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# INVESTIGATING THE EFFECTS OF PRESCHOOLERS' COMPUTER USE BASED ON THEIR PARENTAL OPINIONS

***Annotation.*** *Due to the change and development in the field of science and technology, our age is also called the "computer age". In this study, it was aimed to determine the time 4-6 years old children of preschool education spend in front of the computer, the quality of this time, the positive and negative effects of the computer on the child, and the parents 'attitudes towards the child's use of computers in line with the parents' opinions. The research comprises 100 parents in Aksaray. In the research, descriptive research method was used. A questionnaire was applied to collect data in the study. The questionnaire consists of open-ended and multiple-choice questions that examine the duration, reason, program type, family and child's attitudes and behaviors towards computer use of children, and the effects and behavior changes caused by the use of computers by children in children. As a result, suggestions are given to parents on how their children will use the computer.*

***Keywords:*** *Computer, benefits, harms, parents, questionnaire.*

## INTRODUCTION

In recent years it has gained importance that children who grow up side by side with technology can use technological tools when, how and in what way they are exposed to their beneficial and harmful effects. When the studies on the opinions of parents with children in pre-school period on the use of technological devices are examined, the positive and negative effects of technology on child development in the preschool period are generally emphasized [3]. With the rapid development in computer technologies, the Internet has also entered people's lives, and has become used to meet daily needs from shopping to entertainment. In this age called the communication and information age, family members spend most of their time with these communication tools. In this case, family members' relationships with each other are reduced [4]. In addition, many studies reveal that computers offer children effective and rich learning experiences [1]. According to the results of a study conducted on this subject, it is seen that children between the ages of 0-6 mostly met with television at the age of 12 months, with mobile phones between 12-23 months, with computers and tablets between 24-35 months. From a parent's point of view, it has been determined that children spend 30 minutes or less on their mobile phones, computers and tablets on weekdays and weekends [2]. In another study, it was determined that although half of the children do not belong to them, all of them are introduced to computer technologies until the age of 4, and most of them use computer technologies for an hour or more a day, mostly in the home environment and for playing games. Knowing the positive and negative effects of computer technologies is very important for child development [6]. In terms of parental control in technology use, it has been revealed that preschool children choose the game or program during the use of technological devices, control the time, limit the time, and even ask questions about the content while using them [5]. It has been stated that the use of technology affects communication and social skills [8]. In addition, it has been stated that social and emotional skills such as taking responsibility and sharing solidarity can be damaged when technological tools are used excessively, uncontrolled and without guidance [7].

The aim of the study is to reveal parents opinions on the positive or negative effects of computer use of their children in pre-school period.

### Design of the Study

In the study, firstly, computer usage of children in an independent kindergarten in Aksaray city center and in kindergarten of a low-income primary school in Aksaray Province, Gülağaç district was investigated by the questionnaire forms applied to parents. In the research, descriptive research method was used. The questionnaire was applied to parents in order to collect data in the study. The questionnaire items were created by reviewing the literature on parents, child and computer use.

Before the questionnaire was applied, it was reconstructed in line with the appropriate feedback by the field experts. In the questionnaire, there are open-ended and multiple-choice questions that examine the duration, reason, program type, family and child's attitudes and behaviors towards computer use of the parents and their children, and the effects and behavior changes caused by the parents' computer programs on the child. From the collected data, open-ended and multiple-choice questions were subjected to content analysis [9] to create themes and sub-themes.

**Participants of the study**

The universe of the study, constitute all parents having children between 48-72 months subjected to pre-school education in Turkey. The sample consists of a total of 100 parents, 50 parents in Aksaray Seyhun Aytaç Kindergarten and 50 parents in Atatürk Primary School in Aksaray Gülağaç District. The sample was created according to easy accessibility criteria.

**Data Collection Method**

The questionnaire was applied to a total of 100 parents, 50 parents in Aksaray Seyhun Aytaç Kindergarten and 50 parents in Atatürk Primary School in Aksaray Gülağaç District. Before the study, the school administration was interviewed to collect information about the parents' profiles who participated in the study.

