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Efficacy of Cognitive Behavioral Play Therapy (Cbpt) for Children with Attention Deficit Hyperactivity Disorder (Adhd)

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Abstract

An exploratory research was designed to study the effectiveness of Cognitive Behavioral Play Therapy (CBPT) for children with Attention Deficit Hyperactivity Disorder (ADHD). It was hypothesized that CBPT markedly reduces inattentiveness in children with ADHD. A sample of 10 children (5 girls and 5 boys) was selected from the Army Special Education Academy, Fort Road, Rawalpindi Cantt. The children were in the age range of 08-15 years. Swanson, Nolan, and Pelham Teacher and Parent Rating Scale was used to screen out inattentiveness in children (Bussing et al., [2008](#)). Paired sample t-test was used to check the significant change in the behaviors of children and to measure the overall effectiveness of CBPT. The difference in the symptoms for pre-test and post-test measures was found to be significant for the symptoms of inattention in children with ADHD. It was also found that CBPT is effective for reducing inattentiveness in children with ADHD.

Keywords: Attention Deficit Hyperactivity Disorder (ADHD), Cognitive Behavioral Play Therapy (CBPT), inattentiveness

Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is a persistent state in which an individual is not able to control their behavior due to trouble in dealing out neural stimuli. It is often accompanied by a tremendously elevated level of motor activity (American Psychiatric Association, [2013](#)). A child with ADHD may be highly distractible, incapable of staying still, and very talkative. In ADHD, a person cannot pay attention, remains hyperactive, and cannot control their actions, or a mixture of these symptoms (Cordier, et al., [2018](#)). Children with ADHD may also struggle with low confidence, troubled relationships and reduced performance in educational institutes. Its symptoms decrease with the passage of time. Although some people can never reduce their symptoms of ADHD, still they can be taught different ways to be successful in life.

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Cognitive therapy suggests that there is a relationship between feelings, cognition and behaviors which can be modified (Knell, [2009](#)). CBPT is cognition and behavior-based theories of emotional problems. The child is treated in Cognitive Behavioral Play Therapy (CBPT) through play, art materials, dolls, stuffed animals, doll houses, puppets, and other toys. The therapist focuses on the thoughts and feelings of the child when devising a plan for developing adaptive thinking and behaviors and for eliminating unwanted behaviors (Feizollahi et al., [2020](#)). A major goal of the cognitive therapy is to recognize and change maladaptive thoughts related to the patient's symptoms (Bana et al., [2017](#)).

Acquiring knowledge about the child's beliefs, feelings, behaviors and self-statements is the prerequisite of carrying out CBPT. The therapist can acquire this information from various informants such as parents, through observation, and through different psychological tests. After a thorough assessment of the child, cognitive-behavioral interventions can be used through role-play, positive reinforcement, and modeling. For instance, a child who has stage phobia may reduce his phobia via role play in which he tells a story to his mates. The therapist can give him positive reinforcement in order to encourage him and to reduce his stage phobia. For the same problem, modeling can also be used (Hassani et al., [2013](#)). During treatment, the therapist uses different situations to teach the child different ways of coping with the problem.

Literature Review

About 18.8% of children in the urban areas of Pakistan have elevated levels of hyperactivity (Malik et al., [2017](#)) and up to 13% have externalizing symptoms (Saleem & Mahmood, [2011](#)). The intervention given to ADHD children to help them direct their symptoms and mend their psychological processes should be the one that is perceptive to their boundaries in self-expression, since these children have limited communication skills (Bana et al., [2017](#)). There is one means that may give out as a waterway for ADHD children to communicate their feelings and difficulties and it is through expressing themselves in the course of play which is well thought-out to be a medium for developing children's language (Kaduson, [2019](#)).

Since play is the worldwide language of children, it is contended that it may have therapeutic powers especially for those experiencing difficulties in communicating their thoughts and feelings. Children can communicate through play without the need to verbalize their thoughts. Kaduson ([2019](#)) opined that play allows the mastery of skills. These two processes make possible for the children to satisfy their inherent need to muster control over their background, such as

overcoming painful situations and to act out their real life weaknesses and worries and recompense for them. Through play, they may experience pleasure accompanied by overall positive outcomes within themselves and their environment (Fred, & Berger, [2015](#)). When children play, they are expectant to think and reflect about their situations which likely helps them deal with their terrifying feelings and to seek meaningful solutions to their concerns at their own pace and time (Robinson et al., [2017](#)).

