CLINICAL REPORT OF CASE OF ATTENTION DEFICIT HYPERACTIVITY DISORDER

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Abstract

Client is 10 years old boy. He belongs to middle socio economic status. Client is a second born child and has one elder sister. He is studying in class five in a Sir Syed school in Rawalpindi. Client was brought to NIRM by his parents. . He came with the complaints of marked behavioral impairments (i.e. difficulty in organizing tasks and activities, difficulty in sustaining attention, Fidgets with the hands, aggression towards people etc). Client was assessed with the help of informal and formal assessment. Informal assessment includes history taking, interview and mental status examination. Formal assessment included House Tree Person (HTP), Child Problem Checklist (CPC), and Colored Progressive Matrices (CPM). According to DSM-5 criteria, results of the psychological tests as well as case history and behavioral observations seem to indicate that client is having Attention Deficit Hyperactivity disorder. Therapeutic recommendations include parental training, behavioral treatment, and classroom management, suggestions for parents and teachers and cognitive behavioral therapy.

Part 1

Bio Data

Name: AL

Gender: Boy

Age:10

No. of siblings: 2 sibling (one elder sister)

Socioeconomic status: Middle class

Family Structure: Joint family system

Father's occupation: Shopkeeper

Mother's occupation: Shopkeeper

Education of Father: F.A

Education of Mother: B.A

Religion: Islam

Source of referral: School principle

Informants: Mother, Father and the child himself

Address: People colony

Admission date: 10-4-2014

Date taken history: 16-04-2011

Hospital: NIRM

Behavioral Observation

The client was showing restless behavior. It seemed as if the client was uncomfortable on the seat. He was changing his position again and again. I noted the frequency and time of the changing of the seats, within 10 minutes he changed his seat thrice. He was moving his legs back and forth. He was trying to stand up again and again from his around him in the seat. He had a ball in his hand with which he was playing. When I was talking with him, he was staring the other objects in the room. He had an appropriate orientation of time place and person when I asked him what is your city name, what is your country name, and about day and nigh. When I asked him any question, he replied with one sentence that "man dusri chair pe bat jaon'. After he quickly changed his seat. He was not fellowing my instruction when I went near him, he again went to the other chair. He could not recognize my instructions. He responded only on political issues. He talked about Nawaz Sharif, Musharraf, and Benazir Bhutto's assignation. Such as Musharraf came back in Pakistan and Nawaz Sharif is from illness due to this reason he can't compete with Mushrraf. He got this information from the TV. According to teacher he beat the other boys who studied with him. I talked about his mother he said to me that "tmhari man tum se pyar kartihae", I replied that my mother loves me too much. He said my mother also loves me and met on Friday. The boy said that "man un ke sat jauno ga jumeko" and I started asking about his father he said "*un kay pas time naehaga*" and kept quite. He interrupted me many times when I was talking with psychologist and asked me why do you come here ,and then he took my folder and my pencil and asked them, 'ap yahan parn ay hain'. When I requested him to make HTP he refused to make and put the pencil in his mouth but when psychologist instructed to him, he started drawing .While drawing HTP, he drew the HTP within 35 minutes before this time he went to the other room and changed the seat many times while drawing he constantly moved his legs. After few minutes he went and replied that "man ne seepara parnej anahae" and he went. In the next seesion he showed same behavior.

History of Present illness

As reported by the school principle, the client's behavior was considered problematic in the class at the age of 4 and a half years, when he was enrolled in school and failed to follow the instructions given by the teacher and was unable to successfully fulfill the requirements of school, such as difficulty in understanding that what the teacher is saying, taking too much time

for simple tasks, making disturbance in the classroom by teasing class fellows which followed the complaints of other parents to keep away their children from such a child. He had difficulty in sustaining attention, did not seem to listen to when spoken to. Had difficulty in organizing the tasks and activities. The client loses his things like pencil, copies, and notebooks frequently. With the passage of time that behavior became more and more evident in home setting also which was earlier considered as a silly behavior. Fidgeting with the hands and feet and squirms in the seat is also present. Leaving seat in the classroom. He has aggressive behavior towards the teachers, class fellows and play activities. He used to run in the class, easily distracted especially when doing homework or task requiring some mental effort. The client also has habit of lying and uses abusive language. He also used to beat his younger sister brutally and feels jealous of his sisters. So, problems in school led to the realization of presence of problems in home too. The client also has unnecessary fear of darkness. The client has poor peer relationship and if he makes friends by chance, this friendship remains for a shorter period of time due to the client's aggressive behavior.

