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Original article

THE RELATIONSHIP BETWEEN SOCIAL NETWORK ADDICTION TO PHYSICAL ACTIVITY IN UNIVERSITY STUDENTS

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Abstract

Objectives. This study was conducted to evaluate the relationship between social network addiction and physical activity in university students.

Methods. This research is of descriptive relational type. The research was carried out with 100 university students. In collecting data, socio demographic information form, International physical activity questionnaire and Social Network Addiction scale were used. In evaluating the demographic data of the study, Mann Whitney U test was used to evaluate the relationship between number and percentage distributions, socio demographic characteristics, and the International Physical Activity questionnaire and Social Network Addiction scale, and Pearson correlation analysis was used to evaluate the relationship between the International physical activity questionnaire and Beck depression scale.

Results. The average age of students is 22.3 ± 3.15 , 65% boys, 35% girls, 35% mother high school graduates, 43% father university graduates, 67% longest living place metropolitan and 52% perceive their health moderately. When students' social network addiction scale sub-dimension mean scores are examined, the point of attention sub-dimension mean score is 25.17 ± 2.30 , the mood-change sub-dimension mean score is 19.14 ± 1.45 , the withdrawal symptoms sub-dimension mean score is 14 The mean score of 35 ± 1.08 , conflict sub-height is 23.38 ± 3.07 , the recurrence sub-dimension score average is 17.45 ± 3.24 and the total score average of social network addiction is 99.49 ± 7.65 . When the relationship between physical activity levels and social network addiction was evaluated, there was a strong negative relationship between physical activity and social network addiction's attention, mood change, withdrawal symptoms, conflict and relapse sub-dimensions ($p:0,0001$).

Conclusions. In terms of physical activity, girls are in the risk group of those whose mother education level is primary school, father education level is secondary school, those who perceive their health poorly and who live in the metropolitan for a long time.

Key words: Students, Physical activity level, Social Network Addiction.

Introduction

Social networks include websites and apps that allow users to share ideas, beliefs, emotions, and personal, social and educational experiences. It also allows communication between a wide variety of users on a global level (Ellison et al. 2007, Alahmar 2016, Błachnio et al. 2016). According to the Global Digital Report, the three most popular provinces in the world are listed as Facebook, YouTube, Instagram. According to the report, Facebook has the most used social network and 2.4 billion users globally. Facebook terms of use, Turkey is among the top 10 countries with 37 million active users (Global Digital Report 2020).

Social networks cause some threats as well as opportunities to improve and improve the quality of global communication (Avcı et al. 2015). When the use of social networks is poorly managed, it can have negative consequences at the individual and

social level. Social network addiction is one of the results that many social network users can experience (Schou Andreassen and Pallesen 2014). Therefore, the widespread use of social networks is a new form of addiction (Zaremohzzabieh et al. 2014). In general, social network addiction is classified as a kind of cyber relationship addiction (Can and Kaya 2016). Social network addiction is expressed as mental anxiety about using social networks and allocating time for these networks. Thus, this affects individuals' personal relationships and social activities such as health (Zaremohzzabieh et al. 2014).

Students are one of the most important users of the virtual world and social networks. Excessive use of social networks affects physical health as well as mental health. One study has shown that internet addiction is associated with a higher body mass index and a lower quality diet. In the same study,

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high-risk smartphone users were reported to have less physical activity levels (Kim et al. 2015). Limited studies have been reached to examine the relationship between social network addiction and physical activity. For this reason, this study was carried out to determine the level of social network addiction and to evaluate its relationship with physical activity.

Method

This research is of descriptive relational type. The research was carried out with 100 university students. In collecting data, socio demographic information form, International physical activity questionnaire and Social Network Addiction scale were used.

Collecting data

The data of this study were collected from individuals over the age of 18 by face-to-face interview method.

Personal Information Form

Personal Information Form included questions such as age, gender, longest living place, perceived health status and perceived family income.

International Physical Activity Survey

In this study, the International Physical Activity Questionnaire short form was used to determine individuals' physical activity levels. International validity and reliability study of Craig et al (2003) conducted by this survey, the validity and reliability study in Turkey Ozturk (2005) was conducted by university students. In the evaluation, the criteria are taken that each activity should be done for at least 10 minutes at a time. A score is obtained as "MET-minute /week" by multiplying the minute, day and MET value (multiples of resting oxygen consumption). Physical activity levels are not physically active (<600 MET-min / week), low level of physical activity (600 - 3000 MET-min / week), and physical activity level is adequate (useful for health) (> 3000 MET- min / week). In calculating the energy consumption related to physical activities, the weekly duration (minutes) of each activity and the MET energy values created for the International Physical Activity Survey were multiplied. Thus, energy consumption related to severe, moderate, walking, sitting and total physical activities for each individual was obtained in MET-min / Week unit.

Social Network Addiction Scale

The scale was developed by Karaca et al. (2018). In the first phase of the development process of SADS, researchers conducted a comprehensive literature review. As a result of the literature review, it has been determined that social addiction has common symptoms with other scientifically defined substance and behavioral addictions. After determining the sub-dimensions of the scale, a pool of items consisting of 46 items was

created for social network addiction. During the creation of the item pool, Bergen Facebook Addiction Scale was a guide. As a result of the researchers' evaluations, nine items were removed from the draft scale and the number of items was reduced to 37. As a result of the factor analysis, 11 items were removed from the scale, taking into account the expert opinions. After deletion of 11 inappropriate scale items, SADS consisted of 26 items and 5 factors. As a result of the analysis, it has obtained a structure with 5 factors explaining 63.6% of the total variance. The attention-drawing factor consists of 6 items, the mood change factor is 5 items, the withdrawal factor is 4 items, the conflict factor is 6 items and the last factor is relapse 5 items. Exploratory Factor Analysis was performed with 37 items in SADS. As a result of the factor analysis, after the eligible 11 items were deleted, the final version of the SADS, which explained 63.6% of the total variance, consisting of 26 items and five factors, was obtained. Each item of the scale is scored between 1 and 5. It is understood that as the scores obtained from the scale increase, social network addiction increases. Internal consistency values of SADS were between .87 and .95 values for the whole scale and sub-factors; The item total correlations of the items appeared to vary between .46 and .74. The fit indices of the model obtained by Confirmatory Factor Analysis were examined and it was found that the chi-square value ($\chi^2 = 601.849$, $df = 286$, $p = 0.00$) (Karaca et al. 2018).

