

## The Benefits of Using Traditional Martial Arts as an Intervention Programme for Children with Behavioural, Emotional and Social Difficulties

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### Abstract

The aim of this paper is to examine the potential use of a traditional martial arts programme as a form of intervention for children with behavioural, emotional and social difficulties (also known as BESD) and the benefits that such an intervention could offer. As a special education teacher and Karate-Do practitioner, I believe I can present the use of martial arts in the school setting in a different light, explaining their usefulness as a psychotherapeutic tool that promotes inclusion. In this paper the benefits and inclusive characteristics of martial arts will be examined, as well the importance of the instructor as a mentor, therapist and role model. There will also be a brief overview of similar intervention programmes that have already been successfully implemented in schools.

**Keywords:** martial arts, intervention programmes, behavioural, emotional and social difficulties, special educational needs

### A short review of the validity of the label BESD

Children diagnosed with behavioural, emotional and social difficulties (the acronym BESD will be used for the sake of simplicity) are described as being:

*'...withdrawn or isolated, disruptive and disturbing, hyperactive and lack concentration; those with immature social skills; and those presenting challenging behaviours arising from other complex special needs'* (Department for Education and Skills, 2001, p.87)

However the wide and generic nature of these characteristics makes the definition and the diagnosis of BESD very challenging (Syrnyk, 2013). Teachers and other professionals in the educational field seem to have a common concept of what BESD is, but cannot agree to a precise definition (Daniels *et al.*, 1999). Unlike other kinds of special educational needs, this lack of consensus as to how BESD should be defined, affects in turn the way interventions are planned for it (MacLeod and Munn, 2004).

The problem lies in the validity of its nature since there are opposing discourses on what is its aetiology. The individual, medical or deficit model (IMD) considers BESD as an internal impairment that should be treated with the use of chemicals and medicine, while the sociological discourse does not accept the existence of it as a disorder and instead claims that BESD is socially constructed, as a result of the distortion of modern society (Visser and Jehan, 2009).

In the IMD model psychostimulants are considered to be the first line of treatment (Travell and Visser 2006). These psychostimulants have been found to be effective only for short periods of time and the long-term effects they might have on the health of the children can be potentially dangerous because of the toxic ingredients these drugs contain (Ghodse, 2007). Not only that but medication prescribed for ADHD, such as Ritalin, is known to make children feel weak, sleepy and feeble, as though they have been drugged (Loe and Feldman, 2007). The so called benefits, such as an increase in focus and self-regulation, begin to fade after three to four

hours and it is possible that the unwanted behaviour will be intensified after the drug's effect wears off (Cooper and Jacobs, 2011).

Slee and Allan (2009) claim that the IMD model used for behavioural, emotional and social difficulties is causing individuals to be presented as abnormal and problematic. This causes children with BESD to be stigmatized with a label and face further exclusion and marginalization (Sutton, 2000).

Since behavioural, emotional and social difficulties is such a complex issue, simple solutions will not be of much use. More complex forms of interventions should be pursued, which may be the result of combining several disciplines together in more than one environment (MacLeod and Munn, 2004). The social model promotes certain types of interventions such as therapy, counselling, educational interventions, parent training, art and sports (AYCNP, 2008). Their nature is often 'therapeutic' and their purpose is to allow children to raise their self-respect/self-esteem, learn how to control their emotions and actions and work towards overcoming the problems that they face (Cooper and Jacobs, 2011).

Another form of intervention like the above could be based on traditional martial arts, since such programmes have already been used to 'combat' violence and bullying incidents in schools (Zivin et al., 2001). But how useful would an intervention for children with BESD be, based on this kind of training? What are the specific characteristics of martial arts that can promote the inclusion and well-being of students with behavioural, emotional and social difficulties?

### **An Introduction to Traditional Martial Arts**

'Traditional martial arts' is a vast umbrella term that is used to define a variety of Eastern martial arts originating mainly from Japan and China. Traditional martial arts have existed for over three thousand years and are characterized by a huge variety of styles and techniques, which have evolved over the centuries (Lewis, 1996). It is commonly accepted that martial arts began as war-oriented, self-defence systems and later flourished into more intricate and sophisticated ideas during more peaceful times (Fuller, 1988). Initially limited by geographical bounds to the East, nowadays traditional martial arts are taught and practiced worldwide, with many renowned masters travelling all over the world to promote their art (Hall, 2012).