Personal History

Prenatal and Perinatal history

The mother conceived the client after two years of marriage and at that time mother was 24 years old. Mother took no medicine other then prescribed by the doctor and she took appropriate diet. The family environment was also stressful because first child was a girl and the father and other family member wanted a boy. The duration of pregnancy was normal and there were no birth related complications. The child was born through normal delivery.

Postnatal history

The client's birth weight was normal. The client achieved developmental milestones at appropriate age. The client was breast fed for one and half years and then later was bottle fed. The client successfully achieved motor milestones at appropriate age and his language and speech development was also normal. The client had no sleep or eating problem. He was complete toilet trained at the appropriate age.

School history

The client was admitted in the school at the age of 4 and half years. His teacher mostly reported his problematic behaviors becomes frequent in the classroom, such as running in the whole class; he did not sit still on the seat, frequently stood up for 3 times after every ten minutes and wandered in the classroom, so the client was referred to NIRM where he is assessing. The client had taken treatment for hyperactivity in PIMS. With a result, his hyperactivity had reduced to some extent then PIMS referred the client to NIRM for the management of behavior problems, where he is still receiving psychological treatment. Before 1 year, he was promoted to next class but same situation prevailed. All these behaviors lead to poor performance in academics due to the lack of concentration and careless mistakes done poor grades. Therefore, the client repeated class 3 twice. Presently teachers and psychologists are working to improve academic performance as well as to control his disruptive behaviors.

Peer relationship

The child has a very poor peer relationship in the school and in neighborhood also. In the school, as well as playing with the neighborhood children, he created problems and disruption during playing. He did not wait for his own turn in a group play and often take others' turn. He also shows aggression towards his playmates and become irritated easily. Due to these above mentioned behaviors, his friends dislike him and prefer not to include him in their games. So, the child faces lot of peer rejection and disapproval. His mother usually tries to avoid him from such situations and usually does not allow him to play outside home. She keeps him at home and engages him in activities of his interest like watching cartoons and playing with ball.

Family History

Client belongs to middle socioeconomic status. He lives in joint family system with his parents, grandfather, an aunt and one elder sister. Parents of the client were relatives. Both parents of the client didn't pay their attention and did not care for the child. Because they had two jewelry shops. They did not have extra time for their children they gave more attention to their shops than fulfilling the demands of the child. He is second born child of his parents, he is protected but not given much attention by his father. Home environment of the client is least restrictive and so stressful because his grandfather is so strike and used the critical words for the

client but other family members gave more attention and were more loving to him specially his uncle and his mother. Client lives with his uncle in these days due to the treatment purpose and study. Client uncle live in Islamabad and client parents live in Gujarat.

Relationship with mother The client has healthy relationship with his mother. He is very close to his mother and become easily upset when his mother does not give attention to him when she was exist in home. He was over protected and over pampered .He begins to tease and abuse his mother when his mother gives love and affection to his elder sister because his sister is so intelligent and toper in school. He becomes aggressive when his mother forces him to do something such as like her sister.

Relationship with father Father of the client did not pay a lot of attention and care because he had two jewelry shops and all day his father was run shops dealt with customers. He did not fulfill the demands of the client properly. He has insecure relations with his father. He mostly went for a walk with his uncle. He became angry and irritable when his father did not fulfill his demands. He did not use to play with his father due to his father did not give him proper attention as like other children.

Relationship with sister He did not have healthy relationship with his sisters. He used to beat his elder sister brutally and showed aggression towards his sister. He also felt jealous of his sister because he was very possessive about his mother's love and attention. He did not like to play with his sister. According to his mother, he did not spend time with his sisters and when his sister wanted to talk to him, he got irritated.

Family Psychiatric History. The parents of the client were not relative. Mother as well as the grand parents of the client are physically and mentally healthy but his father was so aggressive and suffered from hepatitis-c. His father was aggressive and was involved in the illicit activities .He had fought with his neighbors because of his aggressive behavior. He had been arrested once and was sent to jail also. The client also has a cousin who is mentally retarded.

