

Research Paper

A Study on Efficacy of Cognitive Behavioural Play Therapy on Internet Addiction among Adolescents with Intellectual Disability

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ABSTRACT

The aim of the current research was to examine the efficacy of Cognitive Behavioral Play therapy (CBPT) on internet addiction among adolescents with Intellectual disability. CBPT incorporates cognitive and behavioral inventions within a play therapy paradigm. As a pilot study, a total of 7 samples of adolescents were obtained after screening them for internet addiction test from the state of Gujarat by using the technique of purposive sampling. Parent child Internet Addiction test (PCIAT) (by Kimberley Young) was used as a screening test. Paired-t test was used to statistically analyze the mean difference of the data among the participants in the Pre and Post intervention using MS Excel software. Statistical analysis of the result gave t-stat value= 13.749, showing that there is a significant decrease in the internet addiction among adolescence with intellectual disability post-CBPT intervention as compared to the scores on PCIAT in the pre intervention condition. Conclusion- the efficacy of CBPT can be observed in managing and reducing the problem of internet addiction among adolescents diagnosed with different level of intellectual disability, significantly post CBPT intervention.

Keywords: *Cognitive Behaviour Play Therapy, Intellectual disability, Parent-Child Interaction*

Disability is a characteristic of being human (as stated by WHO). A disability is likely to impact someone at some point, either momentarily or persistently. Approximately 15% of the world's population, or more than 1 billion people, are currently disabled.(WHO, 2020) A person is termed mentally disabled if marked by a severe decline in cognitive and coping skills (Chavan & Rozatkar, 2014) i.e they have trouble understanding everyday communication and exhibit unusual behaviour, such as self-talking, weeping, giggling, or staring for no apparent reason. They may also act violently or suspiciously without cause. "Intellectual disability (Intellectual Developmental Disorder) is characterized by deficits in general mental abilities, such as reasoning, problem-solving, planning, abstract thinking, judgment, academic learning, and learning from experience. (APA, 2013, p.31). With escalating use of video games, especially in among the youths, it's discovered that many mental health issues are also related to it, even quoted by Von Der Heiden and colleagues that "it is associated with psychological symptoms, maladaptive coping strategies, negative affectivity, low self-esteem, a preference for solitude, and poor

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school performance.”(Von Der Heiden et al., 2011) and this will make the case of ID students even worse as they often lack the coping techniques and are already vulnerable to above mentioned characteristics.

Thus, it becomes even more important for health and education professionals to take into account the psychological, intellectual, physiological, and neurological alterations that are linked to excessive smartphone usage. (Wacks & Weinstein, 2021). In the beginning, Cognitive Behavioural Play Therapy was specifically designed, for children in the age group of 3-8 years old. It's an offspring of Cognitive Therapy (CT) as given by Aaron Beck (1964,1976). CBPT given by Knell was initially developed for dealing with children between 2 and 1/2 to 6 years which includes cognitive, behavioral, and traditional play therapies but now is used with varied age groups.

Objective

The objective of the current research work was to study the efficacy of CBPT among adolescents with ID having internet addiction.

Hypotheses

H₀. There is no significant decrease in Internet addiction among adolescents with Intellectual disability post-CBPT sessions.

H₁. There is a significant decrease in Internet addiction among adolescents with Intellectual disability post-CBPT sessions.

METHODOLOGY

Selection of Sample

VARIABLES

- Independent variable: Cognitive Behavioural Play Therapy (CBPT)
- Dependent variable: Internet Addiction

RESEARCH MEASURES:

Inclusion criteria:

- Adolescents belonging to the age range of 13-18 years were selected as a sample for the research study.
- Only internet-addicted adolescents with ID were taken into consideration after appropriate screening.
- Only those adolescents who were pre-diagnosed with ID were taken into consideration.

Exclusion criteria:

- Female participants were excluded from the sample.

Research Tools

Parent-Child Internet Addiction Test (PCIAT): The PCIAT is designed by Kimberly S. Young (1998) to be administered to a parent/caregiver. The test classified the severity of the child's internet addiction as mild, moderate, or severe. It consists of 20 items to be answered in the fill-in-the-blank format. It has 6 point-Likert type structure and scored as “0= Never” “1- Seldom” “2- Occasionally”, “3-Frequently” “4-Very Often” and “5- Always”. The test may be completed in a group or individual setting.

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Administration time: 5-10 minutes

Age limit- Intended for adolescents aged 12 to 18 years of age

Reliability and Validity: the PCIA test has good internal reliability (0.90 on average) and high validity.

Scoring and Interpretation: scores of 80 and above on the scale are defined as “Internet addicts”, those between 50-79 points as “those with limited symptoms” and those with 49 and below as “those who show no symptoms”.

CBPT techniques in the present research during the sessions included-

-Psycho-education

-Problem-solving methods introduced

-CBPT interventions in the current research included activities like- talk the talk, parental counseling, individual counseling, video-based learning, games (passing the ball, guess who?, puzzle, indoor games, X and 0, square and dots, etc.) craft, positive-negative reinforcement, spot the difference, drawing and coloring, household chores, relation techniques (meditation, deep breathing, enchanting om, etc.)