During play, children acquire an understanding of their surroundings and discover their sense of self. Literature has also speculated that play can help children to achieve the problem solving skills necessary to live in their world as well as to learn compassion and the handling of emotions (Halder & Mahato, [2019](#)). In another interesting study, the efficiency of CBPT found a significant difference in aggression level (Garber et al., [2016](#)). Moreover, research was carried out regarding the effectiveness of play therapy for reducing the children's behavioral problems. It was identified that play therapy leads to reducing the children's behavioral troubles (Fabiano et al., [2009](#)).

A research was conducted to explore the effectiveness of CBPT regarding the development of social skills in intellectually disabled children. A total of 32 children were selected and arranged into two groups namely experimental and control groups. The participants in the experimental group contributed in CBPT sessions. Both of the groups had a pre-test and a post-test. For the gathering of data, the questionnaire for the intellectually disabled children's social skills inventory was used. The findings pointed out that CBPT subsidize the intellectually disabled children's social skills and is effective on these children's social skills (Matson, [2019](#)).

Malik et al. ([2017](#)) examined the efficacy of the behavioral training program on parents and teachers and revealed that the treatment group showed a significant pre-post improvement in their ADHD symptoms.

Rationale of the Study

The purpose of the current study is to identify the application of CBPT on children with ADHD. It aims at providing and implementing a specific set of play techniques and proving its effectiveness. CBPT affects the cognitive, behavioral, social, and emotional development of children in a positive way. From the existing literature, we can conclude that CBPT is useful in various settings and for various purposes, although it is inadequately applied in Pakistan. Play is a universal phenomenon and it will be equally effective for the Pakistani children of

exceptional needs as it is in the western countries. Different researches proved that play therapy and CBPT are operative for cultivating the attention, impulsivity and hyperactivity of children with ADHD.

The main aim of the current research is to demonstrate the efficiency of CBPT by applying it on children suffering from ADHD and getting significant positive results. Only through the scientific process of research, a therapeutic intervention can be widely accepted as a practical treatment.

Hypothesis

The hypothesis formulated for the current study is given below.

- CBPT reduces inattentiveness in children with ADHD.

Method

Sample

The non-probability technique of purposive sampling was used to select the sample. For the purpose of data collection, 10 children with ADHD were selected from the Army Special Education Academy in April 2015. Their age range was 8-15 years. All the 10 children took part in detailed assessment. Evaluation was done by collecting parents' and teachers' information through the SNAP-IV Teacher and Parent Rating Scale. Detailed history about the birth of the child, complications during pregnancy, the child's medical history and developmental milestones were also recorded. The children who have Attention Deficit Hyperactivity Disorder predominantly inattentive type were included in this study. The children with ADHD must be in Special education institute from past 2 years.

Instrument

Swanson, Nolan, and Pelham Teacher and Parent Rating Scale (SNAP-IV)

Swanson, Nolan, and Pelham Teacher and Parent Rating Scale (SNAP-IV) was developed by James M. Swanson. It is a revised version of the Swanson, Nolan and Pelham (SNAP) questionnaire (Swanson et al., [1981](#)). It was published by the University of California, Irvine. This parent and teacher rating scale for ADHD is based on the DSM-IV symptoms for ADHD. SNAP-IV is a 0 to 3 rating scale designed to measure inattention, impulsiveness and hyperactivity. For each subscale of SNAP-IV, items are marked as 'not at all', 'just a little', 'quite a bit' and 'very much'. There are 18 items in SNAP-IV. The first 9 items measure inattentiveness and the last 9 items measure hyperactivity-impulsivity of the ADHD children. Only the first 9 items which measure inattentiveness were scored in this

study.

Scores of the subscale 'inattention' were calculated by summing the scores of the 9 items and dividing them by the number of items in the subset, that is, 9. Average Rating-Per-Item is the score of any subset. The 5% cutoff score for teachers is 2.56 and for parents it is 1.78. The score is considered significant if it falls in the top 5 percent.

CBPT Techniques

There are a variety of treatment techniques in CBPT which help to reduce anxiety in children and also help them to cope with emotional problems. Techniques which were used include modeling, role play and positive self-statements.

