

## Using Experiential Metaphors in Assessing Self-Image in Children with Attention Deficit Hyperactivity Disorder

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### Abstract

**Introduction:** *The paper presents the construction and validation of a process research instrument in experiential psychotherapy, aimed for the detection of improvements in the self-image of children diagnosed with ADHD. It also provides the conceptual frame on using experiential metaphors in the psychotherapeutic intervention of the same children.*

**Objectives:** *We have created two dynamic, experiential diagnosis techniques called “The Orchard” and “My World”, starting from the classical projective techniques “Draw a Person test” and “Draw a Tree test”.*

**Methods:** *The techniques were applied to 2 groups: 5 children diagnosed with ADHD, in the experimental group, and 5 typical children composing the control group. The dynamic exercises were video recorded. Then we created and validated an observation sheet for video images centered on self-image. The construction was made using the method of expert groups, with a total of 16 experiential psychotherapists. The validation was carried out with help from a group of 33 independent psychologists, who watched the videos of the experiential diagnosis sessions and assessed the children involved in these meetings, based on the observation charts.*

**Results:** *The psychometric qualities of the observation sheet for video images centered on self-image indicated a good reliability. The internal consistency was also good, Cronbach’s alpha coefficient indicating 0.914. Content validity was ensured by involving experts in elaborating the exercises, the items and the definition of the answer options. The discriminative validity *t* test revealed a significant difference between the group of children with ADHD and children in the control group, with the global score ( $t = 2.294$ , Sig. = 0.029) obtained in the observation sheet.*

**Conclusions:** *The experiential metaphorical scenarios that we have proposed can be used as assessment methods because they do not only evaluate certain areas of mental development, but also capture interactions between them, as well as the child’s capacity for emotional regulation in social contexts.*

**Keywords:** *ADHD, experiential diagnosis, experiential psychotherapy, child psychotherapy, metaphors*

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## **I. Introduction**

According to the 2013 European Commission report, published by the Executive Agency for Health and Consumers (EAHC), Attention-Deficit and Hyperactivity Disorder (ADHD) is the most common behavioral disorder of childhood and has a prevalence of 5% in younger age groups. The prevalence in adult population in Europe is estimated at 4.1% (European Commission, 2013).

ADHD is characterized by a pattern of behavior, present in multiple settings (at school, at home and with siblings), that can result in performance challenges in social, educational, or work settings. The ADHD symptoms are divided into two categories: inattention and hyperactivity-impulsivity. These include behaviors like: failure to pay close attention to details, excessive talking, difficulty in organizing tasks and activities and inability to remain seated in appropriate situations, or fidgeting (American Psychiatric Association, 2013).

In their highly relevant article published in *Nature*, Purper-Ouakil and his colleagues (2011) characterize ADHD as a highly prevalent neurodevelopmental condition, with symptoms of inattention and impulsivity/ hyperactivity to a degree that is inconsistent with the developmental level. The condition has been defined in the last years as a spectrum disorder (Barkley, 1998), and recent findings have drawn attention to the involvement of rare genetic variants in the pathophysiology of ADHD, some being shared with other neurodevelopmental disorders (Purper-Ouakil & al., 2011). Nikolas & Burt reported, in a meta-analysis from 2010, that genetic factors accounted for between 71 and 73% of the variance of inattentive and hyperactive symptoms in twin and adoption studies.

Rendering the treatment of ADHD more efficient will have important social effects, linked to a better life-quality of these children, their families, teachers and colleagues. Over time, the studies measuring the effectiveness of treatment administered to alleviate ADHD symptoms classified the interventions in three categories: psycho-stimulant drug therapy, psycho-social psychotherapy and the combination of approaches.

Psycho-stimulant medication was for many decades, and still seems to be, the choice of treatment for children with ADHD, because it can improve the neural substrate of behavioral inhibition and the executive functions dependent on such inhibition. Methylphenidate (MPH, e.g. Ritalin) has been used to

treat ADHD for over 50 years. It is the most commonly prescribed treatment for ADHD and its effect is to enhance hippocampal synaptic plasticity via catecholamine receptors (Jenson & all., 2015).

