

## The Effectiveness of Play Therapy Studies on Behavioural Disorders in Children in Iran



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### ABSTRACT:

**Introduction:** This study aimed to meta-analyze the influential play therapy studies on behavioural disorders in children in Iran.

**Method:** The analysis of the present research method uses internal and external databases to find and collect all research reports. The sample used included 22 studies conducted from 1997 to 2013, including 637 subjects. The data from these 22 studies were meta-analyzed by the standardized effect size difference method or Cohen d for the fixed effects model. All statistical operations were performed using the second edition of comprehensive meta-analysis software.

**Results:** The results showed that the average effect size of the studies is 0/434 for the fixed effects model and 0/477 for the random effects, both of which are significant. Because the effect sizes were heterogeneous, moderators were searched. The results showed no significant difference between the effect size of the studied studies according to the research design and the gender of the subjects. However, there was a substantial difference between the effect of studies on the effectiveness of play therapy on children's behavioural disorders according to the subject's age, the type of independent variable and the number of play therapy sessions.

**Conclusion:** Holding play therapy sessions ultimately and in multiple sessions and at a young age can improve more behavioural disorders in children.

**KEYWORDS:** play therapy, behavioural disorders, children, analysis

### INTRODUCTION

The game has always existed in history. The play has been a constant companion of infants, children and adolescents. It is a restless game that reveals the labyrinth of players. It is difficult, if not impossible, to imagine a world without children and children without games. The game has five essential characteristics: it is aroused from within, it is freely chosen, it is enjoyable, it is unrealistic, and the players are actively involved in it. Use activities and play equipment (such as pottery, water, cubes, dolls, puppets, paintings and finger paints) in child psychotherapy (Reid Chassiakos et al., 2016). Play therapy methods are based on the theory that such activities, life. They reflect the child's emotions and fantasies, enabling them to express their feelings and problems, try new ways, and learn about relationships, not just in words but in action. The child's inner world and subconscious conflicts and their daily life and current relationships may be unguided but can also be performed at a more guiding or analytical level and interpretively (Davis & Pereira, 2013). He communicates and allows the child to take control of foreign objects. Show experiences, thoughts, and feelings that are threatening to him. Studies on the clinical effects of play therapy on various diseases found that play therapy profoundly impacts a wide range of children's problems. In general, the history and developments of play therapy to play therapy are psychologically based on analytical activity, relaxation therapy based on the activities, communication therapy based on the activities, and b) directed or client-centred treatment based on the actions (Wicks, 2019).

Specialists have found play therapy to be very effective in improving externalized behavioural problems such as fighting and internalized problems such as immorality and children. Over the years, psychologists have pointed to the importance of play in children's psychotherapy for several reasons: Play allows children to express their emotions effectively, and playing is a natural way to do so. Allows adults to enter the world of children and show children that they recognize and accept them (Jones, 2013). Children are enjoyable, encourage children to calm down and thereby reduce their anxiety and defensive state is complex, play provides an opportunity for children to acquire social skills and -3 play gives children the chance to play new roles and experiment with different problem-solving approaches in a safe environment. They were the first to receive pretence games to allow children to practice newly acquired skills. Researchers have found that playfulness can strengthen cognitive and social skills. Furthermore, studies have shown that play helps children's attention, memory, logical reasoning, language, imagination, and creativity and enables them to see the point of view of others (Todd, 2022). Researchers have found that imaginary play, in addition to helping Cognitive development, increases children's self-awareness, self-confidence, self-control, memory and language skills. Landert for working

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with children] based on this approach has described the following: Children are not a tiny version of adults, so the play therapist should not treat them this way. They can express all human emotions. - deserve respect and should be valued by children for their uniqueness, are flexible -, have an innate ability to grow, communicate naturally through play, have the right to express themselves. Nonverbal expressions determine how to benefit from treatment sessions. They grow at their own pace, and the therapist's play must be patient in the process. The research background in various play therapy methods in children's behavioural and mental disorders in Iran and the world is relatively limited (Muchiri, 2021). So far, the effect of play therapy on social and psychological adjustment children, students' self-concept, reading progress and source control , children's speech problems, different stages children development, preoperative surgery on its consequences , internalized problems, External problems Internalized Disorders, Children 's behavioral and emotional problems, anxiety and depression and self-esteem, Children witnessing domestic violence, severity of symptoms of dysfunction activity / attention, inattention and impulsivity in children with attention-deficit / hyperactivity disorder activity, self-esteem, blind students , reduction of night fear Aggression, Children, Skills, Communication, Light Parenting, Child Behavior Disorder Reducing Anxiety, and Increasing Positive Emotions and General Adaptation Levels Decrease, Shyness and isolation Social isolation Specific fear, Fear, Social separation anxiety, Social interaction, Symptoms, Transformational impairment Ability, Mental Decrease, Students' spelling errors has a new disorder Shetenactivities, mental and immunological indicators related symptoms, with grief and injury caused by earthquake, development of motor perception children with vision, reduction of social phobia cases reviewed (Gil, 2012).

