

THE ROLE OF THERAPEUTIC CHESS IN EDUCATION TRAUMAS AND PEDAGOGY

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Abstract: *In this article as a result of the "Therapeutic Chess" project, which is a new teaching technique designed with an interdisciplinary method on kindergarten-primary school children, the increase in children's interest in chess lesson and expressing themselves in mathematics, music, painting, puzzle solving, board games and philosophical level. It has been observed that the students' ability to learn how to act has increased, and it is aimed to contribute to the socialization, normalization process of children who have experienced trauma, to introduce this technique to more widespread use and to transfer it to teachers.*

Keywords: *Chess, Lesson Design, Pedagogy, Philosophy for Children*

To cite this article:

Özbek, C. (2023). The Role of Therapeutic Chess in Education Traumas and Pedagogy. *Education. Innovation. Diversity*, 2(7), 115-121. DOI: <https://doi.org/10.17770/eid2023.2.7337>

Introduction

What is Therapeutic Chess?

It is an interdisciplinary new generation course design that makes learning inclusive with participatory and joyful principles through the use of philosophy to pose questions, wonder, and seek answers to the questions asked, and chess to learn through games by exploring and that teaches critical and creative thinking, allowing the information to be used for drug-free treatment in life and trauma situations. It can also be called "Chess Philosophy" to put it briefly.

Sessions of therapeutic chess for school-aged children who rarely use their critical-creative thinking skills to comprehend the real world can be considered an educational revolution.

The Therapeutic Chess Project: Why It Started and Why It is Important:

In this project, the term "therapeutic" which is commonly used in the field of medicine is used in the sense of "healing". The question "Is someone sick?" may emerge. Yes, indeed. Screen addiction, caused by factors such as algorithms, stimuli, and virtual games that surround us in the age of digital transformation, has a negative impact on focusing and thinking. Children of Generation Z who encounter the virtual world without comprehending reality may develop an addiction to virtual happiness in the real world. Especially in children, this can contribute to a lack of attention, loneliness, and anxiety. When evaluating the new generation on a cognitive level, it is simple to recognize that their "different" response to us is truly a "request for assistance" that reveals their needs.

Project – Research Content

The Purpose of Using Chess in Therapeutic Chess Lessons and Its Achievements

Expressing themselves through talking and playing games appears to be the most fundamental need of children.

Children love learning while they play. This is a highly effective way of learning and teaching. Chess, on the other hand, is a very suitable game for this idea, a wonderful simulator. You start on an adventure and dive into an exciting discovery during the chess

lesson. Chess trains children to use critical thinking skills and focus. It provides the ability to discover solutions by providing tenacity. Academically, it contributes significantly to the growth of mathematical reasoning.

Many skills can be applied in both chess and life. Personal characteristics such as patience, response management in win-or-loss circumstances, and stamina (Struggling to go back from a loss in a chess match), are skills that can be used in both chess and life. This method, which is unique as a teaching technique, is a very useful instrument for acquiring life skills and supporting this process.

While chess as a sport includes tournaments, competition, and prizes, therapeutic chess is an entirely distinct challenge with different dynamics, stakeholders, objectives, and outcomes. In therapeutic chess, chess is a tool whereas, in sportive chess, the educational environment is the tool. We prefer therapeutic chess over sportive chess as a technique because it allows us to work in a non-competitive environment with feelings of solidarity and trust.

What do we want to teach students? The answer is not “We want to teach you how to play chess”, because teaching the rules of chess takes only five minutes. The rules are much simpler than those of football. “To be good at anything, you must know how to apply the basic principles” said world chess champion Kasparov. “To be great at this work, you must understand when to violate these principles.” (Kasparov, 2018)

Fisher Chess (The name given to the chess variant game invented by Bobby Fisher, one of the American former world chess champions) is a great example of this. Children who encounter Fisher chess for the first time in lessons experience a great surprise when all of their memorizations are shattered and every opening theory they have been taught up until that point is flipped upside down. They even acquire a completely new perspective just by asking, “Can I start over again?” In contrast to classical chess, the position of all pieces, with the exception of the pawn, is determined by randomness, and all opening theory known in chess history is obsolete. The attempt to discover creative solutions alters the game's entire philosophy. Fisher's game-changing, creative, and surprising chess teaches children in a fun manner that the rules can always change.