Because of my experience as an educator and a martial artist, I cannot help but notice the common pattern between traditional martial arts training and inclusive education, since both disciplines are constantly evolving and improving, like walking on a road that has no end, where the journey is more important than the destination. Just like in martial arts there is always something new that you can learn, no matter what your current level is, there is always something more that can be done towards inclusion, no matter how inclusive a system is.

Practitioners of traditional martial arts are encouraged to learn about their style's history and the philosophy that characterizes it. For example a well-known phrase in Karate-Do is '*karate ni sente nashi*' which means '*there is no first attack in Karate*', explaining the peaceful nature that the Karate-ka must strive for (Funakoshi, 1981).

On the contrary, combat sports tend to underemphasize these aspects or outright disregard them, focusing instead on aggression, competition in athletic events and fighting for personal fame or money. Training in traditional martial arts has been associated with decreased aggression, lower anxiety and increased self-control and self-regulation (Zivin et al., 2001). On the other hand combat sports have been shown to increase violent behaviour and aggressive thoughts (Nosanchuk & McNeil, 1989).

This distinction has to be made clear since unfortunately a lot of misconceptions exist in modern society concerning this subject. This happens primarily because the media often present a distorted idea as to what traditional martial arts are, opting to emphasize the more flashy, aggressive and violent aspect of the arts through movies, video-games and television (Lakes & Hoyt, 2004). Traditional martial arts pick up where combat sports are lacking by offering a complete philosophical/technical system that is deeply pacifistic in nature. The main aim of traditional martial arts is none other than the cultivation of a calm and centered mind that can be applied in every facet of life (Zivin et al., 2001).

It is easily understood that combat sports, due to the promotion of impulsive aggression, cannot play an effective role as a part of a behaviour therapy approach or intervention programme for children with BESD. Instead we must turn to traditional martial arts training in order to fill that slot (Twemlow et al., 2008).

### **The physical & psychotherapeutic benefits of Martial arts and how they can help children with BESD individually**

The surge of popularity that martial arts experienced in the West resulted not only in more practitioners but also in more research being carried out based on these arts and how they can be utilized in the school environment and in after-school intervention programmes for aggression, bullying and even traumatized women (Twemlow and Salco, 1998), (Guthrie, 1995). Back and Kim (1979) have studied the effects of martial arts and proposed that the benefits of training in them come not only from the physical exercise, but from the building of an honorable, non-violent and respectful character as well.

#### **Physical benefits and BESD**

Richman and Rehberg (1986) suggest that traditional martial arts have survived and even 'grown' over the years not only because of their cultural and historical importance, but also because of their physical and psychological benefits.

The physical benefits of martial arts are well known and involve increased strength, agility, awareness and coordination (Lewis, 1996). Through practice, children learn how to better use their body and synchronize their moves, improving their balance and flexibility. An added advantage to this is that in traditional martial arts, the teaching is concentrated mainly on technique and proper posture of the body and not on strength or speed, two attributes that are also raised in time. This can be very useful for students with ADHD who often have trouble with their fine motor skills and such training can help them in terms of balance, dexterity and spatial understanding (Loe and Feldman, 2007).

Heliq (2007) proposes that physical exercise such as martial arts, can lead to a marked decrease in the symptoms of ADHD in children and adults. In fact his research shows that exercise is more effective in alleviating the symptoms of mild ADHD compared to prescribed medication, both in short-term and long-term efficacy. It is also a more interesting alternative to other forms of exercise and it can capture the interest of today's children, who are more used to indoors activities (Lewis, 1996).