A meta-analysis on a study conducted in 1953 covering a distance of 3263 subjects from 1953 to 2000 reported an average effect size of 0.80. The effect size of the studies that involved parents in child rehab was much larger than the studies that the novel game was conducted by experts alone. The effect of play therapy did not differ according to the gender and age of the subjects and the type of play therapy approach used. Since research related to play or effective treatment on mental, behavioural disorders in children has increased significantly in recent years in our country, meta-analysis studies can, while reviewing the previous results, combine the results of those studies and more accurate estimates and Single results (Kottman & Meany-Walen, 2016). Combining the results and using the previous research as the unit of analysis to obtain a general and unambiguous picture of the impact of play therapy at this time in the country is valuable and practical. Researchers have traditionally investigated the generalization of accepted findings by examining research backgrounds. Research background The researcher studies several types of research that have dealt with a specific topic and then empties the article to summarize and evaluate the research backgrounds. Sometimes, a review reports that the author makes conclusions about research presentations and findings of the research background (Athey & Imbens, 2017). The determination of a research background report is based on the author's mental perceptions. In recent years, another method has been designed to compare a large number of studies in a particular field, and this method is called a meta-analysis. In a meta-analysis, the researcher combines the actual results of several studies. In this analysis, a set of statistical methods using effect sizes compares a specific finding in the research background. In this method, statistical conclusions can be drawn instead of relying on a research background report judgment. The information obtained from a meta-analysis is beneficial and informative. It isn't easy to reach a general conclusion of the meta-analysis type, main Peugeot target in a traditional research background (Field & Gillett, 2010).

### METHOD

The metric method of the present method Play, play sand, play with rules, preschool play, imaginative play, imitation play, physical play, movement play, sensory-motor play, imaginary play, computer play, play game, computer play, play computer, play Bubbles, game bubbles, toy dolls, play equipment, medical arts and the like in domestic and foreign information databases such as MIDLINE, Noormags ERIC, Iran, And SCI / SSCI, PsycARTICLES, Most, Rice various search engines for finding and compiling all articles published in Persian and English, a summary of articles, a summary of articles Provincial, master's and doctoral dissertations were conducted to study the effectiveness of play therapy on behavioural disorders in children and adolescents in Iran. Also, he went to his universities and institutes to find master's, doctoral and professional doctoral dissertations, whose research report was not received in an article. Thus, all the research carried out from 1997 to 2013 were collected. The following criteria were considered for entering any study in the meta-analysis (Czalczyńska-Podolska, 2014):

1. Research has been done in organizations, universities and higher education centres.
2. Research has been done on master's and doctoral degrees.
3. Research has been done using proper tools and methods, and have psycho-characteristics have been done with one of the experimental and quasi-experimental methods.
4. Research has been done correctly in terms of methodological principles.
5. Research has reported the work's size or provided the information needed to calculate it.

The research was performed on at least five subjects. Also, a checklist was prepared to select and extract information from various studies. The content of this list was prepared and finalized based on research literature and surveys of three experts in meta-analysis and play therapy. This list was used to codify the research and coded by two evaluators separately. Finally, the reliability of these evaluators was calculated with a kappa coefficient of 0.77.

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Researchers are to modify various research sections in some cases, including their statistical methods. According to the inclusion criteria of the research in the present meta-analysis and the results of evaluations, only 22 researched investigations were selected and analyzed. Many experts agree to perform meta-analysis even on a much smaller number of studies, provided that the criteria, capabilities and conditions are met. Research data were analyzed based on the effect size method of standardized mean difference or Cohen d for the fixed effects model. All statistical operations were performed with the second edition of comprehensive meta-analysis software.