Unfortunately, psycho-stimulants do not produce long-term positive changes (Pelham, Wheeler & Chronis, 1998). The limitations of pharmacotherapy for ADHD highlight the need for the augmentation of psychosocial and psycho-educational treatments. Pelham states that “simply medicating children, without teaching them the skills they need to improve their behavior and performance, is not likely to improve the children’s long-term prognosis” (Pelham & Gnagy, 1999, p. 226), because medication does not teach the child or promote a cognitive reorganization.

Concerning the stimulant drugs treatment for ADHD, the study of Abikoff, Conners, Greenhill, Hinshaw, Pelham and Swanson (U.S. National Library of Medicine, 1999), called *Multimodal Treatment Study of Children with Attention Deficit Hyperactivity Disorder*, sponsored by the National Institute of Mental Health, is highly relevant, considering 3 years length outcomes, and enrolling 579 children diagnosed with ADHD. The study reported at 36 months that all treatment groups *with and without stimulant medication* were improved from baseline and did not differ significantly on any measure of outcome, and that children receiving (as compared with not receiving) stimulant medications showed significant symptom deterioration from 24 to 36 months and higher delinquency ratings at 24 and 36 months. The results give pause to thoughtful clinicians and suggest the need for more rigorous and transparent diagnosis and therapeutic methods (Furman, 2008).

Children with apparently “pure” attention problems, whose grades improve with stimulant treatment, may have short-term improvement without long-term benefit, and the child’s apparent improvement (or worsening) can mask the need for treatment of an underlying problem. Pelham noted that the “costs of [ADHD] treatment reflect dramatic underutilization of psychosocial treatments” and recommended the use of behavioral treatments, including educational interventions and parent education before medication. In a list of 10 limitations of pharmacological interventions when used alone he included: removes incentives for parents and teachers/ schools to work on other treatments; does not affect several important variables (e.g. academic achievement, concurrent family problems, peer relationships); and uniform lack of evidence for beneficial long-term effects (Pelham, 2007).

A review of the non-medical interventions used with children with ADHD was made in 2007 by Trout, Lienemann, Reid and Epstein. This review examined 41 studies which evaluated the impact of non-medication interventions on the academic functioning of students with ADHD. The findings revealed that a broad range of traditional and nontraditional interventions has been used to improve students' academic outcomes; yet systematic lines of research were clearly missing. Moreover, important demographic and descriptive information, such as participant characteristics and classroom settings, were often poorly defined and generally did not reflect the current population of students with ADHD. Despite some indications of promise, significant limitations in the literature allow for few conclusions about intervention effects and generalization (Trout, Lienemann, Reid & Epstein, 2007).

### **The experiential psychotherapy plan based on metaphorical scenarios**

A child who is hyperactive is not feeling in control of his body. His motor difficulties cause poor eye-hand coordination and affect his ability to write easily and clearly. This child has severe learning disabilities caused by the impairment of perceptual abilities (visual, auditory and sometimes tactile). He responds with confusion and irritation to the many stimuli in his environment. There are also many secondary effects contributing to the difficulties the child faces. Adults are impatient with him, do not trust him, yell at the child and sometimes cannot stand him. He has very few friends, since he has poor interpersonal relationship skills. He feels bad about his learning impairments and his self-image is usually very poor. This paper presents a complex intervention plan addressing the Attention-Deficit Hyperactivity Disorder.

The proposed therapeutic intervention with children is an experiential one, fostering artistic expression, in the spirit of the person – centered on the expressive art therapy work of Natalie Rogers. The therapeutic plan consists in involving children in a series of provocative exercises specific to experiential psychotherapy, based on art-therapeutic techniques (drawing, sculpture, modeling, dance-therapy, music-therapy), psychodramatic techniques (drama, role-playing, playing with puppets) and metaphoric techniques, facilitating the identification of disruptive behavior patterns, their causes and effects. Acknowledging all these increases children's compliance to therapy and change. When a child discovers new, alternative modes of interaction a rapid self-transformation and improvement of self-image are guaranteed.

*“Expressive arts therapy uses the expressive arts – movement, art, music, writing, sound, and improvisation – in a supportive setting, to facilitate growth and healing. It is a process of discovering ourselves through any art form that comes from an emotional depth”* (Rogers, 1993, p. 29). The idea is that the client expresses inner feelings by creating outer forms. These art forms that the client produces in the therapy sessions represent feelings in a metaphorical way. They offer new ways to discover, experience, and accept unknown aspects of the self.