Reasons and Benefits of Using Philosophy in Therapeutic Chess Lessons

We observe in children's lessons a high degree of curiosity, as well as creative and original approaches to the subjects. The objective of the lessons is not only to pose questions but also to provide answers. Although it may appear to be a disadvantage that children become bored or lose interest rapidly, philosophy is beneficial for children. When chess is added, these positive effects become even more evident.

Curiosity and motivation must be maintained across all age groups for the intended information to be comprehended, internalized, and transformed into a behavior change by the learner. Gaining good questioning skills is a crucial aspect of teaching. Given the lack of questioning in the world of education, this may be even more essential than most other acquired skills. Is it possible to pose better questions, make better decisions, and be a happier individual as a result? Why not? This path is made possible by therapeutic chess.

The results that follow thought with “reflective thinking” that is, the critical thinking technique, are carefully assessed, especially when analyzing chess positions or questions. If you are unable to use your imagination to consider more carefully, it is also difficult to think critically. The reason why we use philosophy in chess class is to help children learn to think freely. This should be viewed as a step in gaining the ability for critical thought.

“People will forget what you said or did, but they will never forget how you made them feel.” (Angelou, 2016)

Students/participants unknowingly benefit from the healing effects of chess and philosophy in the discovery process provided by the workshop provided by the community they are a part of when using the method of interdisciplinary therapeutic course design. After the age of ten, when the brain starts to form, this spontaneous questioning-learning process becomes an automatic part of their lives. As a result, therapeutic chess can be viewed as a long-term investment that paves the way for natural growth.

The Reason, Applications and Benefits of Creative Thinking in Therapeutic Chess Lessons

Creativity and creative thinking are among the general curriculum goals of many countries. The concept of creativity is derived from the Latin word *creare*, which means “to create, to give birth, or to bring into existence.” In the dictionary, it is also defined as “the state of being creative, the capacity to create, and the predisposition that is assumed to exist in every individual and compels them to create something” (TDK, Turkish Language Society, 2023).

Creativity as “a lifetime talent”, “having the capacity to express oneself, using intelligence and imagination.” (Craft 2003).

Because a new idea is often a combination of known ideas or a freshly formulated version of an old idea, creativity isn't just about creating something out of nothing. In this context, creativity can also be described as the activity of giving new identities to old ideas and synthesizing new ones from old ones. (Bessis & Jaqui, 1972).

Creativity is a concept whose scope is difficult to define due to the wide variety of its definitions. Creativity has a place not only in literature and fine arts but also in all spheres and stages of life.

Bogoyavlenskaya (2013) examined the changes in the creativity of kindergarten and elementary school students and revealed in her study that the creativity of six-year-olds decreased when they began elementary school.

Similarly, when children start school, their creativity either remains constant or starts to decline due to academic expectations and authority. This decline is attributable to environmental factors. When children begin school and join a new environment, they recognize rules and authority. There is a pause and regression in creativity if the environment contains negative conditions (Toyran, 2015).

To develop creativity or encourage its emergence, children must be given the chance to make mistakes and put ideas into action. Organizing creative activities makes it easier to discover and express one's current potential (Kovalenko-Smirnova, 2015).

The learning process that emphasizes critical thinking and students' interests, an environment equipped with rich stimuli, open-ended questions, acceptance of differences, and encouragement to attempt new things are regarded as crucial factors in supporting creative thinking. (Freedman, 2010).

The purpose of creative thinking in education is to encourage curiosity as well as to guide the design of creative ways to solve complex problems. This is only possible with an education that follows a pedagogical approach. Despite the fact that every individual possesses some degree of creativity, it is the responsibility of education to help them discover in which areas they can apply it. In this case, the students' abilities and interests also determine their tendency for creative thinking (Rawat & Qazi- Hamid, 2012; Shaheen, 2010).

