learning.

How Deviations from the Norm may Appear

Many children will express internal conflicts with variations in drawing style and developmental level. Low self-image is often expressed in drawings in which the child draws himself in a regressed manner, but other objects and people in the composition will be drawn at a more age-appropriate level. A domineering parent may be expressed much larger in comparison to the other family members.

Often, family divisions as seen by the child will show up in the way he or she groups the members in a drawing. For example, drawings in which body parts such as arms or legs are left out, when the child is known to be capable of appropriate representation, can be indicative of denial. Another variation is having the appendages drawn too small to be of any use, and may symbolize the child's feeling of powerlessness about the events happening around him or her. A depressed child may choose to use only a pencil, and make a minimal amount of investment. Children who have ADHD will often use heavy scribbling, and might portray themselves incredibly small in a classroom but normal sized on a playground.

There is no Art Therapy manual that provides a concrete key on how to interpret drawings; however, a perceptive individual with an art background and knowledge of clinical principles is able to interpret the subliminal messages children express in their work.

So what can we learn about a child from their drawings?

A method known as projective testing can be used to provide insights into children's emotions. There is much debate about the reliability of the method, as many things are inferred which aren’t necessarily backed up with hardcore evidence. However, I’ll explain some of
the most common suggestions of features of drawings, and the emotions linked with them*.

**Signs of Impulsivity:**
- Poor integration of parts
- Gross asymmetry of limbs
- Transparencies
- Big figure
- No neck

**Signs of insecurity and feelings of inadequacy:**
- Slanted figure
- Tiny head
- Hands cut off
- Monstrous or grotesque figure
- No arms, legs and/or feet

**Signs of anxiety:**
- Shading of the face, body, limbs, hands or neck (or a combination)

**Signs of shyness and timidity:**
- Tiny figure
- Short arms
- Arms clinging to body
- No nose and/or mouth

**Signs of anger:**
- Crossed eyes
- Teeth
- Long arms
- Big hands
- Nude figures, exposed genitals or sexual content

*These were defined by Koppitz (1968, 1984) and I used a Staffordshire University workbook for this information.

## 2. Case example

**Bridget: Art Therapy in Action**

The following case illustrates some basic principles of Art Therapy practice. Bridget was a five-year-old girl who attended a small kindergarten class, which consisted of a blend of "normal students" and students with special needs. She was referred to Art Therapy by her mother and teacher because of her screaming fits during transitions of any type and her oppositional behaviour at school and at home. Bridget lived with her mother and two older siblings, one of whom was prone to violent outbursts towards the family. Before she was born, her father had been removed from the home molesting her siblings.

**Bridget's Initial Assessment**

During the initial assessment, I asked Bridget to draw a picture of herself. She responded by drawing a very small circle. She then drew her mother around the circle, and stated "This is me inside my mom's belly. She is pregnant". The overall figure is very small, isolated, and ungrounded (Figure 4). Behaviourally, she alternated between acting out and seeking physical contact and approval, reminiscent of a 2 year-old's "Separation-Individuation" process.
Her background history described her as functioning at the emotional level of a three-year-old, based on her mother's report of what she had been told by an early intervention program and her own experiences with Bridget. Her teacher, however, reported that she performed within the expected range on academic tasks. All five artworks she did for me during this assessment reflected an age appropriate pre-schematic level of development, confirming her teacher's assessment of Bridget's cognitive development. The theme of her drawings, however, suggested to me that she was in the midst of the psychosocial task of "Individuation", which is normally achieved around three years of age. I felt that her drawing in Figure 4 in particular, portrayed her sense of self as still merged with the identity of her mother.

My first objective was to support Bridget's development of a schema of self that was separate from her mother. Emphasis was placed on her forming an opinion about things, such as her favorite color. Her mother supported this by offering simple choices when possible at home where either choice was correct. In her early treatment, Bridget avoided conversation and preferred to sing phrases repetitively that related to her process or her relationship with me.

During this initial stage of treatment, she showed a low tolerance for frustration and had tantrums frequently. To help her learn problem-solving skills, art tasks were broken down to simple shapes that she then could combine to form a schema of a person. She would eventually learn that mistakes in one element did not mean the whole piece had to be destroyed.

**Bridget's Progress: Two Steps Forward**

During the middle phase of treatment, Bridget stated "I want to draw a picture", and used this time to draw a picture of herself. She said "This is me in my beautiful dress". (Figure 5)

Figure 5. My Beautiful Dress

She easily drew this more advanced, individualized representation of herself, and displayed none of the frustration that had been evident during previous sessions.