Premorbid personality. The client has good health and his activities were considered normal and very active by his parents in reported four and half year. The client had normal sleep. The client's appetite was poor and he liked junk foods. He was toilet trained at appropriate age. Because the client was second born, he was overprotected and over pampered not only by his

parents, but also by the other members of the family. The client was provided over stimulation by his family and if he wants to play, a lot of toys always remained around him. The client played with any toy not more than 2 or 3 minutes. His parents fulfilled his every demand instantly. Theclient also had attention seeking and stubborn behavior. The client used to show startle response. Home environment of the client was least restrictive and the family members gave less consideration to the client's disruptive behavior.

Medical History. He had hepatitis-c by born and treated properly. He achieved developmental milestone at appropriate age but in class 3 he had suffered from malaria and typhoid after this diseases his performance became low in school.

Assessment

Assessment has been done at two levels: informal and formal assessment. In case of informal assessment case history, interview, mental status examination and behavioral observations have been done and formal assessment has been done by administering different psychometric tests.

Informal Assessment

Mental State Examination Detailed description of mental State Examination is given below:

General Appearance. Overall, the client was looking as a healthy child. His overall appearance was good. The client was sitting in a tense posture.

Overt Behavior and Psychomotor Activity. The client was showing restless behavior. He was changing his position again and again. He was trying to stand up from his seat. The client was showing a lot of hyperactivity. He was showing stereotypical movements also. He was also showing restlessness and startle response. He was moving his head back and forth, wringing his hands, pacing and was moving his legs again and again.

Mood and Affect. The client's mood was irritable at that time and he was showing appropriate affect according to his mood

Facial Expressions. The client was showing adequate facial responsiveness.

Language and Speech Development. The client's language and speech development was adequate according to his age. He was good in expressive and receptive language skills. The child was talkative and had rapid speech. The child had no speech impairment.

Orientation of Time, Place and Person. The client had appropriate orientation of time, place and person i asked the client what is the time? and what is the name of the institute? he told me correctly.

Impulsivity. The client was showing lot of impulsivity. He had poor self control such as he don't attention on tasks, class, and home related works. When the client became irritable or aggressive, he could not control his behavior.

Formal Assessment

Keeping in view the symptoms and the problems reflected in the behavior of the child, as well as reported by the mother and significant others, following scales were administered for the assessment of the child to have a clear idea of the problem.

- 1. Colored Progressive Matrices
- 2. ADHD checklist
- 3. Child Problem Checklist
- 4. House Tree Person

Colored progressive matrices. Colored Progressive Matrices was administered to assess the intellectual capacity of the client. The test was introduced to the client and the instructions were given how to respond. He did not give all responses he left the test after 4 minutes because he was so impulsive. He stood many times and changing his place.

Quantitative Interpretation

Total Scores	35
Percentile	
Grade	
Discrepancy score	
Time taken for test completion	4 min
Interpretation	

Qualitative interpretation

Colored Progressive Matrices (CPM) was administered on the client. CPM is a test measuring general intelligence. The three sets of twelve problems are arranged to assess the chief cognitive processes, mental development and intellectual maturity. Results of the test revealed that client has above average intellectual ability as he falls on grade +3 and he lied on 50th percentile. It shows that the client has the capacity to think clearly and reason by anology. The response style of the client indicates that he has the ability to understand newly introduced things and the capacity for learning is also adequate.

ADHD checklist

ADHD was based on the translation of diagnostic criteria for ADHD listed in Diagnostic and Statistical Manual for Mental Disorders. It has three categories including inattention type, hyperactive type and impulsive type. It is scored on 5-point rating scale. Never was rated as1, Rarely as 2,Often as 3, Very often as 4 and Always as 5. It was consisted of 18 questions. Scores on the scale can be ranged from minimum 18 to maximum 90 and cut off score is 54. Further categorization of ADHD children in predominately inattentive, predominately hyperactive and combined type is made that is based on DSM-IV criteria, i.e. children with six or more symptoms of hyperactivity\impulsivity but fewer symptoms of inattention is diagnosed with ADHD-hyperactive type . The client scored 63, which significantly show the symptoms of ADHD.

Child problem checklist

Child problem checklist was administered on the child to check the problematic behavior of the client. It's a five point rating scale. It has three domains that cover externalizing problems, internalizing problems and somatic complaints. The highest score of CPCL is 400 and lowest score is 80. The cut of CPCL is 50th percentile.