The expressive experiential group techniques give children opportunities to experiment in the secured environment of the therapeutic session, “here and now”, their personal problems, having restructuring insights. The children manage to activate their own resources or discover these personal resources for the first time. They discover by experimenting how to face the life situations they are involved in and, during this process, they are growing up emotionally.

The specificity of these experiential expressive techniques is that they create the impression for the children that they are not coming for therapy, but to play. The motivation for play increases the degree of authentic participation of the child in the therapeutic process and, with that, the utility of these techniques in his transformation process. The possibility of adopting and experimenting new attitudes and behaviors in the safe environment of the therapeutic group, without the fear of failing, increases the children's self-confidence. They learn to interact with others and to communicate, develop their capacity to receive/ask for and to offer help and these increase their self-esteem. The therapeutic instruments that we employed were: play, metaphors, drawing, music, collage and any other art-therapeutic means.

The provocative experiential exercises are centered on the main behavioral needs of the child diagnosed with ADHD: paying attention, control impulses, keeping still, waiting turns, increasing tolerance in ambiguous and frustrating situations. The exercises also have the purpose of increasing self-esteem, developing assertive communication skills and experimenting adaptive behaviors.

### **Experiential diagnosis techniques**

Experiential diagnosis is often used in child clinical evaluation and psychotherapy, especially by humanistic-experientially oriented practitioners. The experiential psychotherapist uses techniques, materials and modalities of action that are familiar to the child: drawing, stories, play provocative situations, modelling

and so on. The child can experiment himself in action, can achieve satisfaction by creating the object he/she is working on, and, in addition, the effect of self-awareness and self-knowledge is occurring spontaneously.

These diagnosis techniques are particularly relevant to improve self-image, because the children are allowed a high level of freedom in their actions. The psychologist has access to how the children relate to themselves in the current action: what claims have of themselves, what distinctions they make between objects, if they have the ability to combine several ways of expression, the purposes they use those ways of expression for. Complex and complete information is obtained, often exceeding the children's ability to verbalize, and also their parents' ability to recognize and disclose. The children are thus freed from the need to express themselves 'adequately' with words, which can be difficult for them, and are encouraged to use alternative ways of communication that are more familiar and in which they better discern the relevant differences for their internal dynamics.

Expressive-creative diagnosis modalities are the most appropriate tools helping with the way in which children process the emotional significance that various events have for them. Such experiences can nuance the type and intensity of emotions, but may also signal a certain dynamic of the child's feelings. Through expressive creative methods the children can communicate important information about the dynamics of the unconscious processes: either related to their past experiences or contents from the collective unconscious. The diagnosis techniques fulfill their purpose when the children find a meaning for themselves, creating a gestalt, a correlation between the dynamics of personal and collective unconscious, gaining access to a greater self-knowledge, self-acceptance and self-development.

The experiential diagnosis techniques provide information about self-image that will set the base for the psychotherapist's assumptions about predisposing factors, determinants, triggering and maintaining the disorder, and also for the subsequent psychotherapeutic targets. The therapist can select those expressive-creative ways that are more appropriate for the particular child.

The experiential diagnosis techniques that we used consisted in small group exercises which allowed the observation of the child's self in relation to peers. Starting from the idea that man relates to others as he/she relates to the self, the child's behavior in the proposed group exercise allowed capturing the children's attitude towards themselves.

Adequate social functioning and healthy relationships with peers are considered basic conditions for the optimal development of children. In general, social issues are an important predictor of long-term emotional consequences in adolescence. Since children with disruptive disorders frequently encounter problems in social interactions with peers and they often face rejection or social isolation, social skills can be an important factor for optimal personal and social development (DeBoo & Prins, 2007).

However, this type of diagnosis may be at risk to produce biases, often due to the psychologist's subjectivity in the assessment and interpretation of child's behavior. To reduce the subjectivity of the therapist's interpretation, the entire experiential diagnosis session can be recorded on camera. This way the therapist is no longer concerned with noting ad hoc the child's behavior and writing his own comments, and can pay more attention towards the emotional support of the child involved, so the behavior samples obtained are as relevant as possible to the child's usual pattern of behavior.