What are the benefits of using creative thinking in therapeutic chess lessons?

Chess is an excellent tool for teaching high -level thinking skills by using the combination of both Critical Thinking and Creative Thinking. Analysis, evaluation and creativity are at every step of chess game. When these 3 high -level thinking skills are used,

things are very different and chess provides a simple and direct way to improve the three sub - row thinking skills: application, understanding, remembering (memory).

Applications Used in Therapeutic Chess Sessions:

- International Chess Federation FIDE-Chess applications in education and european Chess Union (ECU) :<https://edu.fide.com/materials/>
<https://projects.europechess.org/>
- European Chess Union, Champs Chess and Mathematics in Primary Schools - Erasmus + “50 chess and Mathematics Exercises for Schools” A (chess) game-based approach to problem solving.
- Chess and Math Puzzles, Classroom Chess and Strategy Games: <https://chessplus.net/chess-and-math-puzzles/>
- Chess.com/lichess Derivative Chess Applications : <https://www.chess.com/home>
<https://lichess.org/>
- Rebus, Analogy, Video and cartoon chess position analysis, Scamper, Brainstorm, Combinatoric game theory, Workshop group work, Mind and board games, Motivation with monthly rewarded questions.
- Pooble 365 <https://app.pobble.com/auth/>
- Cocology (Isamu Saito and Tadahiko Nagao-Self-discovery game).
- P4C (Philosophy for Children - should be done by an expert or by a trained person).
- Kahoot (General ability, puzzle, memory, pattern, chess topics.) Family and group competitions and individual competitions.
- Homework and follow-up of these studies with families on social media groups
- Book applications (problem solving).
- Meditopia (Comforting stories before bedtime): <https://meditopia.com/en/>
- Gymchess <https://gymchess.com/en/>
- Logiqboard <https://logiqboard.com/boards/bQNg1dUzOx>

Who Is Therapeutic Chess Appropriate For?

- Individuals of all ages who have encountered or are experiencing trauma,
 - Children who are gifted,
 - Students (kindergarten, primary, intermediate, high school, and university)
 - Adults, parents
- Although it is appropriate for those suffering from behavioral disorders as well as problems such as loss anxiety, perfectionism, ADHD (Attention deficit-hyperactivity disorder), and dyscalculia (difficulty learning mathematics), it is primarily considered to be used in the field of education.

The encouraging feedback received from children, parents, guidance services, and school administrations regarding this new course design, which was implemented on approximately 1000 children at the kindergarten and primary school level in some kindergartens, private primary schools, secondary schools, and high schools throughout Istanbul, was the primary driving force in the emerge of this project.

The Use of Therapeutic Chess in the Treatment of Trauma - Attention Deficit - Focus - Digital Addiction Conditions

We must know why we want to protect children. In the face of the feeling that they are incomplete without their tablet-phone, which has become an addiction, directing them to the

therapeutic chess experience, which is also a game and where they spend time with joy, is a healing option to fill this gap.

The majority of patients need long-term treatments. Until recently, pharmacotherapy (drug therapy) was regarded as one of the most effective treatments for addiction and panic disorder. Toys and play have been shown in studies to help children cope with circumstances during disasters and post-traumatic recovery. Regardless of the source, traumatized individuals are anticipated to exhibit meaning-seeking, insecurity, and depressive reactions. Furthermore, chess can be used to avoid problems such as anxiety disorder and insecurity.

There are also studies on the internet that show that practicing chess can help with panic disorder. This effect is stated in a section of the study titled “Chess Therapy: A New Approach to Panic Disorder Treatment” by Kazem Barzegar and Somayeh Barzegar, which was published in Asian Journal of Psychiatry in 2017:

I am a lecturer at a medical university in Iran. I was born in 1971, and in 1998, I got married. A month before our wedding, I lost my wife in a car accident. She resided in another city 450 kilometers away from my workplace. I was shocked when they told me the bad news late at night. After that, I felt like I was having a panic attack because from that moment on, at that hour at night when I got the bad news, I was always in shock. The symptoms gave the sensation of a sudden surge. Chess on a mobile phone first weakened the impacts of these attacks, and then the attacks ceased entirely.

