The Investigation of the Relationship between Cyber Loafing, Internet Addiction, Information Literacy and Cyberbullying

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Introduction

- Due to the rapid developments in ICT, some real life problems have started to be seen in the virtual environments as well.
- Loafing, bullying, addiction and lack of literacy can be given as examples of those problems that society face.
- When these problems are moved to the virtual environments, they are named as
  - cyber loafing,
  - cyber bullying,
  - internet addiction and
  - information literacy, respectively.
Definitions of Information Literacy and Cyber Loafing

- Information literacy is to define the need for information, find this information, and evaluate and use this information effectively (American Library Association, 1989).

- Cyber loafing is defined as non-productive use of time on the internet (Ugrin, Pearson, & Odom, 2007).
Definitions of Internet Addiction and Cyber Bullying

- Internet addiction means harmful and uncontrolled use of internet (Ekşi, 2012).

- "Cyber bullying involves the use of information and communication technologies to support deliberate, repeated and hostile behavior by an individual or group that is intended to harm others" (Belsey, 2007).
Theoretical Framework

- According to Maslow (1943),
  - there are some hierarchical needs of humans that need to be fulfilled orderly.

- These hierarchical needs are physiological, safety, relationships, self-esteem and self-actualization from lower to higher needs of humans, respectively.

- This hierarchy has some implications for education as well.

- The main fact is that it is hard for an individual to learn effectively without feeling safe because learning is an inherently social process.
Significance

- Preventing cyber bullying is of great significance in order not to disrupt cyber victims’ psychologies.
- And to do this, first of all, the underlying reasons of cyber bullying should be comprehensively understood (Eroglu, 2011).
Aim

- It was aimed to investigate the relationship of cyber bullying with cyber loafing, internet addiction and information literacy within the scope of this study.
- Besides, the effects of some demographic variables on the cyber bullying were investigated as well.
Research Questions 1

1) Is there a statistically significant relationship between cyber bullying and
   1a) internet addiction
   1b) cyber loafing and
   1c) information literacy?
Research Question 2

2) Do the following variables have a statistically significant effect on cyber bullying?

2a) Gender
2b) Age
2c) Education status
2d) Occupation
2e) The most frequently used device to connect internet
Method
Study Group

- A total of 181 voluntary participants, mostly undergraduate and graduate students, constituted the study group of the study.
- Participants are mostly women (59.7%).
Data Collection Tools

Five data collection tools were employed.

1) Demographic information questionnaire
2) Information literacy scale
3) Internet addiction scale
4) Cyber loafing scale
5) Cyberbullying scale

All scales are valid and reliable.
Data Collection and Data Analysis Processes

- Data were collected through Google Forms, an online scale development platform.
- After conducting Kolmogorov-Smirnov normality test, it was ascertained that the data strongly violated the assumption of normality.
- Therefore, Spearman’s rank correlation coefficient to check correlation and Kruskal-Wallis test to check the cause and effect relationship were employed.
Findings
## Research Question 1

**Table 1.** The findings regarding the relationship of cyber bullying with internet addiction and information literacy

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factors</th>
<th>Cyber Bullying</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>r</td>
</tr>
<tr>
<td><strong>Cyber Loafing</strong></td>
<td>Minor cyber loafing</td>
<td>.147*</td>
</tr>
<tr>
<td></td>
<td>Serious cyber loafing</td>
<td>.288**</td>
</tr>
<tr>
<td><strong>Internet Addiction</strong></td>
<td>Lost of control</td>
<td>.227**</td>
</tr>
<tr>
<td></td>
<td>Desire to stay online more</td>
<td>.240**</td>
</tr>
<tr>
<td></td>
<td>Negativeness in social relations</td>
<td>.289**</td>
</tr>
<tr>
<td><strong>Information Literacy</strong></td>
<td>Defining information needs</td>
<td>-.263**</td>
</tr>
<tr>
<td></td>
<td>Access to information</td>
<td>-.249**</td>
</tr>
<tr>
<td></td>
<td>Use of Information</td>
<td>-.199**</td>
</tr>
<tr>
<td></td>
<td>Ethical and legal settings in use of information</td>
<td>-.334**</td>
</tr>
</tbody>
</table>

* *Significant at the level of .05.*
** **Significant at the level of .01.*
Research Question 1