Video recording of the experiential diagnosis sessions has several advantages:

- it allows for subsequent careful analysis of the child's behavior;
- releases the therapists from the structured observational tasks, so that he/she can even consider his/her own in session experiences as relevant to how the child relates to adults;
- allows capturing behaviors that stand out during the entire session in terms of frequency, intensity and emotional tone;
- makes it possible to diagnose more children working together in the meeting, but also behaviors that may be subject to individual assessment;
- permits other specialists to also analyse the children's behavior and thereby can increase the objectivity of the evaluation;
- the video may contain details that escape the simple observation, due to the limited observational capacity of the psychotherapist;
- allows the use of standardized rating scales of behavior that can help in making inferences on the general functioning of the child.

## **II. Research methodology**

### *Objectives*

We have created two experiential diagnosis dynamic techniques called "**The Orchard**" and "**My World**". In structuring these exercises we have started from the classical projective techniques (*Draw a*

*Person* test and *Draw a Tree* test) that produce data on self-image. The methods were transformed into dynamic exercises which are closer to the natural ways of action for children. They allow the observation of behaviors with the purpose to increase the diagnosis objectivity and to enable a clearer identification of therapeutic targets. As mentioned, the dynamic exercises were video recorded. Then we constructed and validated an observation sheet for video images centered on self-image.

### **Subjects**

The exercises were applied to a total of 10 children (3 girls and 7 boys, aged 7-8 years), 5 diagnosed with ADHD and 5 children without ADHD. The children were divided into 2 groups of 5, an experimental group and a control group. In terms of gender variable, in the first group there were 3 girls and 2 boys, the second group being composed only of boys. The children were pupils in the second grade in one of the local schools.

For the construction of the observation sheet we have used the method of expert groups, with a total of 16 experiential psychotherapists. The validation was made by a group of 33 independent psychologists.

### **Procedure**

Two sessions of experiential psychological diagnosis, corresponding to the two created dynamic exercises, were performed for each of the 2 groups. The sessions were led by two certified experiential psychotherapists and have been entirely video recorded. The sessions took place in the school counseling office, where there was enough space for optimal applying of the two exercises. Children were also provided with materials such as: crayons, chalk, and colored modelling clay, elements from nature (shells, pieces of colorful plants, etc.), plastic components of creative building games, some with wildlife thematic, sheets of paper and paperboard.

The first dynamic exercise was “**The Orchard**”. The children were seated around a table, which was placed so that they would have enough room to move and be able to work comfortably. Initially, on the table were placed a large cardboard piece and modeling clay of various colors.

One of the therapists gave the following instructions: “*Today we’ll play and we’ll talk. I invite you to choose a piece of modeling clay, the one that attracts you the most. ‘Meet’ the piece of modeling clay you have chosen... you begin to shape it, to play with it...*

*until it warms up and becomes soft. Once you’ve soaked it, try to mold it like a shrub. Slowly... now please look at your little tree and imagine that he would like to be completed in order to become more beautiful than it is. Look at the available clay colors and try to add more ornaments so that it becomes a sapling that is doing very well in its shell. Each sapling makes you feel better... Slowly, you approach the completion of the tree. Now, each of you will tell something about his/her little tree. Try to stay in your seat, without hustling, and tell your colleagues about you as if you are that little tree. For example: I am sapling X... (Shows and tells everyone about herself.) Now that all the trees have met each other, imagine that this board is an orchard. I invite you to place the little tree where it feels best in this place and draw the rest of the orchard. Draw everything around you so that the tree feels good in the orchard. Let us imagine that it is spring, a late spring, late summer too. The trees have budded, they are in bloom... (Everyone describes what is happening and how his/her little tree is feeling about it.) Slowly, the heat comes... and while the summer heat comes, let’s see what the trees are doing... (Again, children are encouraged to talk about their experience.) It keeps getting warmer outside, it is summer and it is hot, hot everywhere. The sun shines, heats all the trees. What are the trees doing, how are they feeling, and what do they need now? (Each child is asked.) Gradually the clouds gather and cover the sky, and it starts to rain, now it rains. In the orchard it starts raining increasingly louder, the wind blows and it is a rainstorm... it hits hard! What are the trees doing? (The children describe their experience while they are representing it.) Slowly, the rain stops and the trees find out that summer has passed and now it’s fall. How are they feeling at this point, what happens further? It begins to get increasingly cold; the leaves start to fall... Winter comes and it begins to snow. What do the trees do in winter? (The children are completing the drawing.) Each tree has to look around and tell the others how he feels in the orchard and how he went through all the four seasons.”*

Throughout the course of the dynamic exercise, the children are encouraged to talk about what they experience, here and now. Finally, each child is asked to choose a color and write down the name he thinks this drawing may have.