**Results**

77% of the parents surveyed have a computer at home, while 23% do not have a computer at home. While 59% of the respondents have an internet connection, 41% do not have an internet connection.

According to the information provided by the parents participating in the survey, 53% of the children spend time on the computer every day. 62% of these children spend 1 hour a day, 20% 2 hours, 1% 3 hours, 4% more than 3 hours in front of the computer. Only 13% of children spend less than an hour in front of the computer.

Regarding the results of the survey, 57% of children play games under the supervision of an adult, and 43% alone play computer games. According to the findings, 86% of parents can control the computer use of their children.

According to the observations and opinions of the parents who have children in the preschool period, the order of the games played by the children on the computer is as follows:

1- Coloring 25%, 2- Car racing 11%, 3- Educational games 10%, 4- Puzzle 10%, 5- Barbie 9%, 6- Cooking cake / fighting 8%, 7- Shape (matching, tangram ..) 7%, 8- Ball games (basketball, football) (7%) / Gun (7%) / Winx (6%)

According to the results of the questionnaire, while children use the computer mostly to play games such as painting and car racing on the internet, they use the least ball games, guns and Winx.

**The Dimensions of Computer Games Influence on Children**

The psychological, biological, mental, linguistic and social effects observed in the child after playing the computer in the questionnaire were classified into themes / sub-themes as follows in line with the observations and opinions of the parents.

***a. Psychological Dimension***

*Happy (32%), Cheerful (16%), Angry (15%), Ambitious (15%), Stressful (16%), Restless (5%).* According to the parents who participated in the research, while computer games affect their children psychologically 48% positively, they affect them 52% negatively.

***b. Biological Dimension***

*Increased Hand Skills (24%), Hand-eye coordination (24%), Eye Pain (24%), Fatigue (20%), Back Pain (8%).* Parents who participated in the study stated that computer games affect their children biologically 48% positively and 52% negatively.

***c. Cognitive Dimension***

*Attention Increased (26), Learns Concepts Quicker (26), Attention Decreases (13), Remember Better (13), Difficulty Distinguishing Real and Unreal (8), Forgets Quickly (7), Understands Better (7).* Parents who participated in the study stated that computer games affect their children 59% positively and 41% negatively.

***d. Linguistic Dimension***

*Learning new words (55%), gaining speaking skills (25%), not speaking properly (13%), and using slang words (12%).* According to the parents who participated in the research, while computer games affect their children linguistically 80% positively, they affect 20% negatively.

***e. Social Dimension***

*Getting Lonely (33%), Socializing (25%), not talking to others much (22%), Making new friendships (20%).* Parents who participated in the study stated that computer games affect their children socially 45% positively and 55% negatively.

**Conclusion and Suggestions**

According to the opinions of the families participating in the survey, half of the children spend an average of 2 hours in front of the computer every day, and almost half of the children use the computer away from adult supervision. Also, they use the least ball games, guns and Winx while children use the computer mostly to play games such as painting and car racing on the internet.

Regarding the parents who participated in the research, computer games affect their children *psychologically, socially and biologically* negatively. Contrarily, According to the parents who participated in the research, computer games affect their children *cognitively and linguistically* positively.

In line with these results, the parents should place a time limitation on their children who attend pre-school institutions such as 1-2 hours a day, while using the computer. In addition, parents of preschoolers should frequently monitor their children's computer usage in order to protect their children from harmful computer programs. Moreover, the parents of the preschoolers should take the necessary precautions for their children who are affected negatively from *biological, psychological and social* aspects and limit the time their children spend in front of the computer by supervising them. Parents should adopt a consistent attitude in the use of computer technologies when rules are set for children, and approved and reliable educational games should be preferred.

**Limitations of the Study**

The representation of the universe will be limited as the research is applied in a narrow framework. The research is limited to Aksaray Seyhun Aytaç Kindergarten and Gülağaç Atatürk Primary School Nursery Class. The research is limited to the parents of the students attending the kindergarten sampled. Computer usage habits of children can be examined with different dimensions, with a larger sample, using qualitative and quantitative methods.

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