As an afterthought, she began an image of her mom, stating "She is small because she is far away." This represented a precocious leap in graphic development because she verbalized a beginning understanding of perspective. It also graphically expressed a successful separation from her mother. Through this image, she expressed pride in herself as an individual while, at the same time, sadness that her mother was far away. The finished picture presented an honest portrayal of a young girl in a beautiful dress.

When she mastered the ability to represent herself in drawings, my treatment approach expanded to include a broader range of symbols, which increased her ability to express herself graphically. She responded to this with an increase in her verbal expression as well. She progressively became more talkative about her family and began making reports about her brother's physical violence towards her and her sister. She displayed little emotion while talking about her brother; however she made physical complaints, such as "My neck is bad and my stomach hurts."
I conducted a projective test to see if she would express emotion graphically that she was not expressing facially or verbally. The test I used was the Rawley-Silver's (1987) "Draw a Story" (DAS). This test is administered by providing the student with 14 different stimulus cards. The student is told to select two pictures, and then draw and narrate a story based on those subjects. The responses are rated for emotional content, and assigned numerical values.

Is This A Step Back?
Bridget's themes were self-destructive. She drew and narrated two images. For the first (Figure 6), she drew a regressed princess who stabbed herself with a knife and died.

Because her behaviour outside of session was continuing to improve, I felt she had established enough trust in me to use our session time to channel her inner turmoil that had always been present. This increase in her ability to discuss her family dynamics coincided with an increase in frustration tolerance for risk-taking and accepting perceived imperfections in her artwork.

Treatment Conclusion: Bridget's Next Steps
Near the end of treatment, she made this engaging drawing of a neighborhood cat walking upstairs to go into a house. (Figure 8).

She cheerfully drew the image and displayed no frustration over any element within the drawing. She talked about how she liked the cat. The image does contain an environment and tells a story on its own, which demonstrates a clear progression into the next developmental stage of drawing.

I believe this expressive therapy was extremely helpful for Bridget because she began treatment in a primarily non-verbal mode. She was able to use the process in combination with the structure provided by her teacher to achieve greater individuation. She also learned to use the art process to express her inner turmoil in a safe way with an adult, and this enabled her to behave
more appropriately in the school setting. By the end of the school term, she was well within the expected range of academic progress. Her psychological problems were so severe, however, that it was clear she would need continued help.

Data I collected helped clarify her problems, and the severity of those problems. The support she received from me and her teachers enabled her creative strengths to compensate for her emotional deficits. She did achieve significant developmental goals and a resulting sense of competence. Without that support, she may have continued to experience lowered self-esteem and a feeling of failure.

**Why did creating art help Bridget?**

The theories about why children play are much the same as why they draw, in that the child wishes to be grownup and in control. In this sense, drawing gives children a sense of mastery over the media, as well as the objects and situations they represent in their pictures. (Silk & Thomas, 1990). As a matter of fact, most people of any age have the ability to act out what they feel through play and art. They also have an ability to step out of these activities, to reflect on them, and to create new ideas that lead to healing (Dyer-Friedman & Sanders, 1997; Rubin, 1978). By creating a healthier image to represent herself, Bridget was then able to become more mature in her behaviour.

Winnicott (1965) placed emphasis on "Transitional Space," which is the distance children travel to explore new terrain before returning to their caregiver. The relationship between the therapist and child will mimic the transitional space the child has established with their primary caregiver. Winnicott also placed emphasis on a "Transitional Object," which is usually a favorite toy to which children attribute characteristics of their primary caregiver. This transitional object is used by children to self-soothe when they are separated from their caregivers or during other transitions that cause anxiety. This process is linked to children's growing creativity and their future ability to use play as a coping strategy.

Art products produced by a student during treatment can be used in much the same manner as transitional objects. The child learns to trust another person who is not the primary caregiver, can use the art process as a means of self-soothing, and can form an attachment in the context of the therapeutic relationship (Robins, 1987). In Bridget's case, she was able to form an attachment to me, and then practice separation from me by taking progressively responsibility in her art process.

**3. Conclusion**

The inclusion of Expressive Art Therapies in the school system is slowly increasing, as it becomes necessary to meet the rising needs of students who require more clinical assistance than can typically be provided by a teacher in a large classroom setting. Children entering the schools today face challenging problems that place them at risk for failure, and for many, school is the only place they are exposed to structure and safety. For others, the complex task of learning may be complicated by neurological deficits that cause learning disorders. These children are often rejected by their peers and can then suffer secondary symptoms of low self-esteem, depression, or acting-out behaviour as a result of a primary learning disorder. As more schools begin providing services "in house," these services can be much less costly than paying for education in specialized treatment centers.
Potential Conflicts of Interest

The author declares no conflict of interest.

References


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