The second dynamic exercise was “**My World**”. Unlike the first session, in which children worked mainly with modeling clay and crayons, at this point, other materials (elements of nature – shells, pieces of colorful plants, plastic wildlife animals and

components of some creative construction games) were also made available for them.

The instructions were: *“Choose the colors you like the most. You can choose pencils, pens, whatever attracts you more... Now, while having the sheets of paper and colors in front of you, please draw a little man as you would like yourself to be... (After everyone finished drawing, each child sticks his/her drawing on his/her chest.) Now that all of you have placed the drawing on your chest, let’s find out the story of each of the little men. What can you say about him/her? (Children are encouraged to say more about the drawing: What is his/her name? What does he/she like to do most? What does he/she usually do? What does he/she like mostly about themselves? What does he/she dislike about themselves?) Now imagine that these little people create their own world... Use all the items we have available to make their world a place where the little men feel good.”*

Children are encouraged to unstick the drawings from their chests and put them on a large sheet of paper, and then they are allowed to further build a small world around the characters. Each child tells what he/she feels like in this world that they have built.

### **III. Results**

As a basic tool for the session analysis we have created an observation sheet for video images centered on self-image. This instrument was built especially for this research through the method of expert groups. The approach had three steps: 1) six experienced experiential psychotherapists generated items which represent observable behaviors relevant to self-image (as conceptualized in experiential approaches); 2) a group of 10 experts, all skilled experiential psychotherapists, generated variations in response to each item (five choices for each item, on a Likert-type scale); 3) a group of 33 independent psychologists watched the video recordings of the experiential diagnosis sessions and assessed the children involved in these meetings on the observation chart.

Initially, data analysis focused on evaluating the psychometric qualities of the observation sheet for video images centered on self-image. The reliability was assessed by two methods:

1) Inter-evaluator reliability, measured by the rank correlation coefficient. The calculated value of the Spearman Rho coefficient was medium to strong and statistically significant at a threshold of 0.001 (Spearman rho = 0.5, Sig. = 0.000), which indicates a high inter-evaluators agreement.

2) Internal consistency, as measured by the coefficient Cronbach alpha. Cronbach alpha coefficient indicates a very good internal consistency (0.914), which allows us to state that the designed instrument has a high level of reliability.

The next step was the assessment of the validity of the observation sheet. Content validity was ensured by involving experts in the building of exercises, the items construction and the definition of the answer options. To assess the discriminative validity, we used the t test for independent samples. t test revealed a significant difference between the group of children with ADHD and typical children, with the global score obtained in the observation sheet ( $t = 2.294$ , Sig. = 0.029). The observation sheet successfully discriminates between the two groups of children on different levels and variables of interest, and thus can be used in identifying disruptive disorders in children. We can affirm that the observation sheet has high validity.

### **IV. Discussions**

The main drawback of ADHD rating scales is the lack of clinical ascertainment of the diagnosis, and thereby insecurity as to whether respondents have appropriately understood the questions asked (Posserud & al., 2013). In the process of ADHD diagnosis in children, we often make our assumptions based on the child’s behavior observed and described by a collateral informant, usually the child’s parent or teacher. Thus, children depend on evaluations of other people and it is only if others perceive a mental health problem that the child will be evaluated by a professional at all.

This is why clinicians need to face the challenge of an approximation of the underlying problem, given the fact that referral and diagnostic assessment rely on information provided by third parties. This challenge can be partially met by operationalizing diagnostic criteria and by developing standardized screening tools and diagnostic interviews. But even so, the clinical psychologist needs more direct standardized diagnostic methods in order to fully understand the patient’s particular way to experience self and life events. The experiential diagnosis techniques experimented by us aimed not only the projection of self, but also the action in the “here and now”, allowing comments on the way the child passes through the phases of the gestalt experience as well as how he/she integrates new experiences.

One of the criteria to be fulfilled by a psychological assessment tool is its utility (Barlow, 2005). The experiential diagnosis procedure proposed

by us has the capacity to assess a large number of information about many aspects of children's self-image, which can be obtained in a short period of time. We can also add the fact that the new observation sheet for video images was created in a comprehensive manner, making it easy to fill in and interpret. The observation sheet is sensitive to alterations in the child's behavior during psychotherapy, so it can be used also as a pre-posttest instrument, to monitor the effects of the therapeutic intervention and the child's improvements is his/her capacity for emotional regulation.

