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On the comparison of group playing and computer games and their effects on students

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ABSTRACT

Attention to children and adolescents and their health status will guarantee the future of health of the society. Games as spirit of childhood and the thing distinguishing children from adulthood is a medium with which the child communicates with the world around. Thus, it is imperative to carry out a research on comparing children's physical games in natural settings and computer games which have recently entered into the children world. In the current research, an all-out comparison between these two games has taken place while examining features and outcomes of physical and computer games. The present research has been conducted in a library form and through examination of relevant books and sources. Upon analyzing evidence and sources, it is concluded that children's play in natural settings free from virtual world is far better than computer games and its positive outcomes are more while less risks are incurred. Moreover, computer games related negative outcomes are greater than positive ones.

Keywords: play and games, computer games, group playing, children and adolescents

1. INTRODUCTION

No doubt, children are the greatest human capital. Attention to children and their health status will guarantee the future health of the community. Childhood period creates the best

context for the personality and growth promotion and more tendencies to collective life and synergy among humans. Attention to creating an appropriate environment for the child's growth and familiarity with his/her needs and instinct, to which the child needs them within childhood, provides a proper ground for his/her personality and growth promotion as the future generation (Mehd Nejad et al, 2012). Games are the media with which the child communicates the world. For children, playing is just the form of doing things and for them, it is an enjoyable thing. The most salient property of the child is his/her all-out growth. In this connection, game as an all-out work affects his growth clearly. The difference between child's playing and the adult's work arises from two issues, playing is an enjoyable thing which is done for itself and it is the very reward in itself. Despite what the child receives put of playing, he/she follows no other secondary thing (Mardomi and Ebrahimi, 2013).

They spend much time playing and doing physical work; thus, playing and activities during childhood plays effective roles in their growth and development. Kinetic programs and purposeful games along with other nurturing and developmental activities create a good ground for an all-out physical, mental and psychological growth of children. Playing is the first behaviors children are interested to do. The child attains some major outcomes through games. In playing, the child will learn it through touching and observation than thinking to learn (Noorbakhsh and Rezvani Asl, 2005). Playing can be thought of a way for emptying extra forces or child's preparation for the adulthood or a response to the active nature of the children or as an instinctual solution for his/her growth (Riahi Nejad, 1991).

Computer games, in recent years, as a social phenomenon along with other audio visual media in today's world and due to a substantial growth of communication technologies, select with extra ordinary attraction and gravity their own main audience from among children and adolescents. These games not only involve a considerable part of the leisure time of this group, but they also involve times at which they should devote to do homework or in the companion of the family. Children and adolescents in the current era are intensively influenced by these games and having regard to the importance of games in the social life of this age group, these games have inevitable converted a part of children and adolescents' sociability. On the other hand, the popularity of computer and video games have drawn the attention of researchers and experts, thereby engendering two major categories of theories thereof: some have considered these games specific to the age of communication and believe them to be functionally positive and helpful like the rest of other games. Some other researchers have come to a discovery of negative functions of computer games (Karami Baghteyfouni et al, 2014).

To define it other way, playing refers to a set of subjective and practical activities the child performs for establishing communication with the outside world on his volition. Playing has two major goals. One is teaching and strengthening thinking and mentality force and engagement and the other is entertainment and rejoicing moments of pleasure. According to the definition by Aghajani et al (2014) playing is an activity which is performed without an external force or coercion and it is totally voluntary and without a special end such that the conduct in which results in comfort and pleasure. In its simplest definition, playing is any work which renders in entertainment. In other words, it is an affair which is intended to have pleasure and recreation, while having no benefit (Shoari Nejad, 2007).

In spite of pervasive presence of playing in the human's historical experience, its undeniable role in child's development and its significance as one of his/her rights, it is seen that transformed physical and social life has considerably reduced the quantity and quality of

childish games. Children seldom find the opportunity to play freely without external forces (Mardomi and Ebrahimi, 2013). Today, given the fact that children's life is separated from nature, their experiences are constantly obtained from media, the written language and pictures. In reality, the virtual world has replaced the real world. During the past several years, computers along with expansion of IT have penetrated into all life facets including work, education, leisure time, etc. and via impressive attraction and fascination, they have chosen their own major audience from among children and adolescents. Consistent with compute technology finding way into all layers of life, games have also become the raw material for such technologies and they have created a new life for children. Computer games started for the first time in 1972 with a games named Pong (computerized Ping Pong) and then grew in form of both hardware and software (Gunter, 2008). In recent years, computer games, as a social phenomenon, alongside other audiovisual media, have chosen their major audience from among children and adolescents. These games not only have covered a salient part of their leisure time, but they also covered the times they should do their assignments and gather around their own families. The age at which children start playing computer games is 7 and its peak is in 12-13 (Shaverdi, 2009). Computer games are the second entertainment after TV.