Playing chess on a mobile phone (with apps like chess.com, lichess) can prevent and heal a panic attack from occurring. It is only necessary to know and enjoy playing chess for this. Chess therapy, at the appropriate degree of difficulty, can be tried as a very effective non-drug treatment method for panic disorder.

Personal skills acquired in response to trauma are applicable in both chess and life. The fact that they can win chess match even if they lose the pieces instills the idea in the children that they can recover from their losses. It makes one think that while there may be losses in life, a solution can be found by continuing and not giving up.

With the formation of a pedagogical committee comprised of expert psychologists and academicians, it is planned therapeutic chess sessions and activities will be organized to assist children, students, and adults in reducing post-traumatic effects. For instance, the practice of “loser chess” for helping overcome the sensation of loss.

Loser Chess: In this chess game, the objective is to lose all of your pieces except the king. When one player loses all of the pieces, or when the player runs out of moves, the game is over. In this situation, the person with the fewest stones is considered to be the winner. While children who have been raised with winning-oriented thinking may perceive this result as total destruction, it does provide a chance for them to internalize loss and face their fears through a game.

Its use in education as a method that provides the opportunity to teach by discovering creativity: Teaching models, methods, and techniques are the main factors in the development of creativity and creative thinking abilities among students in educational systems. It is important to identify and implement methods that enable students to think creatively.

It is now essential to revise the curriculum in order to re-teach students to think critically and creatively. School life has shown us that: Education systems are insufficient for critical and creative thinking. They failed to teach children the philosophy of thinking, asking the right questions, and learning. In this age of digital transformation, where many occupations are on the brink of extinction, children who have acquired critical thinking skills will be able to turn into individuals who will make a difference in the future.

Lesson Example for Kindergarten Preparatory and Primary School 1st - 2nd Grades

It is a workshop using the video “*The road to success: Yoann Bourgeois performance*”. A philosophical speech is made (for children) on the topic of losing and they are invited to reflect on the question: “Are you afraid of failing and making mistakes?” After that, a 2-minute video performance is shown, and then, it is time for free questions and responses, and the students are asked what they want to say in the video. Then we have a discussion about what should we do if we lose a chess match. We discuss how we should analyze chess games here as well as how we should learn from our mistakes. The content of the course intertwines music, philosophy and chess. Working on the queen sacrifice -that is, how can you win the match by losing your queen- with a child who is sensitive about losing can help them cope with the feeling of losing while performing a position analysis in chess. Children are treated with their own sentences during these analyses when coping with circumstances such as fear of loss.

Lesson Example for 9 Years and Above

First we start with rebus. They watch Mozart's Turkish March by Fazıl Say for 3 minutes as a clue before answering an example question. Using this clue, they find the word “piano” which is the answer to rebus. The subsequent move of the Italian opening “piano” which is the name of one of the chess openings with the word piano, is followed, and the opening’s details are explained. Starting with the word “piano” it is discussed what the quiet move is and what emotions a musical instrument like the piano can express. Music, rebus, and chess intertwine in this interdisciplinary course style, allowing for the internalization of the life experience.

Lesson Example for High School Level

While describing the time when one of the world's greatest chess players and famous composer of the “Opéra Comique” François André Danican Philidor lived for nearly half a century until his death in 1795, the French Revolution is storified in all its details through this biography. Philidor’s games contain traces of the period's romance. Based on Philidor’s words, “Pawns are the soul of chess”, it can be inferred the ideas that were intended to be said that among the main causes of the revolution were the rise in bread prices and the hunger of the peasants, which appeared as a result of harsh weather conditions and successively poor harvests. In addition, through examining the innovations Philidor introduced to the history of chess and his playing style, a brainstorming session is conducted on the following statement: “My main goal is to get to know myself through a new idea that hat no one has thought of or perhaps hasn't been able to put into action. That is, pawns play well. They are the soul of chess; they alone determine the offense and defense. Winning or losing the game is entirely dependent on their good or bad order.”