Quantitative Interpretation

Scores	percentile	Interpretation
220	56 th	Problematic behavior

The client scored 220 and which is on 56^{th} percentile which is above the cut off score. It indicates that the client has problematic behavior.

House Tree Person The House-Tree-Person (HTP) test that provides a measure of a selfperception and attitudes by requiring the test taker to draw a house, a tree, and a person. The picture of the house is supposed to conjure the child's feelings toward his or her family. The picture of the tree is supposed to elicit feelings of strength or weakness. The picture of the person, as with other figure drawing tests, elicits information regarding the child's self-concept. It also measure aspects of a person's personality through interpretation of drawings.

Rationale for using this test is to have an idea, whether he has some understanding of home living or not. Moreover, it is used in order to understand his interpersonal relationship, how he is relating with his family members.

Overall interpretation of HTP

Line quality Variable line pressure shows normality (Joiles, 1971).

Placement House made on the lower side of the page show impulsive behavior with a drive toward immediate emotional satisfaction of needs (Hammer, 1969). Key figures generating the anxiety are made either first or last as person was made first and house was made in the last.

Erasures Few erasures were used which shows normal functioning, anxiety and concern over a particular area are common and possibly even desirable.

Detail Excessive detail in house and tree but lack of detail in person's figure shows...

Distortions and Omissions Omissions of essential details like absence of roots in tree, absence of nose and ears in person suggests a strong area of conflict with the use of denial (Urban, 1963).

Interpretation of Person

Person is made high on the page which shows high need of achievement (Hammer, 1965). Many facial features are missing which indicates that the person is evasive and hostile (Machover, 1949). Eyes are made in the form of circle which shows ego centricity as well as the eyes are hollow and pupil is small which shows anger and communication difficulty (Hammer, 1969). As the mouth is indicated by a single line which shows aggressive tendencies (Buck, 1966). Presence of a short neck indicates tendencies to be grull and stubborn (Buck, 1969). Presence of open arms indicates aggressiveness (Burns, 1982). Legs are made turning towards different directions which shows lack of attention towards the task (Hammer, 1969). Trunk is drawn simply that may resemble to the person's somatotype (Bolander, 1977).

Interpretation of Tree

Tree was made on the left side of the page which shows emotional imbalance in the individual (Hammer, 1965). As the cloud foliated tree was made by the client, it shows confused thinking (Bolander, 1977). Absence of leaves shows inner barrenness and dissatisfaction with life (Levine and Sapolsky, 1969). Presence of trunk represents ego and reveals feelings of basic power (Bolander, 1977).

Interpretation of House

House is made on the corner of the page and indicates less importance (Hammer, 1969). Doors are closed which show inaccessibility. Absence of windows shows withdrawal tendencies (Buck, 1966). Absence of pathway indicates hatred to others (Hammer, 1958). Extra attention is given to roof which shows an individual intellectual side as well as attention towards fantasy and ideation (Burns, 1982)

Diagnosis

Multiaxial system

Axis 1: Attention-Deficit/Hyperactivity Disorder, ADHD-Combined Type

Axis II: V71.09 (No Diagnosis)

Axis III: Nil

Axis 1V: Academic failure, peer rejection, conflict with parents

Axis V: GAF=41 (current)

Case Formulation

The child is 10 years old, studying in class three in a step to learn rehabilitation center for special children (STL). He is referred by the school principle for his hyperactivity and behavioral problems. By taking the history and from Mental Status Examination and results of psychometric tests it seems that client might have ADHD.

Research has revealed that children with Attention deficit-/hyperactivity disorder use a broad range of psychological and biological causes (Bowen et al., 1991; Henker & Whalen, 1980). Twin and adoption studies indicate that ADHD has a strong genetic component, and heritability is a risk factor of causing ADHD in 80% children (Thapar, Holmes, Poulton, & Harrington, 1999). There is a higher rate of ADHD among the natural parents and extended biological relatives of children with ADHD. (Biederman, Munir, and Knee, 1987; Cantiwell, 1985). The disorder tends to cluster in families, with an increased incidence among first and second-degree relatives of affected individuals (Faraone et al., 1995). Although the etiology of ADHD is unknown, family, twin and adoption studies provided strong evidence for genetic factors as causative components of the disorder (Rietveld et al., 2003). Attention deficit-/hyperactivity disorder (ADHD) is a highly heritable, disruptive condition in children (Biederman&Faraone, 2005). ADHDis associated with risks regarding daily functioning (Barkley, 2002). Studies have estimated that about 60% of children whose parents have Attention Deficit/Hyperactivity Disorder are likely to have ADHD. There is great for prevalance of the disorder in other members of the family (Biederman et al., 1995;

