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# The feasibility study of Internet-assisted play therapy to resolve psychological disorders in primary healthcare settings: A qualitative study

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## Abstract:

**BACKGROUND:** Play therapy is an intelligent tool in cognitive-behavioral therapies. In today's world, the Internet and technology play a key role in all aspects of people's life including mental health. The present study explores the feasibility of using Internet-assisted play therapy to solve children's psychological issues in primary healthcare systems.

**MATERIALS AND METHODS:** The present qualitative research was conducted by the content analysis approach on 20 experts working in the healthcare centers, who were selected purposefully. The sample was saturated with these 20 participants. Data were collected through semi-structured interviews and were coded manually. Then, they were analyzed in the Atlas.ti software package.

**RESULTS:** The results revealed 15 themes and 10 sub-themes. The themes included (1) safety, (2) efficiency, (3) client-orientedness, (4) organizational growth, (5) time, (6) effectiveness, (7) justice-orientedness, (8) access, (9) feedback, (10) analysis, (11) children's computer game room, (12) reward, (13) group game, and (14) capability to be integrated into other electronic programs.

**CONCLUSION:** It seems that Internet-based play therapy is plausible to be used as a service in primary healthcare to tackle the psychological problems of children in the target population if the challenges related to the exploratory themes are taken care of.

## Keywords:

Cognitive behavior therapy, Internet, mental health, play therapy

## Introduction

The UN Convention on the Rights of the Child recognizes play as a right for all children because it can contribute to their physical, emotional, social, and cognitive development<sup>[1]</sup> Play is a key activity with an essential role in the development of a healthy mind and brain in children.<sup>[2]</sup> Children express their emotional communication through play; indeed, play provides children with an opportunity to exhibit their thoughts

and emotions.<sup>[3]</sup> Play therapy is a way to cope with children's emotional stresses. In fact, the problems are revealed by play and the hidden emotions are unmasked during play with the guidance of the therapist.<sup>[4,5]</sup>

With the increasing growth of the Internet, most psychoanalysts and psychotherapists are taking the opportunity to improve their activities.<sup>[6,7]</sup> Presently, Internet-based cognitive-behavioral therapies, backed with vigorous evidence, have been provided for most psychological issues.<sup>[8,9]</sup> Axline<sup>[10]</sup>

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proposes eight principles for play therapy: (i) developing a warm and friendly relationship with the child, (ii) accepting the child, (iii) establishing a comfortable nurturing atmosphere for the child, (iv) recognizing and reflecting the feeling of the child, (v) not interfering with the child's actions and allowing the child to do what he or she wants, (vi) recognizing that play has a progressive path, and (vii) establishing some limitations to support a real therapy.<sup>[3]</sup>

Training to improve computer-based health behaviors that can be used through the web, for the more than 100 health programs in the system, nothing has been done yet, and the introduction of training in its new form is a completely new program and for the first time used in the system. Also, the focus on cultural realities in the preparation of the program causes a completely new program to be introduced in this field, and it can almost be said that at present, in accordance with the health programs in our system, computer and Internet game training has no place. The need for such programs is absolutely essential. Therefore, given the significance of play and Internet-assisted play therapy and because this service is experimentally offered in the healthcare system of Iran for the first time, the present study aims to explore the feasibility of integrating play therapy into the primary healthcare services by identifying and disclosing its requirements in different aspects.

## Materials and Methods

### Study design and setting

The present study was qualitative research that was conducted by the content analysis approach in 2019. The research population was composed of all healthcare experts from the Ardabil University of Medical Sciences.