Therapeutic applications in the world

Club Magic Extremadura (a region in southwestern Spain) is the most well-known and probably most advanced reference in the field of the use of therapeutic chess in trauma and treatment, led by psychologist Juan Antonio Montero, who has 14 years of experience in such varied fields as aging (Alzheimer's, brain aging), drug addiction rehabilitation, children detention centers, down syndrome, cerebral palsy, severe mental disorder, ADHD, autism, etc. They are currently conducting a scientific study in collaboration with a hospital in Germany. For many years, they have been conducted online (Spanish) courses for a large number of students via their website: <https://ajedrezmagic.es/cursos-que-ofertamos/>

In the field of specific chess and ADHD, the world's foremost expert is psychiatrist Hilario Blasco (Madrid-Hierro Hospital), who has prescribed daily chess in his office in

Puertade for many years. His assistant is the clinical psychologist and chess player Maria Rodrigo Yanguas, author of a doctoral dissertation on the subject.

GymChess Application: With the GYMCHES application, which can be downloaded for free on phones with Montero and AsierRufino (an international start-up specialist), chess can be used as a mental gymnastics tool.

The project's final objective

- A. Redesigning education systems to include therapeutic chess as a main-compulsory course at the kindergarten, primary school, and secondary school levels to help students obtain critical and creative thinking, problem-solving, communication, cooperation, and creativity skills.
- B. Ensuring that studies and research are conducted through an independent foundation that brings together the sponsors, academics, teachers, medical institutions, and physicians in the fields of pedagogy and psychology who are the parties involved in this project, which will be implemented for the first time in the world, on the use of chess and philosophy together for educational purposes, under the roof of the Therapeutic Chess Academy.
- C. Ensuring the use of therapeutic chess sessions as an alternative drug-free treatment method in areas of trauma, attention deficit, etc.

References

- Angelou, M. (2016). Excerpt from “*And Still I Rise*”, documentary film on the life of Maya Angelou.
- Barzegar, K., & Barzegar, S. (2017). Chess therapy: a new approach to curing panic attack. *Asian journal of psychiatry*, 30, 118-119. DOI: <https://doi.org/10.1016/j.ajp.2017.08.019>
- Bessis, P., & Jaoui, H. (1972). *Qu'est-ce que la créativité?: Pierre Bessis. Hubert Jaoui*. Dunod.
- Bogoyavlenskaya, D. B. (2013). Nature of changes in creativity scores in preschool and junior school children. *Procedia Social and Behavioral Sciences*, 86, 358-362. DOI: <https://doi.org/10.1016/j.sbspro.2013.08.579>
- Craft, A. (2003). Creative thinking in the early years of education, Early Years. *An International Journal of Research and Development*, 23(2), 143-154. DOI: <https://doi.org/10.1080/09575140303105>
- Freedman, K. (2010). Rethinking creativity: A definition to support contemporary practice. *Art Education*, 63(2), 8-15.
- Kasparov, G. (2018). *Deep Thinking: Where Machine Intelligence Ends and Human Creativity Begins*. Great Book Prices (Columbia, MD, U.S.A.).
- Kovalenko, N.A. & Smirnova, A.Y. (2015). Self-directed learning through creative activity of students, *Procedia-Social and Behavioral Sciences*, 166, 393-398. DOI: <https://doi.org/10.1016/j.sbspro.2014.12.542>
- Rawat, K. J., Qazi, W., & Hamid, S. (2012). Creativity and education. *Academic Research International*, 2(2), 264. Retrieved from [http://www.savap.org.pk/journals/ARInt./Vol.2\(2\)/2012\(2.2-27\).pdf](http://www.savap.org.pk/journals/ARInt./Vol.2(2)/2012(2.2-27).pdf)
- Toyran, G. (2015). *Examining the creative thinking levels and critical thinking dispositions of preschool teacher candidates in terms of some variables.*, Master's thesis. Dokuz Eylul University, Institute of Educational Sciences.
- TDK Turkish Language Society (2023). Retrieved from <https://sozluk.gov.tr/>