

Relations between Computer Addiction and Social Skills in Early Adolescence

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ABSTRACT. The research aims to study the correlation between computer addiction and social skills in the age group of early adolescents in Georgia, and to identify the relation of the correlates with the demographic data of adolescents. The survey was conducted in Tbilisi public and private schools (age: 10-14, $N=200$). Three questionnaires were selected: Questionnaire for the Demographic Data, Computer Addiction Test and Social Skills Questionnaire. The study revealed statistically significant negative correlation between computer addiction and social skills. Reliable negative correlation has been found between computer addiction and following subcategories of social skills: self-control, academic self-efficacy, persistence, and mastery orientation. Statistically significant negative correlation was found between computer addiction and social skills in 5th and 6th grades (age: 12-13 years old). Statistically significant negative correlation was revealed between computer addiction and social skills in both male and female participants; in case of male participants, this correlation was high with statistical reliability. Statistically significant negative correlation between computer addiction and social skills was determined in the first and third children, according to the birth order. © 2018 Bull. Georg. Natl. Acad. Sci.

Key words: computer addiction, social skills, demographic data, gender

The computer has become a part of modern human life. The intensity of its use increases annually, especially in the younger generation [1]. Consequently, specialists are actively considering both positive and negative aspects of the computer technology usage. The phenomenon of computer addiction or computer dependence became the focus of special attention [2]. Excessive Internet use has significant impact on the user's academic performance, professional activities, and social life [3]. Studies show that children and adolescents have disorders of sleep, social and learning skills.

Also, they experience decline in competitiveness, and therefore, are no longer focused on their personal growth and development. Children of early school age face concentration problems, while the middle school age adolescents have reading and social relationships problems [4]. The consequences of Internet addiction are: failure to function adequately in real life, disorder in professional and private life, deficit of behavioral control, low self-assessment and social problems [5].

Social or communication skills are the basis for human interaction with social environment and

their effective functioning. Social skills are associated with positive relationships, cooperation, respect for peers and sharing information with others. Social skills are used in order to get individuals adapted to social context, and specifically, to the learning context. That is why practice of social habits becomes a precondition of academic success. Socialization is the most important aspect in human growth and personality development [6]. According to E. Zamani's research, computer-addicted students have low socialization skills. Many factors influence the acquisition and formulation of social skills; studies show the role and importance of the computer addiction, birth order in the family, culture and development characteristics [7]. The studies we have mentioned are conducted within the Western and individualistic culture. Computer addiction research in Georgian culture has not achieved a desired scope yet.

The purpose of our research was to explore computer addiction in adolescents (10-14 years old) living in Georgia.

Research questions:

- To study the computer addiction in adolescents (10-14 years old) living in Georgia;
- To study the quality of social skills in the same population;
- To study the demographic data in the same population;
- To reveal the correlation between computer addiction and social skills.
- To study the gender differences as factor on the correlation in the above-mentioned population;
- To study the age differences as factor on the correlation in the above-mentioned population;
- To study the birth order in the family as factor on the correlation in the above-mentioned population;

Several hypotheses have been proposed in the study:

Hypothesis 1: There is a reliable correlation between social skills and computer addiction;

Hypothesis 2: Gender influences the correlation between computer addiction and the quality and acquisition of social skills;

Hypothesis 3: The birth order influences the correlation between computer addiction and the quality and acquisition of social skills.

200 children participated in the survey. Students of age 10-14 were interviewed. 100 participants – public school students, 100 participants – private school students. Used two types of variables: Computer addiction and social skills.

Following 3 questionnaires were selected as research instruments:

I. Demographic data questionnaire.

The questionnaire consists of 9 questions, it gathers data about the participants: 1) gender, 2) age, 3) school, 4) school entry age, 5) age when they started computer usage, 6) whether they attended a kindergarten, 7) birth order among their siblings, 8) family members.

II. Computer addiction test [8].

III. Social Skills Questionnaire [9].

In order to determine the numerical value for the correlation between these two sets of data, we used the Spearman's rank correlation coefficient r_s . Data were analysed using computer-based program SPSS 20.

Research Data Analysis

All the results with statistically significant correlation have been presented below. Reliable correlation has not been confirmed in other comparisons.

1. Statistically significant negative correlation between computer addiction and social skills - 2.84 ($p < 0.01$) was revealed. The higher the child's social skills are, the lower the computer addiction is.

2. Statistically significant negative correlation between computer addiction and self-control, one of the subcategories of social skills, -2.28 ($p < 0.01$) was determined. The lower the student's self-control rate, the higher the computer addiction.

3. Statistically significant negative correlation between academic self-efficacy, one of the subcategories social skills, and computer addiction -2.25 ($p < 0.01$) was revealed. The lower the academic self-efficacy of the child, the higher the computer addiction.