Kurdi's researches (2000) illustrated that common games in the southern part of Tehran provide a good ground for the acquisition of perceptual and kinetic abilities, particularly for the children's speed of agility and balance aged 9-10. Yousefi (2003) found out that primary school level games have positive effects on third grade female kinetic and perceptual skills, especially their speed, coordination and accuracy skills. Also, in a research done by Noor Bakhsh and Rezvani Asl under the heading of "An examination of 10 weeks of primary school level games and their effects on some kinetic and perceptual abilities of third grade females in the city of Mahshahr" indicated that such games have positive effects on their perceptual new kinetic skills. Results by Salman (1994) also indicated that games and bodily activities have roles in facilitating and fostering 3-9 aged children's mental capacity.

Foreign researches also illustrated the positive effects of sports activities like playing and physical activities on developing pre-primary and primary school level children's perceptual and kinetic skills as well as on increasing balance and agility. Various researches have also shown that computer and video games could be harmful for children and adolescents. Some studies have suggested that video-computer games result in increased level of aggression and hostility, reduced fortitude against frustration and addiction and dependence as well as reduced level of social relations and weak Educational performance (Zamani et al, 2010). In a research under the title of Comparing social skills of students depending on computer games and those of normal students Zamani et al (2010), concluded that addiction to computer games affect various dimensions of helath and upon addiction to computer games, physical health will be impaired and level of anxiety and depression will rise.

Given the importance and effective role of playing in children and adolescents' life, it becomes imperative to conduct more widespread and pervasive researches as regards the significance of games which children and adolescents do both individually and collectively. Researches and studies done in regard to kinetic and physical games and computer games and their impacts on children and adolescents include positive and negative effects of game son social relations and educational performed, creativity, educational progress and also ill-effects pertaining to computer games in terms of ethical, social and mental issues for the children and adolescents (Mehdian et al 2014; Fazl Allahi & Malaki Tavana 2011; Khaza'ea & Jalilian

2014; Tirgar et al 2015; Mehrabi Far et al 2012; Yazdani Pour & Yazd Khasti, 2012; Noorbakhsh & Rezavani Asl, 2005). In the present research, attempts were made to refer to properties and values of computer games and kinetic and physical games, and an overall comparison between these two kinds of games:

The questions attempted to be answered are as follows:

- 1. What role does playing have on children's growth?
- 2. What role does playing have on children's socialization?
- 3. What are the physical and educational values of playing?
- 4. What negative outcomes do computer games have on children and adolescents' lives?
- 5. What consequences are followed by the violence factor in computer games?
- 6. What are the positive effects of computer games?

2. FINDINGS

- 1. What role does playing have on children's growth?

In its simplest definition, "playing" is any work which renders entertainment. Playing is child's thinking. During playing, the child concerns himself with experimentation, practice, imitation, negotiation, preparation and subjective review of actual life situations. Playing increases merit, independence, self-esteem and other skills. Playing is major factor in developing wisdom and intelligence. The child repeats his/her leanings while playing and contemplate about them. Playing helps the child learn about his/her own body, and the surrounding world; a means for creativity, innovation, experience, understanding talents, abilities, wants, weakness and one's positive and negative points. Thus, via understanding one's characteristics strengthens one's one character and he/she learns about language skills and expansion of internal forces (Fallah Chay, 2002).

Piaget states that during growth period, there are three kinds of playing which differ in terms of structure and they appear one after the other:

- 1.1. Practice games: these games which are for enjoying senses as Piaget states appear from the birth to two years of age, because the child finds touching, tasting, listening, moving bodily organs and feeling the quality of different things through applying senses.
- 1.2. Symbolic games: in this stage, games continue from two years of age to five years of age and new elements enter into the playing. Realities transform. Things that do not exist are represented by other things. In this stage, the child practices life experiences and experiences and tests them variously.
- 1.3. Regular games: this stages covers age 7 to age 11 and its effects remain for the rest of life, and along with the child's growth and lapse of time, they are performed fully. Rules in regular games are transferred from adults to the minors and from one generation to the other. In these games, there is competition. Moreover, each game has symbolic terms. The child begins special games at any age. When the child cannot assume his/her own dolls as living creatures, these games will lose their attraction for the first time. They gradually go to others games such as chess, football, etc. which met thinking, psychical, mental and asocial and ethical needs better. Through playing, children learn

to dominate their world and administer it, expand empathy skills and problem solution and reduce tensions and adapt to past events.