### Study participants and sampling

The sample was randomly taken from heterogeneous expert groups including staff experts and experts working in comprehensive healthcare centers. To observe the heterogeneity, the stratified sampling technique was employed for which two strata were defined: (a) staff experts of the healthcare network and (b) healthcare experts in comprehensive healthcare centers. Eventually, 10 people from the first group and 10 people from the second group were selected as key informants for interviews by the purposeful sampling technique with their own consent. The participants had a working record of over 4 years and to ensure their familiarity with computer games, the experience of playing computer games by, at least, one family member was a key criterion to be included in the study. The sample was saturated with these 20 participants. A topic guide form was used to collect data as the draft version so that the interview questionnaire included

some open-ended questions. In addition to the review of the literature, some experts were asked to provide advice. Then, two healthcare experts, who were not in the sample, were asked to comment on the significance of the questions. Then, the questionnaire was modified accordingly. Finally, three questions were finalized as follows to ask the participants during the interviews

- What do you think about the use of computer and Internet games as a new approach to orienting positive behaviors to prevent diseases and/or treat psychological disorders in healthcare centers?
- What requirements do you think it needs as a service integrated into primary healthcare?
- What are its pros and cons?

The participants were interviewed face-to-face in a semi-structured design by a research team member at their working place when they were not engaged in serving the clients and had free time. The interviews were recorded with two electronic recorders and then, they were transcribed. As well, the important points during the interviews were jotted and the key issues derived from each interview were recorded in a specific form in brief. The form included the key specifications of the participant, the place where the interview was conducted, organizational position, interview date and time, and other necessary information. At the end of each interview, this form and the recorded file were presented to the participant to be checked and modified if required. The time predicted for each interview was about 40 min.

### Data collection tool and technique

The data were analyzed by a neutral expert who had some research experience in qualitative research and content analysis. The expert analyzed the data in the ATLAS.ti (One of the software in qualitative data analysis is for coding and classifying codes and finally determining the components and sub-components introduced by the University of Berlin, Germany. In this study, the version of ATLAS.ti v9.1.3.0 x64 used) scientific software Development GmbH package proceeds through the steps of content analysis including (1) familiarization, (2) identification of a thematic framework, (3) indexing/coding, (4) charting, and (5) mapping and interpretation.

### Ethical consideration

Ethical clearance was taken from the Institute Ethical Committee and informed written consent was taken from each participant for this study (IR.ARUMS.REC.1398.654).

## Results

The content analysis of the interviews with the 20 selected experts resulted in producing 15 themes and 10 sub-themes, which are described in Table 1. Most

**Table 1: The themes and sub-themes derived from the analysis of interviews with healthcare experts as to the requirements for the use of computer games to treat psychological disorders of children within the healthcare system of the healthcare service centers**

Theme	Sub-theme(s)	Notes
Safety	Lacks unwanted educational side-effects All records of children should be kept confidential.	It should not have side effects on the client and all records of the training sessions, follow-ups and the repetitions in intervals should be kept confidential for the client.
Efficiency	Is based on evidence Solves a behavioral issue	It should have effective benefits for the client based on the current knowledge.
Client-based		It should satisfy the educational/consulting needs of the target population.
Organization growth	Enhances the national healthcare programs Enhances provincial healthcare programs	It is effective in enhancing healthcare indices.
Time		The duration of the computer game is appropriate for the age of the client.
Effectiveness	does not have high costs for the target group does not have high costs for the organization	It should be economical in the use of resources (cash and capital) for both the organization and the client.
Justice-orientedness		It should be possible to provide it to all members of the target population.
Access		The target population should have easy access to the service.
Feedback		It should be plausible to provide feedback to the officials.
Analysis		It should be able to analyze the educational progress and solve the educational/behavior problems of the clients.
Children's computer game room		It should be possible to establish a healthcare and behavior change room in the healthcare center for those who do not have access to a computer.
Capability to be integrated into other electronic programs	E-service system of the University of Medical Sciences E-service system of the Ministry of Health and Medical Education	Given extensive e-service in Iran, it should be possible to integrate it into other e-services.
Group game		It should be possible to play it in groups or teams.
Reward		It should have a material and non-material reward system to motivate the children.
Cultural diversity		The rights and cultures of all ethnical groups should be observed when preparing the games.

participants emphasized that owing to its inherent characteristics, play is an effective way to treat psychological disorders in children.