Another physical benefit of martial arts is the fact that training in them allows children to have a more stable diet and healthier eating habits, following a proper nutrition plan, which is also linked to the effects of ADHD. It must be noted however that even though martial arts training encourages the adoption of a balanced diet, the parents of the children have to oversee this nutrition plan, agree to it and in most cases sustain it financially in order for the new eating habits to be effective (Twemlow and Salco, 1998), (AYCNP, 2008). Furthermore weight loss is also achieved through intense cardiovascular exercise which can also promote better sleep (Li, 2001). Children with behavioural, emotional and social difficulties are at risk of obesity and

insomnia due to stress and high levels of anxiety (Collins and Bentz, 2009) however they can be benefitted from the above training perks. Finally, through training children and especially adolescents improve their perception of their physical abilities and as a result enhance their body image and boost their confidence (Guthrie, 1995).

It is clear to see from the above that children with BESD can benefit in a lot of ways from their physical training but the true advantage for using martial arts as an intervention for these children lies in the psychotherapeutic nature of the arts.

### **Psychotherapeutic benefits and BESD**

The psychotherapeutic benefits of martial arts have been the focus of a lot of research in the past years that has brought to light some very interesting findings, which show that long term training causes positive psychological and social adjustments. Fuller (1998) commented on the martial arts character training by stating:

*'From a psychotherapeutic viewpoint, martial arts may be viewed as formalized, refined systems of human potential training which provide interesting, practical models of intervention' (p.318).*

In his study (1998) he found out that children who train in Aikido enjoy a vast improvement in their psychological health, especially in the way they cope with stress and anxiety. Other researchers support his claim with similar findings, proving that martial artists cope with stress in a less violent manner and are more warmhearted and easy-going than their peers (Rothpearl, 1980). Children with ADHD are more likely to suffer from high levels of anxiety and find many situations in their everyday life stressful and overbearing, which can lead to depression or substance abuse (Sutton, 2000). Since medication is often not effective or causes side-effects, physical training may be a more viable and safe alternative (Haydicky et al., 2012).

Martial Arts can be used as a tool for avoiding hostility and aggression, focusing instead on avoiding conflict and impulsive actions (Layton et al., 1993) (Kim, 2004). This peaceful attitude of course takes some time to develop but it is taught from the first day to new students, affecting them positively (Twemlow and Sacco, 1998). Other psychological benefits include higher self-esteem and a more optimistic and confident response to daily challenges, which can help children that feel 'not good enough' or 'inadequate' cope with their stress and anxieties much more efficiently (Lakes and Hoyt, 2004). Lantz (2002) also claims that family members of children who train in Judo consistently reported that they observed a significant improvement in their children's self-esteem and self-respect.

Children with behavioural, emotional and social difficulties can benefit the most from the cultivation of their concentration ability through their training. During their classes they are taught how to set their mind on one thing only, such as a technique or a 'kata' and perform it without distractions (Twemlow and Sacco, 1998). Children with BESD can also benefit from the controlled environment of the class (Lantz, 2002). Inside the training hall there are no noises, pictures or other external stimuli to distract the child, who has to focus and pay attention (Lantz, 2002). According to Twemlow et al., (2008) with proper, long-term training children can learn how to master this skill in the dojo (training hall) and then transfer it to their every-day life.

Students with BESD often have a negative attitude towards learning and homework (Mowat, 2010). However with the skills they can acquire through their training they can develop more positive dispositions towards school and homework (Zivin et al., 2001). Students also learn how to commit themselves to their goals and aims, since most styles take time to learn. This

commitment to martial arts can be further cultivated to transit to school matters, resulting in better grades and academic progress (Lantz, 2002). According to Seitz et al. (1990), martial arts training leads to a greater understanding of the child's mental and cognitive abilities and allows her to take advantage of her potential.

Finally another important benefit that training in the martial arts can offer to children with BESD is the promotion of self-regulation, since traditional martial arts have a strict moral code of conduct that involves respect and courtesy (Twemlow and Sacco, 1998). Lakes and Hoyt (2004) examined a self-regulation programme for teenagers 'at risk' based on martial arts training after school and state on the subject:

*'...as martial arts classes proved to be a context conducive to teaching self-regulation, therapists and educators should consider implementing similar programs in schools or community settings...'* (pp. 296)

It is clear to see that the combination of physical and psychological benefits that martial arts can offer in an intervention should not be overlooked.