There is a substantial evidence of genetic contribution in producing ADHD (Polim, 1980). Stevenson (1992) found that approximately 50% of hyperactivity and inattention is due to heredity. Another study revealed the heritability of 64% for hyperactivity and inattention (delbrock, 1992). Attention-deficit hyperactivity disorder is the most common, highly heritable childhood-onset psychiatric disorder. Quantitative genetic analysis of the large sample of families suggests the greater contribution of heritability (Faraone et al., 1992). There is a higher degree of hyperactivity has been found in the relatives of children with ADHD and researches found the evidence of the presence of the disorder in other family members (Welner et al., 1992). Stevenson (1994) summarized several studies on symptoms of ADHD stating that the average heritability is .80 for symptoms of this disorder. Same is the case with my client as his father has aggressive behavior and delinquent activities and client was rejected from his parents due to these causes client developed the ADHD.

Prognosis

In my client's case unfavorable prognostic indicators are that treatment or management not only depends on the client it takes in to account the whole family or social context which surrounds the individual. And if the family is uncooperative, uneducated and unable to understand the problem of the individual management becomes little difficult. Another unfavorable prognostic indicator is that the client's home environment is. The favorable prognostic indicator is that the client has above average intellectual ability. Hence the prognosis seems to be guarded.

Differentiate diagnosis

Mental retardation: Client was not have symptom of inattention deficit/hyperactivity excessively for child's mental age therefore client was not have the criteria of the mental retardation.

ODD and conduct disorder: Client was not disobedience and oppositional to authority figure and did not involve in more serious crimes and age appropriate societal norms or rules were not violated these symptoms checked from the disruptive behavior rating scale (DBDRS).

Stereotypic movement disorder: Client did not have motor behavior problem such as body rocking, self biting, whereas the fidgetiness and restlessness in attention deficit/hyperactivity disorder are more typically generalized. Client was over active.

Pervasive development disorder: client did not have the symptom of inattention , hyperactivity, or impulsivity related to the use of medication (e.g., bronchodilators, isoniazid, akathisia, from narcoleptics).

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PART-2

NIRM For Special Children

I got this case from NIRM for special children. Client was brought to NIRM by his school principle of Step To Learn. It is an institute for physically disabled persons. They provide all medical, diagnostic, social and psychological services to the disabled person. Their Department of Psychology has been providing various psychological services to the disabled persons as well as non disabled persons who require psychological help.

Treatment client is currently receiving

The client consulted psychologist on weekly basis. Psychologist at NIRM uses behavior modification technique with him which is an effective technique for the treatment of disruptive behavior. They used monitoring chart on which disruptive behaviors, e.g. use abusive language are identified. Reinforcer,s are also mentioned clearly. It was clearly mentioned on the chart and to the client how many stars or ticks he has to earn for getting reward. This technique proves to be effective with his as these results in minimizing her disruptive behavior, especially her use of abusive language.

Therapeutic recommendations

Behavioral Treatment

Behavioral treatment is very effective in treating ADHD and mostly given in combination with other treatments. It is mostly applicable in home and school settings. In ADHD powerful external reinforcement is needed over a longer period of time. Reinforcement can be in the forms of tokens, points and appreciation. Negative reinforcement can also be given in the form of time out and response cost to remove the disruptive behavior of the child. While praising appropriate behavior and ignoring inappropriate behavior is the basic ingredient, ADHD children need frequent and powerful incentive such as tangible or token rewards

Parental Training

A child with ADHD can be very difficult for his parents. These parents need support and understanding. Parental training benefits the child with ADHD disorder because most parents

simply don't know what to do when dealing with an ADHD child, and sometimes they may simply lack basic parenting skills. Learning good parenting skills can actually mediate most negative outcomes and therefore it makes sense to make it one of the main focuses of treatment.