Modeling

Modeling is a frequently used and helpful technique of CBPT. Modeling allows the child to learn how the model acts out in the same situation and it also allows the child to show a more appropriate response. The child learns from the model regarding how to deal with a problem. There are two types of models in modeling: (1) mastery models and (2) coping models. Coping models do not show the skills perfectly and they gradually become more skillful, whereas mastery models demonstrate perfect performance. Several researches show that coping models are better than others because it is like shaping the model towards the desired goal. The child observes the model learning more appropriate skills. Seemingly, mastery models do not help the child learn new skills and acquire new behaviors.

Systematic desensitization can be described by a model. For example, a model is gradually exposed to a testing situation and learns to cope with that situation. Modeling can be of many types, such as symbolic modeling, models of the story, participant models which directly interact with the child and the model guiding the child stepwise.

Role Play

Role play is another very useful technique of CBPT in which the child actually performs a particular role according to the perceived expectations. In role play, a child pretends to be someone or something in a hypothetical situation. For example, a child who cannot sit still for a few minutes plays the role of a statue and learns to stay still.

Positive Self-statements

All individuals can learn adaptive self-statements but children must learn positive self-statements. Very young children can be taught very simple positive statements which are linguistically easy. For example, 'I am brave I can do this' is such a statement. Statements like 'I am doing a good job' have an element of self-reward. Positive self-statements should be like by the parents and the therapist. Children learn the positive value of what they are doing through positive feedback. Positive self-statements can be helpful in learning coping strategies such as the statement 'I can walk past the cat whenever I feel like it.' Reality testing statements such as 'there really are no ghosts in our home' and reinforcing statements like 'I am brave I can do it' also help. Cognitive intervention alone cannot facilitate the mastery of skills; however, a combination of both cognitive behavioral and play therapy intervention helps children acquire new skills.

Procedure

The purpose of the current study was to explore the need of CBPT for children with ADHD. All the participants were selected from the Army Special Education Academy. Its administration was provided with the necessary information regarding the current research in order to obtain its informed consent. Moreover, the administration was assured that the information obtained from the teachers and students would be kept confidential and used only for research purposes. The teachers were given the required information and directions they needed to fill the scales. They were assured that they would be provided with any sort of information regarding their queries. The rating scale was administered in a private one-to-one setting. Inattentiveness of the children was measured using the SNAP-IV Teacher and Parent Rating Scale.

The research work was carried out in 8 weeks. Two sessions per week were held for each participant. A total of 20 sessions were held. The first and the last session were intended for the pre- and post-test assessments of the variables targeted to be measured. The rest of the 18 sessions were conducted to increase children's attentiveness through CBPT. The therapy techniques applied were role play, modeling, story telling through pictures, videos, puppet play, as well as playing with different toys such as dolls and cars. Sweets, cartoon stickers and balloons were given as reinforcers in the last session. The main behaviors focused in these sessions included inattentiveness, following instructions, and concentrating on things. The techniques were designed to improve the individual skills of the students. The contents of the games were so designed that the children had the

greatest role in the game and the therapist played a collaborative role during the sessions.

Two interviews were conducted for the parents. One interview was conducted before the therapeutic sessions and the second interview constituted a follow up about the improvement in the behavior of the children after the therapeutic sessions. The teachers of the respondents were also interviewed regarding their performance in the school.

Results

The current research was conducted to explore the significance of CBPT for children with ADHD (predominantly inattentive type). In analysis, t-test was used to assess the significant change in pre- and post-test results.

Table

Inattentiveness of the children was measured via pre-test using SNAP-IV. Mean and standard deviation were calculated for the pre-test. The mean of the pre-test scores was 2.59 and standard deviation was .158. After 20 sessions, a post-test was administered. The mean and standard deviation of the post-test scores were 1.55 and .258, respectively. The analysis of t-test was used to assess the scores of pre- and post-test. The value of t-test according to the teachers' report was .000 and according to the parents' report it was .001. These values are significant and show a considerable change in the behaviors of the children.

Table 1

Paired Sample t-test pre- and post-test

Assessment	Pre-test <i>M(SD)</i>	Post-test t <i>M(SD)</i>	df Sig.(tailed)
Teachers' report	2.59(.158)	1.55(.258) 16.525	9.000
Parents' report	2.09(.241)	1.40(.315) 4.560	9.001

Table 1 shows the t-test applied to assess the significant change in the actions of the children pre- and post- play therapy sessions. The results showed a difference in pre- and post-test measures which is statistically significant.