### **Why use traditional martial arts as an intervention programme?**

According to Twemlow et al. (2008) martial art training is already a formalized, systematic form of intervention that can have very successful results if it is implemented in schools. However training in the martial arts does not just offer an opportunity for physical and spiritual growth as mentioned above, but also helps in the inclusion of the children who take part in it (Lantz, 2002).

Even though children with BESD experience difficulties with social functioning and peer relations (Wiener and Schneider, 2003), through their participation in such a programme they can feel part of a larger team that shares the same interests and has the same goals with them. This gives them the feeling of belonging in a social group (Lantz, 2002). During practice, children have to learn how to collaborate with their peers in order to perform the requested techniques and advance in the art. Also older and more advanced students are often given the responsibility of teaching or helping the younger ones, thus promoting collaboration and respect between the members of the class (Twemlow and Sacco, 1998). Being given more responsibilities helps children share their knowledge and gain more confidence and control over their behaviour (Goodman and Burton, 2010).

Respectful relationships and friendships between all children are cultivated and encouraged in such an environment, while aggression and competition is avoided and suppressed (Layton et al., 1993). In many martial arts clubs the whole family trains together, helping parents and children spend time creatively and bond further over a common interest (Lantz, 2002). This feeling of belonging and active participation is vital for children with BESD and not only promotes inclusion but it can also help them shake of the 'stigma' of their label (Sutton, 2000).

Intervention programmes with a martial arts philosophy emphasize effort and determination more than just natural talent or athletic ability and draw the interest of children who don't like sports and are not athletic (Lakes and Hoyt, 2004), (Kim, 2004). Progress is based on the personal improvement of the child and there is no comparison with the other students in the class. Everyone's progress is assessed in comparison to his/her previous performance (Lakes and Hoyt, 2004). This is very helpful for students with BESD who often feel excluded by their peers due to their grades and slower progress (Simonnet and Modrick, 2010).

The belts and ranking system also give to the children with BESD the opportunity to see how much they are improving and in what areas they need to work more, by receiving regular feedback (Lakes and Hoyt, 2004). Positive feedback has been shown to have a positive influence on the behaviour of children with BESD (Goodman and Burton, 2010). Also testing events and demonstrations offer recognition of their effort that they might not be getting from their school teachers or family members because of their behaviour (Twemlow and Salco, 1998).

Unlike other forms of interventions that focus on talking and may lead to frustration on the part of the children, martial arts focus more on kinesthetic abilities, allowing them to express themselves through motion and action (Twemlow and Sacco, 1998). Research shows that sports-based interventions generally attract a limited number of children but martial arts seem to appeal to a wider range. Finally, the emphasis on self-regulation is not a core value in other types of sport related interventions, but it is taught and reinforced in martial arts (Lakes and Hoyt, 2004).

I believe that a martial arts class in a school setting can operate like a support group that provides a forum in which pupils can talk about issues of importance to them, in a safe secure environment, knowing that they will be listened to. The instructor assumes a role very similar to that of the Support Group Leader (also called significant other), training and helping the children with BESD and motivating them to move to higher aspirations (Mowat, 2010).

#### **The role of the instructor/mentor in an intervention programme**

When using martial arts training as a form of intervention it is extremely important that the instructor is a role model of the highest character so that she can influence her students to strive and imitate her (Lakes and Hoyt, 2004).

According to Twemlow et al. (2008) the 'Sensei' has to be a leader and a mentor and has to show faith in the students' abilities and potential in order to motivate them. For many children with BESD having such a 'parental figure', that they can look up to, supporting them can boost their confidence and self-esteem (Lantz, 2002). When dealing with children with BESD the instructors should be firm but also allow some lapses or failures in behaviour to which they should respond in a sensitive and understanding way (Twemlow, 1996). It is also necessary to help the children understand how they can transfer the skills they practice inside the dojo (self-control, respect, collaboration) in their school-life (Lantz, 2002). Consistency of character is very important as well, since the instructors have to lead by example and model the behaviour they expect from the children in order for the intervention programme to be effective and efficient (Twemlow and Sacco, 1998).