Emotional factors play a crucial role in the social interactions of children with Attention-Deficit Hyperactivity Disorder. The low emotional regulation capacity is responsible for the disruption in social interactions, reciprocity, and cooperation (De Boo & Prins, 2007).

Barkley conceptualizes ADHD as a deficit in behavioral inhibition, leading to dysfunction in executive neuropsychological abilities such as emotion-regulation. The child's executive system normally can support social activities such as reciprocal exchange and altruism, imitation and vicarious learning, self-sufficiency, innovation, and social self-defense, which is not the case of children with ADHD (Barkley, 2001).

Other studies show that high and low levels of emotional expressivity can be associated with reactive and effortful control. Reactive control is thought to have a biological basis and is an aspect of temperament. The development of effortful control is linked to the development of conscience and empathy (De Boo & Prins, 2007). Since experiential interventions emphasize the development of conscience and empathy, these ideas come to support the efficiency of experiential-humanistic techniques in the diagnostic and treatment of social dysfunction in ADHD.

The experiential metaphorical scenarios that we have proposed can be used as assessment methods because they not only evaluate certain sides of mental development, but also capture their interactions, and the child's capacity for emotional regulation in social contexts. In this kind of dynamic exercises, each child experiences are different; their feelings are born as a necessary part of the response to the provocative situation. Watching and coding the video images allows the clinician to have an integrated image of the child functioning in real situations, otherwise not accessible for him.

Factor analysis procedures did not reveal the existence of subscales for the observation sheet, supporting this idea. Thus, it was noted that disruptive

disorders emerge in the interaction between the different psychological mechanisms.

During the construction of our experiential diagnosis procedure, it was observed that there is a correlation between how the child assesses themselves and relates to themselves, and how he/she evaluates and behaves in relation to his/her peers. This means that improving the self-image can be one of the most important goals in the psychotherapy of children with Attention-Deficit Hyperactivity Disorder.

## V. Conclusions

Art-therapy techniques have the ability to enhance communication and emotional expression in group sessions. Art serves as a container in which experiences and emotions can be expressed and shared, and can be used as the way to work on the multiple sides of the conflict: intrapersonal, interpersonal, socio-cultural, institutional and spiritual (Speiser & Speiser, 2007). Often, children with Attention-Deficit Hyperactivity Disorder have difficulties in expressing their thoughts and emotions and feel that others cannot understand them or do not even bother to understand. This may be the fundament of their interpersonal conflicts, especially in relation with the significant adults in their life. The two proposed dynamic exercises offer the children the possibility of artistic expression of their inner world.

For the therapist, the analysis of these dynamic exercises also provides a first indication of how the child engages in the therapeutic process and the extent to which it is possible for him/her to benefit from an experiential intervention program.

## References

- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders, 5th edition*. Arlington, VA: American Psychiatric Association.
- Barlow, D. (2005). What's New About Evidence-Based Assessment?. *Psychological Assessment, 3*, 308-311.
- Barkley, R. (1998). *Attention deficit hyperactivity disorder: a handbook for diagnosis and treatment (2<sup>nd</sup> ed.)*. New York: Guilford.
- Barkley, R. (2001). The executive functions and self-regulation: an evolutionary neuropsychological perspective. *Neuropsychology Review, 11*, 1-29.
- Bratton, S.C., Ray, D., Rhine, T. & Jones, L. (2005). The Efficacy of Play Therapy with Children: a Meta-Analytic Review of Treatment Outcomes. *Professional Psychology: Research and Practice, Vol. 36, No. 4*, 376 - 390.

