

## DISCUSS THE ROLE OF GAMES IN CHILDREN'S LEARNING AT SCHOOL

BY

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### Abstract

In the present study the pivotal and complex role of games in the psychological, physical and educational evolution of children. The present study consists of material found in scientific articles, books and websites related to the topic. The game satisfies the biological and psychological needs of the kids and plays a role in their mental, emotional, social and moral development. The different roles in the games make for a powerful educational tool because through them children can develop their skill sets and habits, enrich their experiences and gain knowledge. It has been proven that when the children are playing, they reach the maximum effectiveness in learning. As such, games can be included among the modern tools that will help students obtain new knowledge and develop new skills. They have indeed been proven the first social and physical means of human education.

**Keywords:** game, school, child and learning

## Introduction

The definition toy refers to an object that does not have a direct practical use but is instead used for the physical activity of a game. A game is a procedure full of meaning during which kids creatively co-create their world along with their peers, and learn through their interactions with their friends. (Avgitidou, 2001)

The pedagogical value of games, and toys, was of the same big value in other ancient and modern civilizations. Each era had common characteristics with other eras in the game's institution. In recent excavations, many toys were found, the most popular of which were small balls and rattles. (Krontira, 2002)

Other popular games of that era were the instrumental games (playthings), which required the use of instruments. Toys of this kind were found in many different countries like China, Japan, and other countries in the Far East. Regarding the material the games were made out of, metal and wax were also used other than the previously mentioned clay. (Pearson, 1992)

Games were considered to be of big importance for the ancient Greeks since they were regarded as a means of education. They thought that perfection of humans was fulfilled with team games,

and they included them in the children's education schedule. (Geros, 1984) Archaeologists have located more than 50 carved toys in the steps and floors of the ancient temples of Acropolis in excavations. Even the ancient Athenians seem to have been enjoying strategy games like chess and "Xs and Os" since they have been found carved on the steps and floor of the Parthenon. Games such as these can be difficult to date back since they are still being played to this day. (Krontira, 2002)

The purpose of this present study is to present the pivotal and complex role of games in the psychological, physical, and educational evolution of children.

The followed methodology was based on the bibliographical search of retrospective and research studies, drawn from the international Medline, Pubmed, and Cinahl databases and the Greek Iatrotek database, with keywords such as game, school, child, and learning. An important exclusion criterion applied to the articles was the language they were written in, except English and Greek.

## THE SIGNIFICANT ROLE OF GAMES

The big importance that the Greek society has associated games with throughout the centuries also becomes clear from the common etymological origin of the words “paidi” (child) and “paihmidí” (game), which originate from the Greek word “pais”. (Kitsaras, 2001)

In recent times, the term game can be associated with two different meanings. On the one hand, it can be regarded as an activity, and on the other as an object, like a board game. (Botsoglou, 2010) Modern society has not left games unaffected, however, which are limited to a specific space and time. Free and team games have been replaced by singular and collective, with objects constructed by colossal companies and intended for kids of a worldwide market. (Gogouli & Karakatsani, 2008)

Extensive research and studies regarding the effect games have on children prove that their contribution is important regarding their social, linguistic, cognitive, emotional, motor, and physical development. The multidimensional benefit of games has rendered an important pedagogical tool, both in the learning procedure and other educational purposes. (Karabatsos, 2000) A game, regardless of the way it is played, is a context in which the players compete, independently or teams, in order to achieve its goal while following specific rules and principles. (Huang, 2011)

In actuality, games are basic, structured, and necessary activities for the healthy psychological and mobile evolution of humans. The game satisfies the biological and psychological needs of the kids and plays a role in their mental, emotional, social, and moral development. The different roles in the games, even when they are a product of child is his imagination, allow the kid to gain a personal experience of what is considered positive behavior and what is not. They make for a powerful educational tool because through them children can develop their skills and habits, enrich their experiences and gain knowledge. (Petrovskaa et al, 2013)

Finding enough room to play games is sadly not feasible in modern cities. The twenty-first century has led to a society that is undoubtedly characterized by tremendous technological progress and the creation of a digital world that children are encouraged to become familiar with from a very young age. Games are an effective way to achieve that. (Kappas, 2005). As a result, children are unwilling to leave their houses because they are too busy with video games, which have anything but positive effects to offer. A well-known example of negative effects of video games is the high percentage of child obesity present in our country, which seems to be constantly rising. At the same time, the lack of free time to be spent playing games, especially since they start going to primary school, takes away irreplaceable benefits from them. These benefits are necessary for the proper physical, cognitive, emotional, and social development of a child. (Gogouli & Karakatsani, 2008)