Their role in the intervention programme is a key therapeutic element since it goes beyond simply teaching techniques or being a gym teacher. The teachings of a martial arts instructor who is not exemplary will not have the same effects on children and will possibly jeopardize the success of the intervention programme (Twemlow, 1996). Martial arts expertise is not enough, but ideally the instructor needs to have a background as an educator or therapist, so that the intervention can be more effective. If that is not possible then the collaboration between the instructor and other professionals such as therapists or psychologists is mandatory because of the sensitive nature of the children (Twemlow and Sacco, 1998).

Instructors should also have a close relationship with the school and the family of their students with BESD so that they can be directly involved in the students' lives and create bonds of trust with them (Twemlow and Sacco, 1998). The effective collaboration between the instructor, the school-professionals and the parents is necessary in every inclusive intervention



since it is the surest way to achieve satisfactory results, thanks to the combined effort of those involved (Ainscow, 2007).

### **An overview of successful intervention programmes using martial arts**

In the last years there have been quite a few intervention programmes that aim to help children with ADHD, anxiety, aggressive behaviour or bullying-problems, such as 'LEAD', 'Integral Mindfulness Martial Arts', and 'The Gentle Warrior Programme' which were all implemented in the school programme:

1. The 'LEAD' programme was based on the traditional art of Moo Gong Ryu and was taught by the world renowned master Joon Pyo Choi , specifically adapted for the school setting with the help of other professionals. The aim of the programme was self- improvement and self-regulation and it lasted for four months. The students (both boys and girls) who took part in it were students of an elementary school and most of them were chosen because of the disruptive behaviour they displayed (Lakes and Hoyt, 2004).
2. The 'Gentle Warrior' programme was based on a traditional form of Kung Fu and the aim was to promote non-violence and social problem-solving skills for pupils 'at risk'. Other than Kung Fu the children were taught meditation and how to avoid conflict through role-playing. The programme, which was highly structured, run in several public elementary schools in the USA for three years, during which time data was collected (Twemlow et al., 2008).
3. The 'Integral Mindfulness Martial Arts' programme was specifically designed for teenagers (only boys) with ADHD, BESD and anxiety. It was based equally on Mindful meditation and mixed martial arts and every intervention lasted for 20 weeks. The instructors were experienced martial artists and also child/family therapists (Haydicky et al., 2012).

There is strong evidence from the data collected in the above programmes that such interventions are indeed successful and help children increase their concentration ability and self-esteem (Haydicky et al., 2012), be more optimistic and happy (Lantz, 2002), improve other aspects of their life and control their aggression and frustration (Lakes & Hoyt, 2004), (Twemlow et al., 2008). The success of these intervention models should not only act as an example, but also give incentive to more schools to pursue such ways of intervention using martial arts.

There are a few basic elements common in all of the above efficient intervention programmes. First of all the instructors were experienced not only in martial arts but in therapy as well and were also assisted by a team of professionals ,clinicians and researchers during the course of the teaching (Twemlow and Sacco, 1998). The instructors were also respected members of their communities something that helped their status as 'therapists' (Twemlow et al., 2008).

The programmes were the result of careful planning, had clear aims and were designed with specific groups of children in mind (Haydicky et al., 2012). The interventions took place inside the schools where the children were studying or in nearby sports centres that were easily accessible and allowed children to train on a daily basis without having to move far away. This also helped the children develop a sense of consistency during their training, allowing it to become part of their routine (Twemlow et al., 2008). The main focus of all the programmes was to teach non-violence and self-regulation and transmit to the children the values of traditional martial arts, through techniques, combat choreographies and meditation (Zivin, 2002).

The interventions were connected with the school and family life of the children that participated in it, so as to maximize its effectiveness in every category (Lantz, 2002). The majority of the students agreed that these programmes were interesting and fun for them and felt like they helped them. This is very important, since every successful intervention should listen to the experiences of the children to gain a better understanding and become more effective (MacLeod and Munn, 2004).