Discussion

The purpose of the current research was to explore the significance of CBPT for ADHD children (predominantly inattentive type). It was hypothesized that CBPT reduces inattentiveness in children with ADHD. The results of the comprehensive analysis indicated a considerable improvement in the symptoms of inattentiveness in such children. These results suggest the significance of CBPT for the Pakistani community.

The results showed that the participants no longer exhibited an extreme level of inattention. The participants in post-therapy showed fewer behaviors that exhibited the failure of giving close attention to details, following instructions and finishing tasks in time assigned to them. Teachers reported that the participants were more constrained in their behaviors after the therapy. The decrease in the scores of the participants can be credited to the fact that play therapy was not random, rather it was goal oriented.

Thus, in this research play therapy sessions with children with ADHD provided them with an environment that allowed them to express their behaviors and giving them a mastery of when to exhibit behavior and when to inhibit behaviors so that they can complete their tasks. Moreover, when the researcher permitted them to complete the given task in their own way, in this way it will help to understand the children that how they can complete the tasks if they use different manners than the usual way (Feizollahi et al., [2020](#)). This perception is similar to the existing literature that describes that play helps ADHD children to determine the inappropriateness and appropriateness of their behaviors (Brandt et al., [2019](#)). Another study showed that special children were able to learn life skills and overcome speech difficulties through play (Maston, [2019](#)).

This way to teach the children with ADHD helps them to regulate their behaviors. Russ ([2003](#)), in her book *Play in Child Development and Psychotherapy*, told the story of a young girl who was permitted to be angry with her mother through the use of a doll. She was told that anger is understandable and acceptable. By permitting the girl to show her anger, she was provided a chance to manage her anger and she learned to stay calm. In the same way, in this research the children were taught the appropriateness and inappropriateness of various behaviors.

The goal of play therapy in this research was to help children understand what is happening in their specific situation, how to approach it with different styles and be aware of the consequences of using alternative ways. In this study, during play sessions the children were given those tasks by the researcher which helped them

to control their unacceptable behaviors so that they may realize the favorable consequences of controlling these behaviors (Robinson, et al., [2017](#)).

A model that presents the general results of the children showed the difference of their inattentive behaviors in pre and post measures. So, it is possible that play therapy that grabbed the children's desired behaviors and they extended these behaviors towards finding solutions even when they were not attending the play therapy sessions.

Conclusion

It is evident from the results that play therapy is effective for bringing change in the children's behaviors. CBPT can increase awareness in children about their strengths and capabilities, their inabilities or limitations and their inappropriate behaviors. Once children are fully aware of the situation in which they cannot perform well, they may know how to focus and decide and thus choose alternative behaviors for the given situation. Another contribution of the play therapy is the awareness of choosing tasks which the children think they are able to finish in time.

Implications

The current study proved the importance of CBPT for ADHD children in Pakistan. There is limited practical application of play therapy in Pakistan. This study is an attempt to initiate therapy based research on ADHD in the country. It extends the application of play therapy in various mental health settings and also helps to widen the horizon of psychologists and mental health practitioners. It facilitates future researchers as well as children.

Limitations

While interpreting the findings of this research several precautions are necessary and future work may be carry out considering the limitations of current research. Firstly, the sampling method can be changed in the future to make the sample more representative. Secondly, the results of the study are based on the reporting by the parents and teachers which may create biasness, so it is suggested for the future researchers to use additional observational measures.

Recommendations for Future

It is suggested for the future researches to utilize an improved study design. Challenges faced during this research should be kept in mind while conducting future researches. Future studies should be conducted with an increased sample size and other sampling techniques should be used to increase the generalizability of results.