Age Group

Age limit- Intended for adolescents aged 12 to 18 years of age

Administration

Administration time taken to conduct PCIAT was 5-10 minutes

Reliability and Validity: The PCIA test has good internal reliability (0.90 on average) and high validity.

Data Collection and Procedure

Official permission was taken from the respective institute to collect the data for the research work. Only male participants, between the age of 13 to 18 years; who were already diagnosed as having an intellectual disability by using IQ tests like SBI-5, BKT, etc. were selected as the sample for data collection. A total of seven participants were selected and their parents were asked to fill up the demographic details and consent form to begin the therapy. The parents of the participants for psycho-educated and later the PCIAT was given to them before and after the CBPT intervention with the adolescents. The privacy was maintained throughout the data collection and contact information was provided to the subject in case of any query. All the subjects were thanked for giving their valuable time and consent to participate in the research study. After the completion of data collection, each respondent was coded with the help of the scoring key of PCIAT. The data was collected from two different institutions in Ahmedabad city of Gujarat state- the Hospital for Mental Health, Shahibaug, and Navjivan School for mentally disabled children, Memnagar Gam.

Statistical Analysis

Paired t-test was used to statistically analyze the mean difference of the data among the participants in the pre and post-interventions using MS Excel software.

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RESULT

The primary objective of the study was to find out the efficacy of cognitive behavioral play therapy (CBPT) among adolescents with intellectual disability between the age group of 13 to 18 years, who have internet addiction. Various CBPT techniques were used to reduce and manage the problem of internet addiction. 15-CBPT sessions (60 minutes each) were given to each participant having an intellectual disability whose IQ was already measured ranging from mild to severe level and who had internet addiction diagnosed by administering PCIAT). The test was given pre and post-CBPT sessions to see the effectiveness of the intervention.

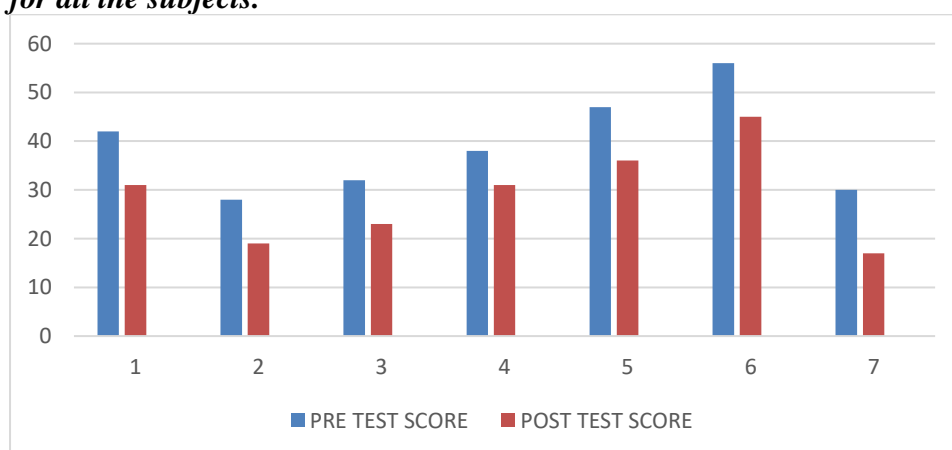
Tab 1.1 Showing the statistical analysis of the data using paired t-test

	Pre-intervention score	Post-intervention score
Mean	39	28.85714286
Variance	102.3333333	98.80952381
Observations	7	7
df	6	
t stat	13.74909088	
p one-tail	0.00000460251	
t Critical one-tail	1.943180281	

Table 1.1 shows the statistical analysis of the obtained data using the pair the test method to find the mean difference between the pre and post-conditions. From the above table, it can be observed that at $\alpha = 0.01$ and $df = 6$, the value of $t \text{ stat} > t \text{ crit}$.

Thus, H_0 is rejected and H_1 is accepted. There is a significant decrease in internet addiction in adolescents with intellectual disability post-CBPT intervention.

Graph 1.1 Showing the mean difference between the pre and post intervention of CBPT for all the subjects.



From the above graph (1.1) it can be interpreted that there is a significant decrease in the mean value from Pre to Post PCIAT scores after providing intervention to the participants. This clearly shows a decrease in the level of internet addiction among the participants with ID post-CBPT intervention.