### FINDINGS

Table 1 of the analysis table of studies on the effectiveness of play therapy for behavioural-psychiatric disorders in children based on Study 22. The mean of the total effect of the studies conducted in play therapy for behavioural disorders in children for the model has a fixed effect of 0/434 and for the effects of 0/477 is equal to 0/01. Thus, the null hypothesis that the overall average does not differ is rejected. Based on Cohen, to interpret the practical significance of the dimensions of the work, a high value of d indicates the magnitude of the effect of the work. Therefore, the mean effect of the present study (0/434) can be interpreted as the average effect of rehabilitation therapy on the improvement of children's behavioural disorders. The confidence interval of the effect of the study for 22 games effective in treating children with behavioural disorders. As in the observation diagram, the size of the studies studied except for studies 2 and 21 are all significant at 0/01 levels, and the same as before the average of the average effect of all of these 22 studies in both fixed-effects models and Random at the significant level is 0/001. The highest effect is in the study of 22 cases, respectively, related to No. 9, 11, 10, 6, 1.

**Table 1. Metadata Analysis of the effectiveness of play therapy on children's behavioural disorders**

$\sigma^2_i$	D	nC	nE	Plan	Year	Study
0/181	0/837	12	12	1	2007	Ghaderi et al
0/322	0/401	7	7	2	2008	Zavalmajd et al
0/386	0/736	-	5	1	2008	Zare & Ahmadi
0/211	0/751	15	15	1	2009	Jalali et al
0/169	0/454	15	15	2	2009	Jantian et al
0/237	0/841	12	12	1	2010	Zarpor et al
0/180	0/680	15	15	2	2011	Jalali & Molavi
0/175	0/575	15	15	1	2011	Karahmadi & Jalali
0/072	0/924	20	60	2	2011	Saadat
0/182	0/855	12	12	2	2011	Babaei et al
0/088	0/90	25	25	2	2011	Jafari et al
0/217	0/79	10	20	1	2011	Ebrahimi et al
0/201	0/321	-	15	1	2011	Taklavi
0/227	0/73	15	15	1	2011	Jalali et al
0/166	0/408	15	15	1	2011	Abdkhodaei & Sadeghi
0/248	0/551	-	25	1	2011	Ganji et al
0/207	0/79	15	15	1	2012	Azarniushan et al
0/183	0/57	15	15	1	2012	Rezaei et al
0/186	0/774	15	15	1	2012	Barzegar et al
0/155	0/358	-	30	1	2012	Bazmi& naresi
0/097	0/192	-	14	1	2012	Soltanifar et al
0/290	0/765	16	16	2	2012	Nasaeimoghadam et al

Although it is essential to calculate the overall effect size in the meta-analysis, it is more critical to evaluate the heterogeneity of the effect estimates around their mean. We need to know whether the variability in effect sizes is due only to sampling error or whether the variability is more significant than can be explained by sampling error. This question is usually answered with a heterogeneity statistic Q. When the null hypothesis assumes that the heterogeneity is only due to a sampling error, the Q statistic follows a k-1 freedom chi-square distribution. When meta-analysis is performed on a few studies, the heterogeneity statistic Q has little statistical power. In this case, completing the heterogeneity statistic Q is more desirable. The percentage gives a lot of information about the

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degree of variability in the effect size distribution due to actual heterogeneity (i.e., heterogeneity not due to sampling error but due to many different mediating variables).

Twenty-two studies with a degree of freedom of 21 equal to 30/271 were calculated, significant at 0/05. The null hypothesis is confirmed, and it is concluded that the studies are heterogeneous and heterogeneous. Statistical I was also calculated and equal to 30/626, indicating significant heterogeneity in the studies, so the studies in question are familiar to one actual effect size. The differences in effect size are due to sampling error. The stochastic effects were also significant, so the heterogeneity of the studies is not due to statistical methods, so the fixed effects model was used, and the moderator variables were searched for. The analysis subdivision was plotted from the line Classic's safe N. The present study is somewhat biased and diffuse. This may be due to the sample size of the studies used. The N-test of classical error also showed that the difference between observed and embedded studies is significant. Rosenthal (N safe-Fail) number of studies with a mean effect of zero (calculates that should be added to the analysis to give a statistically significant impact. Given that the effect sizes are heterogeneous, the next step) The body is the medium of mediating or modifying variables that can explain the variability of the effect sizes. , Boy, both (age of subject 6 years and under 6 above age intervention type play therapy method (and number/hours of training sessions that are all categories except age were selected. Summary of mean effect sizes for these five moderation variables supplier is separated.