### Conclusion

Parents and school professionals are often sceptical or negative when it comes to using martial arts as a therapeutic form of intervention. Their main concerns is that such training may promote violence and that a martial arts instructor (sensei), is not qualified enough to play such an important role in an intervention programme (Twemlow and Sacco, 1998). But traditional martial arts have turned out to be something much more than just self-defence systems (Li, 2001). So, as Twemlow et al. (2008) claim, the most important thing is to make martial arts training legitimate in the eyes of the public and 'bring these esoteric solutions out from the shadows'.

Traditional martial arts offer a wide range of benefits to children with BESD that make them a viable and also a cost-effective form of intervention. Such a programme can be implemented easily in the school setting, since schools are the most efficient locations for interventions in BESD, and promote self-regulation in a way that is both challenging and rewarding for the students who take part in it (Zivin, 2002). A martial arts class is true to the inclusive values of collaboration, respect, acceptance and friendship, uniting the practitioners under a common core of ideals and philosophy, which go far beyond self-defence.

As a special education teacher and an avid martial artist I would like to see such programmes run by schools more often and on a more stable and organized fashion, so that children can benefit from them as much as possible. Traditional martial arts are culturally rich, philosophical systems, and now is a good opportunity to turn them into a strong educational tool as an intervention form for behavioural, emotional and social difficulties.

### References

- Ainscow, M. (2007) Taking an inclusive turn. *Journal of Research in Special Educational Needs*. 7 (1): p. 3-7.
- Back, A. and Kim, D. (1979) Towards a Western philosophy of Eastern martial arts, *Journal of the Philosophy of Sport*. 6: p. 19-28.
- Collins, J. and Bentz, J.E. (2009) Behavioural and Psychological Factors in Obesity, *The Journal of Lancaster General Hospital*. 4 (4).
- Cooper, P. and Jacobs, B. (2011) *Evidence of Best Practice Models and Outcomes in the Education of Children with Emotional Disturbance/Behavioural Difficulties: An International Review*, National Council for Special Education.
- Daniels, H., Visser, J., Cole, T. et al. (1999) *Emotional and Behavioural Difficulties in Mainstream Schools*. Research Report. No 90, London: DfEE.
- DfES (Department for Education and Skills) (2001) *Special Educational Needs: Code of Practice*. London: DfE.
- Fuller, J.R. (1998) Martial Arts and Psychological Health. *British Journal of British Psychology*. 64: p. 317-328.
- Funakoshi, G. (1981). *Karate-Do: My Way of Life*. Tokyo: Kodansha International.
- Ghodsse, A.H. (2007) 'Uppers' keep going up. *British Journal of Psychiatry*. 191 (87): p. 279-281.
- Goodman, R.L. and Burton, M.D. (2010). The inclusion of students with BESD in mainstream schools: Teachers' experiences of and recommendations for creating a successful inclusive environment. *Emotional and Behavioural Difficulties*. 15 (3): p. 223-237.
- Guthrie, S. R. (1995) Liberating the Amazon: Feminism and the martial arts. *Women and Therapy*. 16: p. 107-119.
- Hall, David A. (2012) *Encyclopedia of Japanese Martial Arts*. Kodansha: USA.
- Haydicky, J., Wiener, J., Badali, P., et al. (2012) Evaluation of a Mindfulness-based intervention for Adolescents with Learning Disabilities and Co-occurring ADHD and Anxiety. *Mindfulness*. 3 (2):p. 151-164.
- Kim, I. (2004) Treating Violence in the School through Traditional Martial Arts. *International Journal of Educational Reform*. 13 (4): p.308-324.
- Lakes, K.D. and Hoyt, W.T. (2004) Promoting Self-regulation through School Based Martial Arts Training. *Applied Developmental Psychology*. 24: p. 282-302.