Parent training usually takes on a focused, behavioral psychotherapy approach. The focus is on parenting skills, the child's behavior, and family relationships. One of the key components of parent training is creating ADHD behavioral interventions for the home. Parents should also consider implementing the home daily report card (PDF).

Suggestions for Parents

Recommendations for the parents are given below:

- Parent should actively participate in their child's therapy and learn positive parenting skills that can help ADHD behaviors.
- Structured and organized the routine of the child and define tasks. Organize your home in such a way that will optimize chance of success and avoid conflict. For example, remove items or objects that you do not want your impulsive or hyperactive child to touch or play with.
- Create rules for the home. Develop a set of basic, simple and straightforward household rules.
- Get your child's attention directly before giving directions. This means face to face and direct eye contact, not just calling out what you expect your child to do.
- Prepare a schedule that facilitates the child. Break down the task into smaller steps that you want to get done. Give one step at a time.
- Provide as much positive attention and recognition as possible. A child needs to know what is viewed as acceptable and unacceptable behavior and the consequences (positive and negative for both).
- Provide immediate and tangible rewards for the appropriate behavior of the child. Give immediate praise and positive feed back when a child follows directions or is making good effort to do so because they have trouble in delaying gratification.

- > When a behavior is mastered, begin to fade out the reward system.
- > Use time out and other disciplinary method to control the misbehavior of the child.
- Give the direct instructions to the child. Give directions in a clear, brief and to the point. Give one direction at a time; do not give series of directions. Eliminate unnecessary talking and elaboration. Avoid giving vague directions.
- > Ignore mild inappropriate behaviors and praise appropriate behaviors.
- Create a menu for rewards and reinforcers with the help of child suggesting items and privileges for desired behavior.
- Supervise your child. For example while taking your child to some one else home, keep aware of where your child is and what he or she is doing; ready to direct and redirect if necessary.
- Start with goals that the child can achieve in small steps.

School based intervention

School interventions focus on classroom behavior, academic performance, and the relationships the child with his or her friends. School interventions are typically available in most schools. Such intervention programs are administered most often by teachers.

Classroom management

Classroom management is very effective in addressing child's disruptive behavior and academic failure. The techniques include token economy, punishment and contingency management. Child and teacher sign a written contract specifying how the child will behave and the reinforcement that will be the consequence of behavior.

Daily report card (PDF)

A core part of the school intervention is the school daily report card (PDF). The daily report card servers as a means of identifying, monitoring and changing the child's classroom problems. It also acts as an avenue of regular communication between the parents and the teacher.

Suggestions for Teachers

Recommendations for the teachers are given below:

- Creating an environment in the classroom that is structured, organized, and increased stimulation in task.Remove un-needed stimulation from the classroom environment.
- Provide students with more encouragement and positive feedback than negative feedback.
- Because students with ADHD have difficulty following multi-step directions, it is important for instruction to be short, specific and direct.
- Contingencies need to be available that reinforce appropriate or desired behaviors, and discourage inappropriate or undesired behaviors.
- Teaching rules and reminding students of key rules and classroom expectations frequently.
- Time-out can be effective in reducing aggressive and disruptive actions in the classroom, especially when these behaviors are strengthened by peer attention.
- Provide students with visual cues (e.g., poster) to remind them of rules and state rules in a positive manner ("Please walk" vs. "Don't run").
- Provide students with positive and immediate feedback regarding their ability to show appropriate behavior in the classroom.
- > Break assignment into small pieces and give instructions into small chunks.
- > Placing the child's desk away from the children and near the teacher.
- > Frequently make direct eye- contact with the student.
- > Make lessons fun, interesting and engaging student attention.
- ▶ Use multisensory modalities for teaching like color, movement, pictures etc.
- Give instructions clearly and stepwise, avoid vague instructions like 'complete your work'.

- Make the homework relevant and purposeful, it should be a time for reviewing and practicing what students have been taught in the class.
- ▶ Use Daily Report Card to inform the parents about the problems of the child.

Cognitive Behavioral Therapy

Cognitive-behavioral therapy (CBT) is also the part of therapeutic recommendations which focuses on changing negative patterns of thought, feeling and behavior that contribute to aggression in the child. Self regulation is a natural target in treating ADHD, as self control is viewed as a central deficit in the disorder. Self regulation can be enhanced by employing self monitoring, self reinforcement and self instruction. It can also help to reduce the aggression in

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