**Table 2. Summary table of average effect sizes for five modifier variables**

Q	d	k	Class
Research method			
1/221	0/327	7	Experimental
1/101	0/196	15	Quasi-experimental
Gender			
2/217	0/391	4	Girl
2/301	0/386	7	Boy
2/266	0/498	11	Both
Age			
3/374	0/847	18	Under 6 years
1/219	0/232	4	Above 6 years
Play therapy method			
4/533	0/629	9	Cognitive-behavioral
3/301	0/551	1	Child-centered
2/894	0/192	1	Transformation
2/018	0/482	11	Others
Number of sessions			
3/407	0/446	9	5-8
3/899	0/532	10	9-12
5/121	0/598	3	More than 12

As shown in Table 2, the effect size of the moderating variables showed no significant difference between the study's effect size according to the research design and the subject's gender. However, there was a substantial difference between the effect of studies in the game or the effectiveness of field therapy on the child's behavioural disorders according to the age of the subjects, the type of independent variable and the number of sessions of play therapy training. Thus, the variables of the age of the issues and the number of play therapy sessions in the present study acted as moderating variables and affected the size of the overall effect.

## DISCUSSION

The present study investigated a meta-analysis of adequate play therapy studies on psycho-behavioural disorders in Iranian children to combine existing studies' findings to allow more accurate conclusions in this area. The results showed that the average effect size of studies on the effectiveness of play therapy on behavioural disorders in children with permanent effects is 0/434 and for random effects is 0/477, both of which are significant at 0/001. Therefore, the average effect size of the present study (power) can be interpreted as 0/434 as the average effect of play therapy on children's behavioural disorders, which is consistent with other domestic and foreign studies in this field. However, it should not be considered. The effect size reported by Bratton [Macarano] was more significant than the present study. In addition, the variables of the age of the subjects and the number of play-therapy sessions in the current research acted as moderating variables. They affected the overall effect size. In explaining these findings, we can explain the difference between the number of studies used 637 versus 3263 people (mean age of game-playing issues and the number of saw therapies. However, both studies' Meta-analysis emphasizes the importance and role of different play therapy approaches in

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improving and reducing mental behavioural disorders and helping children grow. Pediatric therapists are always looking for the best and most effective treatment for their young clients.

On the other hand, the community and mental health professionals have historically questioned the effectiveness of psychological interventions. However, in the light of the mass of research conducted in recent years, the importance of early interventions and appropriate treatment measures that have scientific and experimental support and are designed to meet the specific needs of children has been emphasized. Treatment plans should not be mass-produced, even if clients have more or less the same problems, but each program should be tailored to the client's issues and needs (Kazdin & Blase, 2011). Through abstract language, children cannot adequately express their thoughts, experiences, and feelings. Tangible objects, such as toys and other play-based experiences offered in play therapy, provide a convenient and emotionally harmless way to express unpleasant and challenging experiences. Hence, play therapy is an effective intervention for a wide range of problems of children of any age, gender, and environment (Esfandiari, 2018). Meta-analyses divide them into three categories depending on their purpose and information: The power of work in the research literature is summarized. Its primary goal is to determine the presence or absence of hypothetical effects and measure their ability. The second type tries to determine which mediating variables affect the strength of an impact. The third type attempts to use meta-analysis to provide new evidence for a theory. This analysis goes beyond the initial studies' mediating variables and introduces new potential variables. In addition, it identifies the issues that should be considered more in the research literature. They identify structural defects and sources of bias in early studies and raise appropriate research questions for the future (Podsakoff & Podsakoff, 2019).

In the sampling of previous studies to examine the present meta-analysis, it was acted in such a way to sampling the findings, intra and outside the trash bin, one and the lack of independence of the effects, an excessive emphasis on solitary confinement and eventually the problem of apples and Portuguese compositions (Vaportzis et al., 2017). Limitations of meta-analysis to the extent possible can be prevented. Hence, to observe the ethical principles of the research, without any prejudice, the collection of all the existing research backgrounds and the introduction of poor research to the methodology, the statistical model, findings and issues were refused (LEE, 2019). Only 22 studies had the necessary and appropriate angels to include in the meta-analysis in the present study. Many observers consider the conduct of meta-analysis, even on several studies, to be less than acceptable, provided that other queens and conditions are observed. In the American Psychological Association Publishing Handbook, it has been said that for the reader to understand the importance of your findings fully, it is almost always necessary to take note. In the past, meta-analysis studies have been needed to calculate the effect size, which is very difficult and time-consuming in some cases. Researchers should be encouraged to use appropriate statistical methods to present the amount of work in their reports. The editors and editors of scientific journals should be encouraged to do so. There are several ways to determine the size of an effect, and those interested in getting acquainted with it can refer to advanced statistics books.