Ethical and Legal Aspects of the Research

Ethical consent and institutional permission were obtained to conduct the research. Verbal permissions of individuals were obtained before starting the research. The purpose of the research, the duration and duration of the research will be briefly explained in a language they will understand, and the principle of "Informed Consent", the principle of "Autonomy", stating that the students can withdraw from the research whenever they want, the principle of "Protection of Confidentiality and Privacy" has been fulfilled by saying that the individual information will be protected after being shared with the researcher. Before the forms to be used in the research were given, necessary explanations were made orally, and care was taken to create a quiet environment with little stimulus during application.

Statistical analysis

After the data were collected, the option researchers selected by each student for each item included in the scales were entered into the SPSS 18 program and the total scores of the individuals were calculated. In evaluating the demographic data of the research, Mann Whitney U test was used to evaluate the relationship between number and

percentage distributions, socio demographic characteristics, and the International Physical Activity questionnaire and Social Network Addiction scale, and Pearson correlation analysis was used to evaluate the relationship between the International physical activity survey and Social Network Addiction. Results were evaluated at 95% confidence interval and $p < 0.05$ significance level.

Results

The average age of the students is 22.3 ± 3.15 , 65% boys, 35% girls, 35% mother high school graduates, 43% father university graduates, 67% of the longest living places are metropolitan, 52% perceive their health moderately.

When the social network addiction scale sub-dimension mean scores of the students are examined, the average of attracting attention sub-dimension score is 25.17 ± 2.30 , the emotional-state change sub-dimension mean score is 19.14 ± 1.45 , the withdrawal symptoms sub-dimension mean score is 14.35 ± 1.08 , and the conflict sub-length mean score is 23.38 ± 3.07 , the recurrence sub-dimension is 17.45 ± 3.24 , and the total score average of social network addiction is 99.49 ± 7.65 . When the physical activity levels of the students were examined, it was found that 7% were very active (> 3000 MET-min / week), 25% were minimally active (600-3000 MET-min / week), and 68% were inactive. (Table 1).

Table 1. Students' Physical Activity Level and Social Network Score Average

Social Network Addiction	Mean \pm SD
Attention sub-dimension	25.17 (2.30)
Emotion-state change sub-dimension	19.14 (1.45)
Withdrawal subscale	14.35 (1.08)
Conflict sub-dimension	23.38 (3.07)
Recurrent subdimension	17.45 (3.24)
Total score	99.49 (7.65)
Physical Activity Level	Number (Percent)
Inactive (< 600 MET-min / week)	68 (% 68)
Minimal Active (600-3000 MET-min / week)	25 (% 25)
Very active (> 3000 MET-min / week)	7 (% 7)

When the relationship between physical activity levels and social network addiction is evaluated, there is a strong negative relationship between physical activity and social network addiction's

attention, mood change, withdrawal symptoms, conflict and relapse sub-dimensions ($r: -0.864$ $p: 0.0001$) (Table 2).

Table 2. Examining the relationship between students' Social Network Addiction and Physical Activity Level

	X \pm SD	r , p
Social Network Addiction	99.49	r: -0.864 p:0,0001*
Physical Activity	478.35 \pm 12,67	

R: Pearson correlation analysis, $p < 0,05$ *

Discussion

It was determined that students' social network addiction was above average (Table 1) and men were at risk in terms of social network addiction. Unlike the current study, in a study, social network addiction was found to be moderate (Azizi et al. 2019), but similar to the current study, social network addiction score was higher in male students (Kırcaburun 2016, Azizi et al. 2019). It has been reported that the prevalence of social network addiction among students is 29.5% in Singapore and that the addiction is higher among female students (Tang and Koh 2017). In a study conducted by medical students, internet addiction was reported to be 85% among social network users

(Ahmer and Tanzil 2018). This situation can contribute to unlimited and easy access to the Internet from smart phones.

In the current study, 68% of the students were inactive (Table 1) and a negative relationship was found between social network addiction and physical activity. In a study similar to the current study, it was stated that students with insufficient physical activity had higher internet addiction scores than those who exercise regularly (Khan et al. 2017). In another study, it was found that 23.1% of the participants were inactive in terms of physical activity. In the same study, unlike the current study, no relation was found between the

internet addiction and physical activity level of young people and adolescents (Dang et al. 2018).

Conclusion

In terms of physical activity, girls are in the risk group of those whose mother education level is primary school, father education level is secondary school, those who perceive their health poorly and who live in the metropolitan for a long time. In terms of social network addiction, men, those whose mother education level is primary school, father education level secondary school, those who perceive their health poorly and those who live in the metropolitan for a long time are in the risk group. In our study, a significant relationship was found between physical activity and social network addiction. It was observed that as the level of physical activity decreased, social network addiction increased and there were negative effects on all sub-dimensions of the scale (attention, mood change, withdrawal symptoms, conflict and relapse).

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