- 2. What role does playing have on children's socialization?

Playing allows the child to directly experience and interact with environmental factors. Not only does playing affect child's intelligent and observable behaviors, but also its impacts on his/her brain are undeniable. In a research done by Yazdani Pour and Yazdkhasti (2012), under the heading of "Determining the effectiveness of group games on social skills of 6-7 aged primary school level students", they found out that playing has much effects on their social skills. Also, Aghajani et al, researches with the heading of the impacts of playing on children's social skills at the level of Kindergarten in the city of Tehran indicated that children, in playing, expressed their own affection, emotions and fears and doubts. Expression one's own internal states is a means for establishing the child's actual communication with the outside world. The child seeks to discover the surrounding world while playing and through playing, he takes the first steps to become socialized, learns co—op and synergy with others and becomes aware of the quality of influencing others and being influenced by them (Ahmadvand, 2014).

- 3. What are the physical and educational values of playing?

The child jumps, runs, goes up and down of stairs, rides, etc. In all these activities, various muscles and organs are applied and strengthened. From a sensual and kinetic point of view, it can be stated that through playing, the child's senses of vision, hearing and touching will rise. His eyes and hands will be better coordinated and his limb's muscles will be much strengthened. Participation in individual and group games, and also participation in rescue and competitive games in form of sports curricula at schools will create opportunities for the children to add to their own abilities. Sports sciences experts have more emphasized on participation in activities which lack formal structure and are thought as effective for developing children's kinetic and perceptual skills, thereby creating opportunities for the children (Noorbakhsh & Rezvani Asl, 2005). Game oriented learning is along the modern approaches to the category of leaning in which referring to the concept of childhood will define learning as gaining experience from other facets. In this approach, playing is a tool for learning, because learning (creating sustained changes in behavior) is based on experience and for the child, the most certain tool for gaining experience is playing (Mardomi and Ebrahimi, During games, especially Eduactional games, children access new subjective notions and acquire more and better skills. With the help of games and toys, children will be acquainted with various forms and colors. During playing, they learn learnable, without pressure and with willingness.

Playing helps child to identify, understand and handle the world and distinguish between fancy and reality. While playing, the child learns much about himself, others and his/her relation with them. While playing, the child compares his/her own abilities with others and thus, they achieve a clearer and more realistic concept of self. In addition to the values mentioned for playing, playing has today found a position for diagnosing children's mental illnesses and their treatment. Playing results in the child's intestinal thoughts with his/her external world, thereby leading him/her to control external objects. Playing allows the child to demonstrate his/her own thoughts feelings and tendencies which are threatening via experiences. Playing is a proper way for treating the child, because the children are commonly

faced with problems in orally expressing their feelings. Through playing, children can reduce their obstacles, and better exhibit their feelings (Wethington et al, 2008).

- 4. What negative outcomes do computer games have on children and adolescents' lives?

During the past several years, computers along with expansion of IT have penetrated into life facets, including work, education, leisure time, etc. and attracted children and adolescents via their own unique attractions. Increasing popularity of computer and video games among children and adolescents has brought about harmful effects. Also, there are positive signs that state video and computer games can promote special subjective abilities among children. Depending on the goals of designers, the kind of playing and time allotted can be positive and negative. However, due to worries arising from computer games, most researches have focused on their negative consequences (Farmanbar et al, 2013).

Children who are constantly engaged in such games have commonly been introvert and this isolationist morale causes the child to separate from peers and this is a starting point for the incidence of other abnormalities that the child will face (Mehrabi Far et al, 2012). The impacts of these games can be examined in three categories of physical, behavioral and mental-social effects; the physical effects pertaining to computer violent games will commonly lead to skeleton-muscular illnesses; increasing or decreasing bodily metabolism; significance changes in the number of blood immunity cells (Faraji et al, 2002); significance increase of heart rates, blood pressure, respiration rates and thermal degree of the body and in some cases, emergence of epileptic and fainting illnesses (Ghorabani et al, 2007).

Of other physical effects related with computer games, the following can be cited:

1. Children's Enuresis as a result of [playing frightful computer games
2. The individual's eyes will be pressurized as a result of direct gazing of the monitor display and causes vision syndrome side effects. For physicians, these children are exposed to short sightedness side effects.
3. Those who constantly use computer games complain about wrist, neck and back aches, because these people sit down in a fixed state and consequently, their spinal cord and skeleton system will be hurt.
4. The individual's skin will be exposed to rays that are emitted from the display monitor.
5. Another side effect is the obesity of children and adolescents due to immobility. All the movement of the body is limited to working with fingers and other parts of the boy will remain still (Fazl Allahi & Malaki Tavan, 2011).