Table 2. The variables related to cyber bullying

<table>
<thead>
<tr>
<th>Variables</th>
<th>The direction of correlation with cyber bullying</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyber loafing</td>
<td></td>
</tr>
<tr>
<td>Serious cyber-loafing</td>
<td>+</td>
</tr>
<tr>
<td>Minor cyber-loafing</td>
<td></td>
</tr>
<tr>
<td>Internet addiction</td>
<td></td>
</tr>
<tr>
<td>Lost of control</td>
<td>+</td>
</tr>
<tr>
<td>Desire to stay online more</td>
<td>+</td>
</tr>
<tr>
<td>Negativeness in social relations</td>
<td>-</td>
</tr>
<tr>
<td>Information literacy</td>
<td></td>
</tr>
<tr>
<td>Defining information needs</td>
<td></td>
</tr>
<tr>
<td>Access to information</td>
<td></td>
</tr>
<tr>
<td>Use of information</td>
<td></td>
</tr>
<tr>
<td>Ethical and legal settings in the use of information</td>
<td>-</td>
</tr>
</tbody>
</table>
### Research Question 2

#### Table 3. The relationship of cyber bullying with various variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Rank</th>
<th>x</th>
<th>p</th>
<th>Differences**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>25.04</td>
<td>1.58</td>
<td>88.72</td>
<td>.551</td>
<td>.458</td>
<td>Fark Yok</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>28.73</td>
<td>10.79</td>
<td>94.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>Below 25¹</td>
<td>27.52</td>
<td>8.33</td>
<td>59.55</td>
<td>7.162</td>
<td>.028*</td>
<td>1&gt;3</td>
</tr>
<tr>
<td></td>
<td>Between 25–34²</td>
<td>26.50</td>
<td>6.98</td>
<td>49.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Above 35³</td>
<td>24.17</td>
<td>.35</td>
<td>39.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education status</td>
<td>Associates' degree or below¹</td>
<td>24.08</td>
<td>.14</td>
<td>89.33</td>
<td>18.077</td>
<td>.000*</td>
<td>2&gt;4, 3&gt;4</td>
</tr>
<tr>
<td></td>
<td>Undergraudeute²</td>
<td>26.86</td>
<td>7.70</td>
<td>100.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master³</td>
<td>27.77</td>
<td>9.21</td>
<td>108.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHD⁴</td>
<td>25.06</td>
<td>2.94</td>
<td>69.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td>Academician¹</td>
<td>24.79</td>
<td>1.55</td>
<td>44.46</td>
<td>13.936</td>
<td>.016*</td>
<td>1&lt;4, 2&lt;4</td>
</tr>
<tr>
<td></td>
<td>Teacher²</td>
<td>24.18</td>
<td>.40</td>
<td>35.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clerk³</td>
<td>31.02</td>
<td>16.65</td>
<td>50.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student⁴</td>
<td>28.27</td>
<td>8.87</td>
<td>64.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other⁵</td>
<td>25.83</td>
<td>3.60</td>
<td>54.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not working⁶</td>
<td>24.85</td>
<td>.78</td>
<td>43.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The most frequently used device to connect internet</td>
<td>Mobil devices</td>
<td>25.80</td>
<td>6.19</td>
<td>92.08</td>
<td>3.540</td>
<td>.170</td>
<td>Fark Yok</td>
</tr>
<tr>
<td></td>
<td>Notebook/netbook</td>
<td>27.23</td>
<td>5.69</td>
<td>94.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desktop</td>
<td>27.94</td>
<td>12.30</td>
<td>71.48</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at the level of .05.
Research Question 2

Figure 1. Factors affecting cyber bullying

- Gender
- Age (Below 25 > Above 35)
- Education status (Undergraduate and master > PHD)
- Occupation (Student > Academician and teacher)
- The Most Frequently Used Device

Dashed line means non-significant effect, while straight line means significant effect.
Results
The high level of information literacy results as low level of cyber bullying in internet users’ behavior.

The fact is that information literacy construct includes the factor of ethic.

Involving in cyber bullying activities can be regarded as highly unethical.

It could be easier to understand the negative correlation between information literacy and cyber bullying.
Suggestions

- In this study, as data did not ensure assumption of normality multiple hierarchical regression analysis could not be performed.
- Therefore, findings do not mean a cause and effect relationship.
- In future studies, hierarchical regression analysis can be performed to unearth a cause and effect relationship.
Suggestions Cont.

- It was seen that study groups of cyber bullying studies consist mostly of primary and secondary school students.
- More studies focusing on undergraduate as well as graduate students may be carried out.
Suggestions Cont.

Since the relationship of ethic and internet addiction with cyber bullying was well proven in this study, any studies/initiatives contributing to ethical usage of internet and solving the problem of internet addiction can also have a positive influence upon the diminishing of the cyber bullying behavior.
References


References Cont.


Thank You!