DISCUSSION

CBPT was first developed by incorporating cognitive and behavioral inventions within a play therapy paradigm; it provided a novel approach to child psychotherapy. The most significant differences between CBPT and other play therapies are its structure, psycho-educational components and goal direction, and collaborative approaches that are guided by both the child and therapist. It can be used with children with selective mutation; a history of sexual abuse, sleep problems, who are facing several anger-based, emotional and psychosocial problems, obsessive-compulsive disorder, post traumatic stress disorder (PTSD), attention deficit hyperactivity disorder (ADHD), etc. The findings of the present research work shows a positive effect of CBPT by reducing the level of internet addiction among adolescents with intellectual disability. Current research is one of its kind, especially in India and it's still a developing area of research. Not many researches are available in the same context, hence the present study provides a concrete base for other researches which can be conducted using other relevant variables along with covering a wider sample. Research done by Bong, Won and Choi (2021) revealed that when CBPT was combined with music therapy, the combination decreased the behaviour of internet addiction anxiety and impulsivity in adolescence; and this, proved to be an effective treatment for internet addiction. (Bong et al., 2021)

In a study by M. K. Sharma and colleagues (2020), it was found that people with mild intellectual disability use the internet more frequently during free time as well as for entertainment and found to have use of the internet and game in them. (Sharma et al., 2020) At present the findings of the current research revealed that though all the participants benefited from the CBPT intervention those who gained the most were participants with mild and moderate levels of ID. Thus, relating to the latter research work, CBPT can be seen useful for ID population, especially those having mild and moderate levels. Research done by Jenaro and colleagues found that young people with disabilities overuse both the internet and cell phones for social and recreational purposes, indicating unhealthy behavior (Jenaro et al., 2020). As per the results of the present research, the bend toward the internet can be managed by giving CBPT interventions not only to the adolescents but their parents and caregivers too for better outcome. Another research conducted by Bana and colleagues revealed post the CBPT session that play therapy appears to be a successful strategy for raising the self-esteem of kids with intellectual challenges. (Bana et al., 2017). In order to treat these children in rehabilitation centres and schools, educators and teachers are advised to use this method as an adjunctive therapy. Thus, it can be said that CBPT positively affects and enhances self-esteem among ID children. This expands the range of interventions and applications of CBPT. In a research by Randall and colleagues, it was validated that intellectually disabled children experience cognitive limitations and challenges in adaptive behaviors that affect their emotional and social development; in such cases, play therapy proves to be a fruitful intervention, as a means of enhancing their social skills and strengthening their adaptive behaviours. (Astromovich, 2015). A meta-analytic study (Bratton, 2005) also concludes that although there's lack of evidence on the efficacy of play therapy, but it still proves to be impactful, especially when parents are included as well. Various other researches have advocated the positive impacts of play therapy (Charmichael, 1992; Landreth, 2012; Ray et al., 2001; Asjad et al., 2017;) and the social abilities of children with intellectual disabilities were also enhanced by a group play therapy training programme using a cognitive-behavioral approach.(Ashori & Yazdanipour, 2018). In a research, it was also discovered that CBPT is successful in lowering inattentiveness in kids

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with ADHD.(Khatoun et al., 2020) which provides evidence of its applicability and effectivity on not only Intellectually disabled population but beyond.

Thus, the developmental and amiable nature of play therapy irrespective of age and gender allows clients to be able to open up with ease. And such a technique, when amalgamated with CBT works wonders as in the case of current research. At the same time the consistency and implementation style of this technique along with the nature or problem of the subject will play a crucial role in the efficacy of CBPT on the client. And as quoted by Cavett “CBPT is a developmentally appropriate treatment that is sensitive to emotional, cognitive, and linguistic development.”(Cavett, 2015), opens the door of further exploration of this budding therapeutic technique by relating it with various variables.

CONCLUSION

The result shows that there is a statistically significant decrease in internet addiction among adolescents with intellectual disability post-CBPT intervention as compared to their scores on PCIAT in the pre-intervention condition. Thus, it emphasizes the efficacy of cognitive behavior play therapy in managing and reducing the problem of internet addiction among adolescents diagnosed with different levels of ID.

Practical Implications

The current research findings can be useful for mental health professionals especially counsellors, psychotherapists, and special educators dealing with adolescence and children with intellectual disability who are addicted to the internet. Parents can be taught some basic CBT techniques to manage their child's behavior. The results can be useful for students and research scholars who want to proceed in the same direction. The research can be useful for the society and community at large to understand their understanding and spirit awareness about the benefits and efficacy of CBPT for managing unhealthy behavior among adolescents.

Limitations and Suggestions

The research sample was collected from Ahmedabad city of Gujarat state only and was carried out on a small sample therefore it cannot be generalized on the entire population. Other variables like home environment, temperament of the adolescents, family type, professional status of parents, sibling relationship etc were not considered. Also due to time constraints, follow-up was not possible post the study to see whether the effect of the intervention is long-term or not. In the research work the efficacy of CBPT on adolescents with different levels of ID was not studied separately or specifically.

Keeping in mind the above limitations, further research can be conducted for better understanding. Current research work can be extended to a larger sample to validate it on the entire population. The efficacy of CBPT on adolescents and another age group, having internet addiction with specific levels of ID mild, moderate, severe, or profound can also be studied separately. It is also suggested to study the impact of CBPT on children and adolescents with different disorders having any other addictions. Further research can also be done to know whether CBPT is useful in combination with other therapeutic approaches concerning substance use disorder or any other addictive behavior. Lastly, it is also suggested to study the effect of CBPT on adolescents as a preventive measure as well.

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Conflict of Interest

The author(s) declared no conflict of interest.

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