In the area of behavioral effects, most researches have concentrated on the relationship between violent games and emergence of aggressive behaviors in humans' real lives. Anderson and Bushman (2001) have shown in their own meta-analysis that violent computer games are correlated with aggressive behaviors, aggressive understanding, aggressive emotions and short term physiological arousal. The lower the age of the player, the stronger this correlation is. It has also been known that in some frightening games, some anxious disorders and symptoms of fear (e.g. nightmare) have been seen. Another behavioral effect related with gaming is the likelihood of engagement in morbid gambling like behaviors. The most significant mental and social effects of computer games is addiction to them where this case has been greatly examined. For instance, it was determined that around 12% of player in England. Another major issue as regard's games which have simultaneously sexual and

violent scenes is to create tolerance to such scenes among players. In fact, seeing scenes of raping, sexual violence and abnormal sexual behaviors cause these issue to be normal for people and reduce their sensitivity to them.

- 5. What consequences are followed by the violence factor in computer games?

Overall, violence is the background of all computer games, because the developers of these games maintain that fear of death and ache are the most important motives for the player's fast relation against virtual scenes, and it is through such a feeling that players are intermixed with the game and present players in the scene. Computer gamers users gets engaged in the games via designed holograms, so that he/she feels in the end that he /she has just returned from a battlefield. He rests in a corner and reviews for hours scenes of manslaughter and carnage in his/her mind while these scenes are no longer playing and they have extreme effects ion thee body (Azari, 2008). In the same research, Azari concludes that the children undergoing violent games or have even been spectators, expose aggressive and violent behaviors. His findings also revealed that there was a significant relationship between violence, gaming and incidence of violence in lives. Olson et al found out that the behaviors girls and boys expose during playing violent games will affect their playing styles and results in their aggression and violence.

- 6. What are the positive effects of computer games?

In addition to negative consequences pertaining to computer games, these games have also positive effects. There are positive signs implying the fact that computer and video games can improve special mental abilities among children (Mehdian et al, 2014). Computer games could entail positive signs: perfection and development of personality and behavior development of talents, creation of creativity, accuracy and concentration, increase of IQ, expansion of worldview, training of complicated concepts and communication of culture (Khaza'ea and Jalilian, 2014). Understanding kinds of computer gams assumes a higher status in the Country's Eduactional System and using it as a tool will help training people. Playing helps child to identify, understand and handle the world and distinguish between fancy and reality. While playing, the child learns much about himself, others and his/her relation with them. Computer Eduactional games have been attracted by Eduactional Systems due to flexibility in accessing to all kinds of programs, self-dynamism, enriched content and the ability to account to learners' needs. Farhoodi' study suggest that computer Eduactional games result in increased factor of expansion, genuineness, and flexibility among children at primary school level. Results by Baki and Mahmoodi suggest that creativity, self-confidence, awareness of others and fancy are grater in students who have played computer games. Playing computer games in shorter and controlled time and supervised by parents can leave positive effects on the lives of users.

3. DISCUSSION AND CONCLUSION

In today's world, playing is an expression of child's internal wants. In fact, we can state that the content of game chosen by children is mainly a reflection of their internal wants. The child seeks to reflect their own affective and mental problems and to find a solution for dominating them. Playing has a role in building character and growth of the children. Playing

is a means for acquiring valuable experiences through which children will develop from a sensual, social and mental point of view.

The findings of the present research have addressed the explanation of the role playing has in development, socialization, kinetic skills and educational values among children and adolescents as well as positive and negative effects of computer games among children and their peers. Some domestic and foreign researches: Yousefi (2003) the effects of selected primary school level games on female students' kinetic growth; Hatzitaki et al (2002) kinetic and perceptual coordination for controlling stagnant and dynamic balance in children; Aghajani et al (2014) effects of playing on children's social skills; researches by Cowen and Walker (2011) negative outcomes of computer games and Khaza'ea and Jalilian (2014) "effects of computer games on educational progress and creativity of primary level students" who showed that kinetic and physical games and wholly children's playing in natural settings along with their peers will have positive effects on training of social skills and coping with social fear, development of kinetic skills, and creativity, etc. On the other hand, other negative consequences include physical effects, mental and social and behavioral ill effects.

In addition to this, such games have positive signs: development of children and adolescents' mental capacity, development of talents, creation of innovation and development of concentration and communication of culture (Khaza'ea & Jalilian, 2014). In the end, upon comparing outcomes and effects of each of which, it is concluded that children's playing in natural settings free from a visual world is far better than computer games and its positive results will be grater and the risks will be lesser; thus it has to be stated that negative outcomes of computer games are more than their positive signs.

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