- Lantz, J. (2002) Family Development and the Martial Arts: A phenomenological study. *Contemporary Family Therapy*. 24 (4): p. 565-580.
- Layton, C., Higaonna, M., and Arneil, S. (1993) Karate for self-defence: An analysis of Goju-Ryu and Kyokushinkai kata. *Perceptual and Motor Skills*. 77: p. 829-830.
- Lewis, P. (1996) *The martial arts*. London: Prion Books.
- Li, J.X. (2001) Tai Chi: Psychological Characteristics and Beneficial Effects on Health. *British Journal of Sports Medicine*. 35 (3): p.148-156.
- Loe, I.M., and Feldman, H.M. (2007) Academic and Educational Outcomes of Children with ADHD. *Journal of Pediatric Psychology*. 32 (6): p.643-654.
- MacLeod, G. and Munn, P. (2004) Social, Emotional and Behavioural Difficulties: A different kind of special education need?. *Scottish Educational Review*. 36(2): p. 169-176.
- Mowat, J.G. (2010) Inclusion of pupils perceived as experiencing SEBD: Affordances and constrains. *International Journal of Inclusive Education*. 14(6): p. 631-648.
- Nosanchuk, T. A., and MacNeil, M. L. (1989) Examination of the effects of traditional and modern martial arts training on aggressiveness. *Aggressive Behaviour*. 15: p. 153 – 159.
- Richman, C. L., and Rehberg, H. (1986) The development of self-esteem through the martial arts. *International Journal of Sport Psychology*. 17: p. 234–239.
- Rothpearl, A. (1980) Personality traits in martial artists: a descriptive approach. *Perceptual and Motor Skills*. 50: p. 395-401.
- Seitz, F. C., Olson, G. D., Locke, B., et al (1990) The martial arts and mental health: The challenge of managing energy. *Perceptual and Motor Skills*. 70: p. 459–464.
- Simonnet, D. G. and Modrick, J.E.M. (2010) 'Advancing inclusive education and 21st century learning skills through the arts'. UNESCO Observatory. Faculty of Architecture, Building and Planning. University of Melbourne. refereed e-journal 1 (5)
- Smith, H., Polenik, K., Nakasita, S. et al. (2012) Profiling social, emotional and behavioural difficulties of children involved in direct and indirect bullying behaviours. *Emotional and Behavioural Difficulties*. 17(3): p. 243-257.
- Sutton, C. (2000) *Child and Adolescent Behaviour Problems: A multidisciplinary approach to assessment and intervention*. New Jersey: Wiley-Blackwell.
- Syrnyk, C. (2013) Emotional and Behavioural Difficulties: Capturing the Nurture approach: experiences of young pupils with SEBD. *Emotional and Behavioural Difficulties*. 19(2): p. 154-175.
- Travell, C., and Visser J. (2006) ADHD does bad stuff to you: Young people's and parents' experiences and perceptions of Attention Deficit Hyperactivity Disorder (ADHD). *Emotional and Behavioural Difficulties*. 11 (3): p. 205–216.
- Twemlow, S. W. and Sacco, F. (1998) The application of traditional martial arts practice and theory to the treatment of violent adolescents. *Adolescents*. 33: p. 505-518.
- Twemlow, S.W., Biggs, B.K., Nelson, T.D., et al. (2008) Effects of Participation in a Martial Arts Based Anti-bullying Program in Elementary Schools. *Psychology in the Schools*. 45(10): p. 947-959.
- Visser J. and Jehan Z. (2009) ADHD: a scientific fact or a factual opinion? A critique of the veracity of Attention Deficit Hyperactivity Disorder. *Emotional and Behavioural Difficulties*. 14 (2): p. 127-140.
- Weiser, M., Kutz, I.K., Kutz, S. J. et al. (1995) Psychotherapeutic aspects of the martial arts. *American Journal of Psychotherapy*. 49(1): p. 118 -127.
- Wiener, J., and Schneider, B. H. (2002) A multisource exploration of the friendship patterns of children with and without learning disabilities. *Journal of Abnormal Child Psychology*. 30(2): p. 127-141.
- Zivin, G., Hassan, N. R., DePaula, G. F., Monti, D. A., Harlan, C., et al. (2001) An effective approach to violence prevention: Traditional martial arts in middle school. *Adolescence*. 36: p.443 – 459.