CHAPTER – 5
SUMMARY AND CONCLUSIONS

5.1. Summary

Childhood cognitive and behavioral problems categorized as disorders of attention, impulsiveness and hyperactivity, present a challenge for the therapist. The cluster of problems includes inattention, excessive stimulation, hyperactivity, impulsiveness, irritability, and inability to delay gratification. These conditions are diagnostically referred to as ADHD (American Psychiatric Association, 1994), one of the most complex disorders of childhood. These problems affect children’s interaction within their own environment and result in an inability to meet situational demands in an-age-appropriate manner (Routh, 1978).

With prevalence rates estimated to be 3-7% of school-aged children (American Psychiatric Association, 2000), Attention-Deficit/Hyperactivity Disorder (ADHD) has received considerable attention among educators and mental health workers in the past three decades. There are a number of reasons why there is a pressing need to develop treatments for ADHD in addition to medication and behavior therapy that have strong research support. Children with ADHD, whose symptoms persist into adolescence, are at high risk for developing conduct disorders, antisocial behavior, substance abuse, learning problems and so on. It is important to recognize the problems and seek treatment as soon as possible. Early identification and treatment allow such children to grow into happy productive adults. Among researchers and clinicians around the world, there are concerns that youngsters with ADHD/DBDs are not receiving the appropriate treatment that they need (Kutcher,
Aman, Brooks, Buitelaar, Daalen, Fegert, 2003). Children's peer relations are often adversely affected by ADHD and despite the importance of good peer relations for long-term development, this area is often neglected in treatment. Aspects of emotional functioning i.e. feelings of sadness, worries, etc., also tend to be adversely affected in many children with ADHD but often go unaddressed.

From this line of research, three primary modalities of intervention have evolved: 1) stimulant medication, 2) improving self-regulating behaviors in the classroom and at home, and 3) helping parents manage the child effectively (Mash & Wolfe, 2002). Whereas the use of stimulant medication leads to significant reduction in symptoms of hyperactivity and/or inattention in the majority of cases, the long-term effects of stimulants are inconclusive. Moreover, simply using medication does not offer the child behavioral management strategies and may lead to feelings of embarrassment, helplessness, or incompetence (Pelham, Hoza, Kipp & Gnagy, 1997). Behavioral programs such as reward contingencies, reduction of external stimuli, cognitive self-regulation strategies, and social skills training have shown to have at least moderate effectiveness in reducing symptoms.

Two more recent, but separate, interventions are Play Therapy and Yoga. A review of literature regarding Play Therapy revealed a moderate degree of “hope” but little conclusive evidence of its efficacy (Blinn, 2000) and some other reports show the effectiveness of individualized Play Therapy in improving on-task behaviors and developing better emotional regulation in a child with ADHD (Kaduson, 1997).
Review of literature suggests that Yoga can reduce the ADHD symptoms to some extent, but no study has been reported on Iranian children. There are very few studies revealing the study of the effect of Play Therapy based on Non-directive Play Therapy on ADHD children. In addition, there is no study on the effectiveness of the combination of ‘Play Therapy and Yoga’ on symptoms of ADHD, although some of the studies were a motivation for studying the effectiveness of both interventions together.

The effectiveness of Play Therapy, Yoga, and a combination of both in reducing inattention and hyperactivity symptoms in Iranian children diagnosed with Attention-Deficit/Hyperactivity Disorder (ADHD) has been examined in this study. Pre-test and post-test symptoms were rated by parents and teachers using the Child Symptom Inventory-4 (CSI-4). An ANOVA indicated that all three interventions yielded significantly greater reduction of both inattention and hyperactivity symptoms as compared to the controls.

A group of randomly selected ADHD children (80) from different schools of Shiraz city in Iran were treated by Play Therapy, Yoga, and a combination of both interventions. The relative effectiveness of the interventions on hyperactivity and inattention symptoms has also been compared. The factor of age which was expected to influence the effectiveness of the interventions was examined and showed that this factor was partially effective for the effectiveness of the interventions.
5.2. Conclusion

1. Play Therapy enabled children to rise from appropriate behaviors associated with ADHD and help them cope with this disorder better. Consequently, children can and do become more mature, more positive in his/her attitudes, and more constructive in the way he/she expresses his/her inner feelings.

2. Previous reported researches show that during rest and relaxation periods the brain integrates neurologically and cognitively. This can help the ADHD children. In this study, the findings revealed that Yoga is effective as a complementary and alternative method for addressing ADHD children.

3. Not only the combination of ‘Play Therapy and Yoga’ was an effective intervention for the ADHD children, but also, yielded the greatest reduction in both inattention and hyperactivity symptoms among the interventions applied. In other words, it can be said that, Play Therapy can improve its effectiveness by applying it along with other interventions such as Yoga program.

4. Examining the effectiveness of the interventions applied on hyperactivity and inattention symptoms, reveals that in addition to their positive effectiveness on them, both symptoms were influenced almost equally.

5. The effectiveness of age on the modification of the ADHD symptoms has been investigated which resulted that it partially influenced effectiveness of the interventions.

6. Finally, from the results of the present study it can be concluded that Play Therapy and Yoga program may be beneficial adjuncts in helping children manage symptoms of ADHD. This is not surprising considering that ADHD is a multi-face disorder in terms of causes and treatment and that multiple
treatment modalities are most effective. It was also found that emotional problem is a barrier and influences the performance of ADHD children and their mental health. In addition, concentration and self control treatment can help them to cope with their disorder. It therefore, becomes imperative for the teacher and parents to take utmost care in the well being of ADHD children so that the responsibility which children provide to manage their behavior problems is superlative.

The completion of the study is likely to help

1. Identify children with ADHD in Iran;
2. Profile the patterns of their behavioral assets/deficits for intervention planning and programming;
3. Devise or develop a non-directive Play Therapy and Asanas and Pranayama program for intervention on children identified or diagnosed as ADHD in Iran; and,
4. Evaluate the impact of Play Therapy and Asanas and Pranayama program either singly or together on a group of children identified or diagnosed as ADHD in Iran.

5.3. Avenues of Future Research

More work is required to identify various coping mechanisms of ADHD children as well as to understand various sources of the disorder. Other area for future work could be to understand the discrepancies childhood trauma in the developing ADHD symptoms. There is also a strong need to understand the role of concentration in particular practices and its effect on attention deficit disorder.