4. Statistically significant negative correlation between persistence, one of the subcategories of social skills, and computer addiction -2.43 ($p < 0.01$) was found. The lower the student's persistence rate, the higher the computer dependence.

5. Statistically significant negative correlation between computer addiction and mastery orientation, one of the subcategories of social skills, -2.55 ($p < 0.01$) was found. The lower the level of the student's mastery orientation, the higher the computer addiction.

6. Statistically significant negative correlation between computer addiction and social skills was found in the 5th (-3.97 ; $p < 0.01$) and 6th grades (-4.28 ; $p < 0.01$). The average level of addiction varied across age subgroups, and it was indicated that 12-13 year old adolescents have a higher rate than 10, 11 or 14 year old children and adolescents.

7. Statistically significant negative correlation between computer addiction and social skills -3.27 ($p < 0.01$) was revealed in male participants. In case of the female participants correlation was lower but reliable -2.52 ($p < 0.05$). In cases of both genders the higher the computer addiction, the lower the student's social skills.

8. With regards to the child's birth order, the correlation between computer addiction and social skills is different with statistical significance when comparing the first-born and the third-born children. In particular, the correlation for the third-born child (-4.95 ; $p < 0.01$) is higher than the correlation for the first-born child (-3.20 ; $p < 0.01$) with statistical significance.

Conclusions

1. A higher level of social skills is associated with lower level of computer addiction. Consequently, our first hypothesis is confirmed in the study.

2. Higher rates in the subcategories of social skills such as self-control, academic self-efficacy, persistence, and mastery orientation are associated with lower levels of computer addiction.

3. The level of computer addiction was the highest in 5th and 6th grades, and accordingly, in the 12-13 year-old adolescents age subgroup.

4. Negative correlation between social skills and computer dependence is revealed in cases of both genders. However, this correlation is higher with statistical significance in male participants than in female subgroup.

5. With regards to the child's birth order, the third-born children show higher correlation between social skills and computer addiction compared to the first-born children. Therefore, the study confirmed our third hypothesis. The child's birth order influences the correlation between social skills and computer addiction.

სოციალური ფსიქოლოგია

კომპიუტერზე დამოკიდებულებისა და სოციალური უნარების კავშირის კვლევა უმცროს მოზარდებთან

რ. მირცხულავა და მ. წერეთელი

ილიას სახელმწიფო უნივერსიტეტი, ხელოვნებისა და მეცნიერების ფაკულტეტი, თბილისი, საქართველო

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კვლევის მიზანია საქართველოში უმცროსი მოზარდობის ასაკის პოპულაციაში კომპიუტერულ დამოკიდებულებასა და სოციალურ უნარებს შორის კორელაციის შესწავლა და ასევე, კორელანტების კავშირის დადგენა მოზარდთა დემოგრაფიულ მონაცემებთან. კვლევაში მონაწილეობა მიიღეს ქ. თბილისის საჯარო და კერძო სკოლების მოსწავლეებმა (ასაკი: 10-14 წ., $N=200$). კვლევის ინსტრუმენტად შეირჩა 3 კითხვარი: დემოგრაფიული მონაცემების კითხვარი, კომპიუტერზე დამოკიდებულების საზომი კითხვარი და სოციალური უნარების საზომი კითხვარი. კვლევამ კომპიუტერულ დამოკიდებულებასა და სოციალურ უნარებს შორის სტატისტიკურად სანდო უარყოფითი კორელაცია გამოავლინა. სანდო უარყოფითი კორელაცია დადგინდა კომპიუტერზე დამოკიდებულებასა და სოციალური უნარების შემდეგ ქვეკატეგორიებს შორის: თვითკონტროლი, აკადემიური თვით-ეფექტურობა, სიჯიუტე და ოსტატობაზე ორიენტაცია. კომპიუტერზე დამოკიდებულებასა და სოციალურ უნარებს შორის სტატისტიკურად აღნიშნული კორელაცია დადგინდა მე-5 და მე-6 კლასებში (ასაკი: 12-13 წ.). კომპიუტერზე დამოკიდებულებასა და სოციალურ უნარებს შორის სტატისტიკურად სანდო უარყოფითი კორელაცია გამოვლინდა როგორც მამრობითი, ასევე მდედრობითი სქესის პარტიციპანტებთან; მამრობითი სქესის პარტიციპანტების შემთხვევაში აღნიშნული კორელაცია სტატისტიკურად სანდოდ მაღალია. დაბადების რიგის მიხედვით პირველ და მესამე პარტიციპანტებთან კომპიუტერზე დამოკიდებულებასა და სოციალურ უნარებს შორის სტატისტიკურად სანდო უარყოფითი კორელაცია დადგინდა.

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