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The impact of virtual social networks on students' academic Achievement in Birjand University of Medical Sciences in East Iran

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Abstract

Social networking sites (SNSs) have extended all over the world nowadays. These sites have various effect of their users' life. This case-control study was conducted in Birjand University of Medical Sciences in 2011. The study included 70 students with grade point average (GPA) less than 16 of 20 (Case group) and 140 students with GPA equal 16 of 20 and higher (Control group). 54.3\% of students in case group and 35\% in control group were registered in this networks. (OR=2.2, CI=1.23-3.95). The average time spending in the SNSs in case and control group was 0.9 and 0.44 hours per day respectively (p=0.04). Membership start in the majority in case group(57.9\%) was the first term and in the control group (47.1\%)was before the university. Contact with old friends was the most common cause of using social networks in both cases and controls. The result of this study has shown a negative relation between use of SNSs and GPA. In this context we need a culture of SNSs' use with considering its impacts on students' Academic Achievement.

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1. Introduction

Using social networks is an integrated component of the lives of many students. These sites have various effects on their life styles especially in their academic performance and the duration of their studies (Thompson LA, Dawson K et al. 2008; Kirschner PA and Karpinski AC 2010). These sites are able to make fundamental alteration in social life as well as interpersonal and social relations. Although increasing anxiety and stress are two important negative effects of such sites especially among students

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(Farahani HA, Kazemi Z et al. 2011), they have exert some beneficial effects in the educational and treatment process.

In relation with Others (Joinson AN 2008; Kim KH and Yun H 2008), Learning social laws (Boyd D 2007), providing fun and amusements (Abramson G and Kuperman M 2001) and are some of the important reasons which people show interest to use these social networks.

Since our knowledge in this regards are limited, the present study conducted to investigate the effect of social networking site on the academic achievement of students in Birjand University of Medical Sciences.

2. Methods

2.1. Design

This case-control study was conducted in Birjand University of Medical Sciences in 2011.

2.2. Participants

Two group of students participated in the study were case and control groups including 70 students with grade point average (GPA) less than 16 of 20 and 140 students with GPA equal 16 of 20 and higher, respectively. The case and control Groups were matched according to age, courses and colleges.

2.3. Measurement

Data was compiled using a questionnaire consisting of the membership status in SNSs, estimated hours working using SNSs, time of starting membership in SNSs and the reason of usage. After visiting the classrooms and presenting the research objectives for the students by the researcher, students completed the questionnaires.

2.4. Statistical analysis

Data was analyzed using T-test, chi-square and Odd’s Ratio with SPSS software. A levels equal or less than 0.05 was considered significant.

3. Results

In the case group 70 participants with average age of 21.33 ± 2.11 years and in the control group 140 participants with 21.01 ± 1.45 years were attended in the study. While 55.7% of them were female, male students were 44.3% of the participants. Two third of them (67.1%) of students in case group and 63.6% in control group knew about virtual social networks.

More than a half (54.3%) of students in case group and about one-third (35%) in control group were registered before in these networks (OR=2.2, CI=1.23-3.95). Among the members of a virtual social network, most of students in case group (60.5%) and control groups (55.1%) were also registered in Facebook as well. The average time spending in the SNSs in case and control group was 0.9 and 0.44 hours per day, respectively (p = 0.04). The membership starting in the majority (57.9%) in case group was the first semester of university program and in 47.1% of the control group it has been started was before entering the university. Communication with old friends was the most common cause of using social networks in both case and control groups.

Time Usage of social networks in 80.6% of students in case and 76.1% in control group occurred during nights. The duration of virtual networks in the two groups was not significant (p=0.45).

4. Discussion

The present study has shown a negative relation between usage of SNSs and GPA which is similar to results from other studies in this context (Kirschner PA and Karpinski AC 2010; Junco R 2012). However, some other studies have shown that using Facebook has no effect on students’ academic performance (Kolek EA and Saunders D 2008; Pasek J, More E et al. 2009; O’Brien SJ 2012). Since using of these networks can reduce the
period of study, it could negatively affect on academic performance of students. In addition members of the social networks who had often used them at night have not enough rest, resulting in daytime fatigue due to sleep disruption, thereby decrease students’ academic performance.

Communication with old friends was the most common cause of using social networks by students and supports the Pempek study (Pempek TA, Yermolayeva YA et al. 2009) who demonstrated that finding the old friends are the most important reason for student to work with these networks and wide range information sites.

It is recommended to more research on the impacts of these networks on other aspects of students’ life should be conducted, especially its impact on mental health of the users.

Since membership in social networks in the first year lead to poor academic performance for students, universities in collaboration with related counseling centers should warn students for using the virtual social networks and its effects in their performance specifically in first year in the university.

In this context we need to improve the culture of SNSs' usage with considering its impacts on students' academic achievements.

5. **Tables**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Case group</th>
<th>Control group</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean hours of using the computer daily</td>
<td>2.78±2.81</td>
<td>1.49±1.76</td>
<td>0.009</td>
</tr>
<tr>
<td>Mean hours of using the Internet daily</td>
<td>2.01±2.25</td>
<td>1.66±1.73</td>
<td>0.22</td>
</tr>
<tr>
<td>Mean hours of using the social network daily</td>
<td>0.9±1.73</td>
<td>0.44±1.4</td>
<td>0.046</td>
</tr>
<tr>
<td>Mean hours of study during non-exam daily</td>
<td>1.71±2.40</td>
<td>2.01±1.73</td>
<td>0.31</td>
</tr>
<tr>
<td>Mean hours of study during exam daily</td>
<td>8.22±3.71</td>
<td>8.75±3.60</td>
<td>0.34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>causes of using the virtual social network</th>
<th>Case group</th>
<th>Control group</th>
<th>Total</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>using the experiences others</td>
<td>6(8.6%)</td>
<td>9(6.4%)</td>
<td>15(7.1%)</td>
<td>0.57</td>
</tr>
<tr>
<td>Contact with old friends</td>
<td>18(25.7%)</td>
<td>30(21.6%)</td>
<td>48(23%)</td>
<td>0.50</td>
</tr>
<tr>
<td>Find new friends</td>
<td>8(11.4%)</td>
<td>13(19.3%)</td>
<td>21(10%)</td>
<td>0.62</td>
</tr>
<tr>
<td>Contact with current friends</td>
<td>10(14.3%)</td>
<td>16(11.4%)</td>
<td>24(12.4%)</td>
<td>0.55</td>
</tr>
<tr>
<td>Fun</td>
<td>16(11.4%)</td>
<td>10(7.1%)</td>
<td>26(13.5%)</td>
<td>0.001</td>
</tr>
<tr>
<td>Sharing pictures</td>
<td>2(2.9%)</td>
<td>5(3.6%)</td>
<td>7(3.3%)</td>
<td>0.78</td>
</tr>
<tr>
<td>Education</td>
<td>3(4.3%)</td>
<td>5(3.6%)</td>
<td>8(3.8%)</td>
<td>0.79</td>
</tr>
</tbody>
</table>

**References**

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