References

- American Psychiatric Association, A. P., & American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. American Psychiatric Association.
- Bana, S., Sajedi, F., Mirzaie, H., & Rezasoltani, P. (2017). The efficacy of cognitive behavioral play therapy on self-esteem of children with intellectual disability. *Iranian Rehabilitation Journal*, *15*(3), 235–242.
- Brandt, V., Kerner Auch Koerner, J., & Palmer-Cooper, E. (2019). The Association of Non-obscene Socially Inappropriate Behavior with Attention-Deficit/Hyperactivity Disorder Symptoms, Conduct Problems, and Risky Decision Making in a Large Sample of Adolescents. *Frontiers in psychiatry*, *10*(660), 1-6. <https://doi.org/10.3389/fpsy.2019.00660>
- Bussing, R., Fernandez, M., Harwood, M., Hou, W., Garvan, C. W., Eyberg, S. M., & Swanson, J. M. (2008). Parent and teacher SNAP-IV ratings of attention deficit hyperactivity disorder symptoms: Psychometric properties and normative ratings from a school district sample. *Assessment*, *15*(3), 317-328. <https://doi.org/10.1177/1073191107313888>
- Cordier, R., Vilaysack, B., Doma, K., Wilkes-Gillan, S., & Speyer, R. (2018). Peer Inclusion in Interventions for Children with ADHD: A Systematic Review and Meta-Analysis. *BioMed Research International*, *2018*, 1–51. <https://doi.org/10.1155/2018/7693479>
- Drewes, A. A. (2009). *Blending Play Therapy with Cognitive Behavioral Therapy: Evidence-Based and Other Effective Treatments and Techniques*. John Wiley and Sons, Inc.
- Fabiano, G. A., Pelham Jr, W. E., Coles, E. K., Gnagy, E. M., Chronis-Tuscano, A., & O'Connor, B. C. (2009). A meta-analysis of behavioral treatments for attention-deficit/hyperactivity disorder. *Clinical Psychology Review*, *29*(2), 129-140. <https://doi.org/10.1016/j.cpr.2008.11.001>
- Feizollahi, J., Sadeghi, M., & Rezaei, F. (2020). The Effect of Cognitive Behavioral Play Therapy and Its Integration with Parental Management Training on Symptoms of ADHD in 7-11 Year Old Children: A Quasi-Experimental Study. *Journal of Rafsanjan University of Medical Sciences*, *19*(2), 155-172.
- Fred, K. & Berger, M. D. (2015). U.S. National Library of Medicine. Attention deficit hyperactivity disorder. <https://medlineplus.gov/ency/article/001551.htm>
- Garber, J., Frankel, S. A., & Herrington, C. G. (2016). Developmental demands of cognitive behavioral therapy for depression in children and adolescents:

- Cognitive, social, and emotional processes. *Annual Review of Clinical Psychology*, 12, 181–216. <https://doi.org/10.1146/annurev-clinpsy-032814-112836>
- Halder, S., & Mahato, A. K. (2019). Cognitive Behavior Therapy for Children and Adolescents: Challenges and Gaps in Practice. *Indian Journal of Psychological Medicine*, 41(3), 279–283. https://doi.org/10.4103/IJPSYM.IJPSYM_470_18
- Hassani, R., Mirzaeean, B., & Khalilian, A. R. (2013). Effectiveness of cognitive behavior-based play therapy on anxiety and self-esteem of children with attention deficit/hyperactivity disorder (ADHD) children. *Journal of Psychology*, 8(29), 163-80.
- Kaduson, H. G., Cangelosi, D., & Schaefer, C. E. (Eds.). (2019). *Prescriptive play therapy: Tailoring interventions for specific childhood problems*. Guilford Publications.
- Knell, S. M., & Dasari, M. (2009). CBPT: Implementing and integrating CBPT into clinical practice. In: A. A. Drewes, (Ed). *Blending Play Therapy with Cognitive Behavioral Therapy: Evidence Based and Other Effective Treatments and Techniques*. Hoboken, New Jersey: John Wiley & Sons.
- Malik, T. A., Rooney, M., Chronis-Tuscano, A., & Tariq, N. (2017). Preliminary efficacy of a behavioral parent training program for children with ADHD in Pakistan. *Journal of Attention Disorders*, 21(5), 390-404. <https://doi.org/10.1177/1087054714524158>
- Matson, J. L. (2019). *Handbook of intellectual disabilities: Integrating theory, research, and practice*. Cham: Springer.
- Robinson, A., Simpson, C., & Hott, B. L. (2017). The effects of child-centered play therapy on the behavioral performance of three first grade students with ADHD. *International Journal of Play Therapy*, 26(2), 73–83. <https://doi.org/10.1037/pla0000047>
- Russ, S. W. (2003). *Play in child development and psychotherapy: Toward empirically supported practice*. Routledge.
- Saleem, S., & Mahmood, Z. (2011). Development of a scale for assessing emotional and behavioural problems of school children. *Pakistan Journal of Social and Clinical Psychology*, 9, 73-78.
- Swanson, J. M. (1981). *The SNAP rating scale for the diagnosis of attention deficit disorder*. Paper presented at the meeting of the American Psychological Association; Los Angeles.