### CONCLUSION

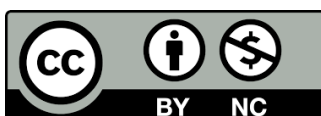
The present study results showed that play therapy is more effective at younger ages in more sessions. In addition, more well-designed studies are still needed to answer the following questions: At what age is play therapy most effective? Which gender is affected by play therapy? Which play therapy approach is more effective? Which client therapy approach is most effective, and under what conditions? Is parental involvement in the play therapy process effective? Is the participation of parents in the play therapy process directly or indirectly more effective? In which group of exceptional children is play therapy more effective? Which of the following problems is most effective for play therapy in extraordinary children? Which method of individual or group therapy is more effective?

### REFERENCE

- 1) Athey, S., & Imbens, G. W. (2017). The state of applied econometrics: Causality and policy evaluation. *Journal of Economic Perspectives*, 31(2), 3-32.
- 2) Czalczynska-Podolska, M. (2014). The impact of playground spatial features on children's play and activity forms: An evaluation of contemporary playgrounds' play and social value. *Journal of environmental psychology*, 38, 132-142.
- 3) Davis, E. S., & Pereira, J. K. (2013). COMBINING REALITY THERAPY AND PLAY THERAPY IN WORK WITH CHILDREN. *International Journal of Choice Theory & Reality Therapy*, 33(1).
- 4) Esfandiari, H. (2018). *A Play Therapy Workshop for Children Witness to Domestic Violence* California State University, Northridge].
- 5) Field, A. P., & Gillett, R. (2010). How to do a meta-analysis. *British Journal of Mathematical and Statistical Psychology*, 63(3), 665-694.
- 6) Gil, E. (2012). *The healing power of play: Working with abused children*. Guilford Press.
- 7) Jones, E. M. (2013). Play therapy for children with chronic illness. In *Innovations in Play Therapy* (pp. 283-300). Routledge.

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- 8) Kazdin, A. E., & Blase, S. L. (2011). Rebooting psychotherapy research and practice to reduce the burden of mental illness. *Perspectives on psychological science*, 6(1), 21-37.
- 9) Kottman, T., & Meany-Walen, K. (2016). *Partners in play: An Adlerian approach to play therapy*. John Wiley & Sons.
- 10) LEE, Y.-H. (2019). Strengths and limitations of meta-analysis. *Korean Journal of Medicine*, 391-395.
- 11) Muchiri, J. W. (2021). *Cognitive Behavioral Play Therapy Efficacy in the Treatment of Gender Symptomatology of Anxiety Disorders among Children A Case of Selected Schools in Dagoretti Sub-County, Nairobi County, Kenya* Daystar University, School of Human and Social Sciences].
- 12) Podsakoff, P. M., & Podsakoff, N. P. (2019). Experimental designs in management and leadership research: Strengths, limitations, and recommendations for improving publishability. *The Leadership Quarterly*, 30(1), 11-33.
- 13) Reid Chassiakos, Y. L., Radesky, J., Christakis, D., Moreno, M. A., Cross, C., Hill, D., Ameenuddin, N., Hutchinson, J., Levine, A., & Boyd, R. (2016). Children and adolescents and digital media. *Pediatrics*, 138(5).
- 14) Todd, C. (2022). *Elementary School Counselors' Experiences Delivering Child-Centered Play Therapy* Capella University].
- 15) Vaportzis, E., Giatsi Clausen, M., & Gow, A. J. (2017). Older adults perceptions of technology and barriers to interacting with tablet computers: a focus group study. *Frontiers in Psychology*, 8, 1687.
- 16) Wicks, J. M. (2019). *Intensive Child Centred Play Therapy for Children Who Have Experienced Adversity in Aboriginal and Non-Aboriginal Communities* Charles Darwin University (Australia)].



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