## Discussion

The results show that computer games are an active training method to teach health-promoting behaviors and are an effective way to solve the psychological problems of children. The growing use of the Internet has provided an opportunity to make easy contact with the target group and population to use educational and therapeutic games. In this respect, the World Health Organization (WHO) has also developed guidelines for the use of the Internet and e-services in healthcare systems.<sup>[11]</sup>

O'Conner<sup>[12]</sup> has presented 11 processes for play therapy, which were divided by Shirk and Russel into three main groups of cognitive, emotional, and interpersonal processes.<sup>[13]</sup> The game should, indeed, provide the child with good recognition of the situation so that the expected behavior can be provoked in the child by having effective emotion.

Most services that are provided for mental health in healthcare systems are based on the cognitive-behavioral theory, which tries to improve cognition and help the client's self-care.<sup>[14,15]</sup> Similarly, game therapy uses the cognitive-behavioral approach and needs 6–8 sessions based on the intensity of the disorder to treat psychological disorders and improve the mental health of the children and this requires frequent visits to the healthcare center.<sup>[16,17]</sup> Thus, most mental health service providers try to use the Internet as an easy-to-access environment for the clients to get training/consulting and therapeutic services.<sup>[18-21]</sup>

An advantage of using games in healthcare environments is that they reduce the children's stress and prepare them to get healthcare services at hospitals and healthcare centers.<sup>[22-24]</sup> Research has well shown the effectiveness of play-based interventions in coping with stress and alleviating anxiety and negative emotions, thus this method will be very effective in preparing the children for more invasive and frightening healthcare interventions.<sup>[25]</sup> For example, dental services in healthcare centers are some of the most stressful

processes with negative emotions, and play therapy has proven to be effective in preparing children for these services.<sup>[4]</sup>

One of the limitations of this study was the dissatisfaction of some participants in recording audio and the need to select another participant. Also, another limitation was the lack of knowledge of the participants about some of the questions, which to solve this problem, it was necessary to indirectly provide more explanations about the question, which required more time.

## Conclusion

It seems that Internet-assisted play therapy is plausible to be used as a service in primary healthcare to tackle the psychological problems of children in the target population. If the challenges related to the exploratory themes are considered. It is recommended to use qualitative research to use Internet-based games to promote health behaviors in other areas of personal and social health as well as environmental health. Also, conduct a small study with a comprehensive and valid questionnaire to assess the feasibility of using online games for health education and the establishment of healthy health behaviors in children. To integrate service into the health care system, it is better to use the benefits of quantitative and qualitative research.

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## Conflicts of interest

There are no conflicts of interest.

## References

1. Bissell S. Overview and implementation of the UN Convention on the Rights of the Child Marta Santos Pais. *Essay Focus* 2006; 367.
2. Thompson RA. What More Has Been Learned? The Science of Early Childhood Development 15 Years After *Neurons to Neighborhoods*. *Zero Three J*, 2016.
3. O'Connor KJ, Schaefer CE, Braverman LD. *Handbook of play therapy*: John Wiley & Sons; 2015.
4. Kiran S, Vithalani A, Sharma DJ, Patel MC, Bhatt R, Srivastava M. Evaluation of the efficacy of play therapy among children undergoing dental procedure through drawings assessed by graphological method: A clinical study. *Int J Clin Pediatr Dent* 2018;11:412-6.
5. Steve Tuber S, Da Costa R, Eidman J, Feldman H, Hadar O, Kaur N, et al. Dialectical reflections on the advantages and