- De Boo, G., Prins, P. (2007). Social incompetence in children with ADHD: possible moderators and mediators in social-skills training. *Clinical Psychology Review, 27*, 78–97.
- European Commission (2013). Mental Health Systems in the Europe Union Member States, Status of Mental Health in Populations and Benefits to be expected from investments into Mental Health. European profile of prevention and promotion of mental health (EuroPoPP-MH). <http://www.adhdeurope.eu/images/files/MHSystemsreport.pdf>.
- Furman, L.M. (2008). Attention-Deficit Hyperactivity Disorder (ADHD): Does New Research Support Old Concepts?. *Journal of Child Neurology, vol. 23, no. 7, July, 775-784*.
- Jenson, D., Yang, K., Acevedo-Rodriguez, A., Levine, A., Broussard, J. I., Tang, J. & Dani, J. A. (2015). Dopamine and norepinephrine receptors participate in methylphenidate enhancement of in vivo hippocampal synaptic plasticity. *Neuropharmacology, Vol. 90, 23-32, ISSN 0028-3908. <http://dx.doi.org/10.1016/j.neuropharm.2014.10.029>*.
- Kazdin, A. (1991). Effectiveness of Psychotherapy with Children and Adolescents. *Journal of Consulting and Clinical Psychology, Vol. 59, No. 6, 785-798*.
- Kazdin, A., Marciano, P. & Whitley, M. (2005). The Therapeutic Alliance in Cognitive-Behavioral Treatment of Children Referred for Oppositional, Aggressive, and Antisocial Behavior. *Journal of Consulting and Clinical Psychology, Vol. 73, No. 4, 726–730*.
- Lis, A., Zennaro, A. & Mazzeschi, C. (2001). Child and Adolescent Empirical Psychotherapy: Research. A Review Focused on Cognitive-Behavioral and Psychodynamic-Informed Psychotherapy. *European Psychologist, Vol. 6, No. 1, 36-64*, Hogrefe & Huber Publishers.
- Mills, C.G., Crowley, J.R. (1986). *Therapeutic Metaphors for Children and the Child Within*. N.Y.: Bruner/ Mazel Publishers.
- Nikolas, M.A., Burt, S.A. (2010). Genetic and environmental influences on ADHD symptom dimensions of inattention and hyperactivity: a metaanalysis. *Journal of Abnormal Psychology, 119*, 1–17.
- Pelham, W. (2007). What should we treat and how should we treat it? Paper presented at: *The Spectrum of Developmental Disabilities XXIX: ADHD – Beyond the Basics*; March 28, Baltimore MD.
- Pelham, W. E., Gnagy, E. M. (1999). Psychosocial and combined treatment for ADHD. *Mental Retardation and Developmental Disabilities Research Reviews, 5*, 225–236.
- Pelham, W. E., Wheeler, T., & Chronis, A. (1998). Empirically supported psychosocial treatments for attention deficit hyperactivity disorder. *Journal of Clinical Child Psychology, 27*, 190–205.
- Posserud, M.B., Ullebø, A.K., Plessen, K.J., Stormark, K.M., Gillberg, C. & Lundervold, A.J. (2013). Influence of Assessment Instrument on ADHD Diagnosis. *European Child Adolescent Psychiatry Journal*, DOI 10.1007/s00787-013-0442-6.
- Purper-Ouakil, D., Ramoz, N., Lepagnol-Bestel, A., Gorwood, Ph. & Simonneau, M. (2011). Neurobiology of Attention Deficit/Hyperactivity Disorder. *Nature, Vol. 69, No. 5, Pt. 2, 69R-76R*.
- Rogers, N. (1993). Person-Centered Expressive Arts Therapy. *Creation Spirituality, March/April*, 28–30.
- Shirk, S., Karver, M. (2003). Prediction of Treatment Outcome from Relationship Variables in Child and Adolescent Therapy: a Meta-Analytic Review. *Journal of Consulting and Clinical Psychology, Vol. 71, No. 3, 452–464*.
- Speiser, V.M., Speiser, Ph. (2007). An Arts Approach to Working with Conflict. *Journal of Humanistic Psychology, Nr. 47, 361-366*.
- Trout, A.L., Lienemann, T.O., Reid, R. & Epstein, M.H. (2007). A Review of Non-Medication Interventions to Improve the Academic Performance of Children and Youth With ADHD. *Remedial and Special Education, 28*, 207-226.
- U.S. National Library of Medicine (1999). *Multimodal Treatment Study of Children with Attention Deficit and Hyperactivity Disorder (MTA) (MTA)*. Retrieved from <https://clinicaltrials.gov/ct2/show/NCT00000388>.
- Weiss, B., Catron, T., Harris, V. & Phung, T. (1999). The Effectiveness of Traditional Child Psychotherapy. *Journal of Consulting and Clinical Psychology, Vol. 67, No. 1, 82-94*.