Studies have also highlighted the contribution games can have regarding a child's lingual evolution, whether the child is disabled or not. With the usage of proper tools such as pictures, stories, dialogue, and toys - objects, related to a specific topic, a child can

understand by correlating objects and pictures, and repeating the vocabulary given to it (Panagiotakopoulou, 2007)

## GAMES AND LEARNING

The procedure of a game supports learning, allowing the players-students to gain learning experiences in games, encourage the interactions between game and students, and put the students in complicated learning environments. (Howard, 2002)

Educational games allow the student-players to invent, apply, constantly rate, and reconsider new strategies. It has been proven that when the children are playing, they reach the maximum effectiveness in learning. The most effective learning procedure for children takes place when they communicate in a free environment without limits. That way the interest of the children peaks, while they are having fun. (Kumar, 2008) According to Twellman, the existing connection between teaching through games and learning can be explained in the three following ways (Pantazis, 1999):

- someone must first learn about a game in order to be able to play it,
- what someone has already learned becomes clearer through games,
- the learning procedure is completed in a phase during which any knowledge that someone has gained up until that point, is secured in a way that is always directly available to him in game form

Experimentation and exploration during a game are vital elements for the satisfaction of the children's curiosity and creativity. They themselves get to choose the direction they will follow, making the games provide a feeling of importance and satisfaction as a result. In addition, children get to discover more about themselves through games, as they spend time on something that precisely interests them, and they establish proper conditions for cooperation not only with other minors but adults as well. (Dafermou et al, 2006) As such, they are providing all of their energy in favor of productive education. (Pantazis, 1999) Also, children's understand of the connection between games and learning has to do with the teacher's presence in the game and the types of game environments that they have available in their classes. (Pyle & Alaca, 2018)

Besides, there is need for developing news skills in order to face any future challenges and prepare the students for new technologies. In society in general and education specifically, the twenty-first century has brought for the important changes. According to Prensky (2004) «technology has become an entire new strategy on how to live, survive and thrive in the twenty-first century». In this context, the twenty-first century arequires new total of skills, in contrast to the skills needed in the twentieth century which relied on reading, writing, and arithmetic. (Wisniewski, 2010) These skills must be simultaneously developed by all the students involved in learning environments, so that they can face new challenges, solve problems and adapt to changes happening in technology, and the corresponding knowledge. (Wang & Chen, 2010)

Game-based learning (GBL) is based on active learning methods and encourages student activities based on the commitment and the

challenges that must be overcome in order to achieve the intended learning aims. (Romero et al., 2014)

As such, games can be included among the modern tools that will help students obtain new knowledge and develop new skills. (Pack-Brown et al., 2008)

Games that help with the development of motor skills turn out to be quite helpful since through them children can discover their physical and motor capabilities. At the same time, games have serious effects in the physical activity of the children, and can drastically increase or reduce it. (Holt et al., 2015)

Sadly, the participation of disabled children in these games is considerably lower since they are deemed quite difficult for children facing mobility difficulties. (Brodin, 1999) As a result, games can be applied to cases of disabled children with the assistance of an adult, parent or teacher, or another minor like a brother for example, as a means of supporting that child in various sectors of its evolution, such as its social and emotional development, knowledge, oral skills, vocabulary, and motility. (Avgitidou, 2001)

In addition, another form of alternative game is theatrical game, which can prove to be very valuable for disabled kids, since through it they can combine imagination, art, dramatization, and movement, and gain unique experiences while freely expressing themselves at the same time. (Brodin, 1999)

## CONCLUSION

Games were, are, and always will be the main activity children spend their time with, because they are fun, enjoyable, and simple, and do not require anything from anyone for his or her participation. In addition, they are governed by their own rules and prioritize the need of joy and entertainment, a need that any child has.

Their role is also, important for the mental development and learning of a kid since it can offer motives for exploring, observation, interpretation, questioning, goal achieving, and problem-solving. Through games, the emotions of the children are supplied, their thinking ability is developed and their linguistic and social evolution is facilitated. In addition, children can learn about their body, their potential, and their limits through games, while developing their orientation and the adaptation of their bodies at the same time.

Games can also be of use in the case of disabled children, with the assistance of an adult, and have proved to be quite beneficial. They have indeed been proven the first social and physical means of human education.

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