- disadvantages of tele-play therapy. *J Infant Child Adolesc Psychother* 2022;21:19-26.doi: 10.1080/15289168.2022.2043058.
6. Fishkin R, Fishkin L, Leli U, Katz B, Snyder E. Psychodynamic treatment, training, and supervision using internet-based technologies. *J Am Acad PsychoanalDyn Psychiatry* 2011;39:155-68.
7. Bonnie E. Litowitz. *Psychoanalysis and the Internet: Postscript*, *Psychoanalytic Inquiry*, 2012;32:5, 506-512, DOI: 10.1080/07351690.2012.703592.
8. Berger T, Bur O, Krieger T. Internet-based psychotherapeutic interventions. *Fortsch NeurolPsychiatr* 2020;88:677-89.
9. Gerhard Andersson G, Rozental A, Shafraan R, Carlbring P. Long-term effects of internet-supported cognitivebehaviour therapy. *Expert Rev Neurother* 2018;18:21-8.
10. ZhengLi, ShiyaoChang, LinweiMa, PeiLiu, LingxiaoZhao, QiangYao. The development of low-carbon towns in China: Concepts and practices. *Energy* 2012;47:590-599.
11. WHO.WHO Guideline: Recommendations on Digital Interventions for Health System Strengthening. Geneva: World Health Organization; 2019. Available from: <https://apps.who.int/iris/bitstream/handle/10665/311941/9789241550505-eng.pdf>.
12. Burgin EE, Ray DC. Child-centered play therapy and childhood depression: An effectiveness study in schools. *J Child Fam Stud* 2022;31:293-307.
13. Shirk S, Russell R. *Change Process in Child Psychotherapy; Revitalizing Treatment and Research*. New York: Guilford Press; 1996.
14. Horvath A, Del Re AC, Flückiger C, Symonds D. Alliance in individual psychotherapy. *Psychotherapy* 2013;48:1-9.
15. Hoifodt RS, Strom C, Kolstrup N, Eisemann M, Waterloo K. Effectiveness of cognitive behavioural therapy in primary health care: A review. *FamPract* 2011;28:489-504.
16. Bratton SC, Ray D, Rhine T, Jones L. The Efficacy of Play Therapy With Children: A Meta-Analytic Review of Treatment Outcomes. *Professional Psychology: Research and Practice*, 2005;36(4), 376-390. <https://doi.org/10.1037/0735-7028.36.4.376>.
17. Kottman T. Adlerian play therapy. *Int J Play Ther* 2001;10:1-12. doi: 10.1037/h0089476.
18. McCashin D, Coyle D, O'Reilly G. Qualitative synthesis of young people's experiences with technology-assisted cognitive behavioral therapy: Systematic review. *J MedInternetRes* 2019;21:e13540.doi: 10.2196/13540.
19. Andersson G, Titov N, Dear BF, Rozental A, Carlbring P. Internet-delivered psychological treatments: from innovation to implementation. *World Psychiatry* 2019;18:20-8.
20. Radomski AD, Wozney L, McGrath P, Huguet A, Hartling L, Dyson MP, et al. Design and delivery features that may improve the use of internet-based cognitive behavioral therapy for children and adolescents with anxiety: A realist literature synthesis with a persuasive systems design perspective. *J MedInternetRes* 2019;21:e11128.doi: 10.2196/11128.
21. Webb CA, Rosso IM, Rauch SL. Internet-based cognitive behavioral therapy for depression: Current progress & future directions. *Harv Rev Psychiatry* 2017;25:114-22.
22. Norris AE, Aroian KJ, Warren S, Wirth J. Interactive performance and focus groups with adolescents: The power of play. *Res Nurs Health* 2012;35:671-9.
23. He HG, Zhu L, Li HCW, Wang W, Vehviläinen-Julkunen K, Chan SW. A randomized controlled trial of the effectiveness of a therapeutic play intervention on outcomes of children undergoing inpatient elective surgery: Study protocol. *J Adv Nurs* 2014;70:431-42.
24. Zahr LK. Therapeutic play for hospitalized preschoolers in Lebanon. *PediatrNurs* 1998;24:449-54.
25. Li WHC, Chung JOK, Ho KY, Kwok BMC. Play interventions to reduce anxiety and negative emotions in hospitalized children. *BMC Pediatr* 2016;16:36.doi: 10.1186/s12887-016-0570-5.