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The Investigation Of Relation Between Cyberloafing Activities And Cyberloafing Behaviors In Higher Education

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Abstract

It has begun to emerge negative conditions in the process of learning and teaching with the use of internet technologies for educational environment. One of these conditions is that students have inclined to use internet for personal purposes rather than use PC labs to fulfill given learning tasks. This state has been expressed as cyberloafing. There are internal and external constructs that cause cyberloafing. In this study, it has been researched the relation between cyberloafing behaviors and cyberslacking activities of higher education students by analyzing data acquired by 215 higher education students. Cyberloafing behaviors and cyberslacking activities of students have been acquired by assessment instruments based on likert kind of self-reporting. According to results of this study, while salvation, escape, and development behaviors of cyberloafing have not been statistically significant, a significant relation between addiction behavior and the reason of inclining to cyberloafing have been found.

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1. Introduction

When we enter in PC labs in computer programming lesson, whereas we expect students to open programming editor software on their computer screens, we often observe that facebook, twitter, virtual game websites, and simultaneous messaging programs are open. In fact, PC labs are suitable platform for task-based learning, and also there is no online activity in learning tasks given to students in programming lesson. This situation can be explained by cyberloafing. Cyberloafing has been explained as personal usage of internet apart from tasks of staff in job environment (Lim, 2002; Philips, & Reddie, 2007; Blanchard & Henle, 2008). However, schools are an education institution, and students have duties. These duties are the tasks that we call learning tasks, and which we aim students to learn while fulfilling these tasks. Kalaycı (2010) has stated cyberloafing as "the tendency and/or behavior of students to use internet irrelevant to lesson in lesson period". From this point of view, it is necessary to broaden the description of the cyberloafing: Inclining to personal tasks including internet use, and unrelated tasks to main task at that moment can be referred as cyberloafing.

Particularly students access internet from PC labs in schools. However, the PC labs are the platform that students fulfill their learning tasks for development/utilization skills. We have expressed cyberloafing as students use internet

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for the purpose of another usage instead of learning tasks that we expect them to fulfill in the PC labs. In this case, one of the important subjects that should be examined is that: the justification of students to incline cyberloafing in PC labs during lesson.

In researches held for to find answer to this situation, various internal and external constructs that cause this behavior have been found (Kalaycı,2010; Chen & Ross & Yang; 2011). Nevertheless, cyberloafing activities of students and the internal dynamics that incline students to such activities are the subjects of this research.

Doorn (2011) set forth that cyberloafing has a multidimensional structure through the studies that done for definitions and dimensions of cyberloafing with the internet usage in the work environment. In this context, Doorn (2011) has explained four different behaviors of cyberloafing in his study. The four behaviors of cyberloafing were: development, recovery, deviant and addiction behavior. Development behavior considered the learning ability of Cyberloafing. Furthermore, Recovery behavior viewed cyberloafing as a way to recover from learning activities. Deviant behavior considered the engagement in cyberloafing to avoid learning activities. The last behavior was the addiction behavior, related to the compulsory use of cyberloafing activities.

Doorn (2011) has described these constructs as follows;

Development behavior; developmental behavior considers the process of cyberloafing as a potentially source for learning. Cyberloafing from this point of view provide an increase of skill which could be used in future activities by students to benefit students.

Recovery behavior; recovery behavior takes the health of the student into account. Cyberloafing can reduce discomfort and has positive effects on the student and instruction.

Deviant behavior; the deviant behavior considers cyberloafing as unwanted behavior aimed against the instruction. This behavior clearly considers cyberloafing as behavior with negative consequences (e.g. decreased productivity) for instructions.

Addiction behavior; this behavior could be caused by engaging in cyberloafing as a habit and could result in problematic behavior.

Revealing the relation between levels of cyberloafing and justification of students' appealing to cyberloafing as complementary of learned knowledge at application platform in PC labs will provide to restructure learning tasks by planning the instruction in PC labs which are learning environments. With this new restructure, the productivity and efficiency of spending time of students in PC labs will increase. In this regard, we aim to put forth that there is a relation between internal constructs (i.e. salvation behaviour) that are justifications of students in higher education for applying to cyberloafing, and levels of fulfilling cyberloafing activities of students.

2. Method

The relation between cyberloafing activities and the reasons of inclining to these activities have been searched by date acquired from 215 higher education students. This study was held on higher education students at Hacettepe University in Turkey in 2011-2012 school yearss. Cyberloafing activities and cyberloafing behaviors questionnaire was applied to first, second, third and fourth grades students of Hacettepe University, Faculty of Education, Department of CITE(Computer and Instructional Technologies Education). These students have had at least one experience in PC labs, and answered the questions in the survey in parallel with that experience. Of the 215 respondents, 103 were female, and 112 were male. There were 59 respondents in first grade, 48 in the second, 57 in the third and 51 respondents in fourth grade.

To determine the cyberloafing activities of students, the updated version, developed by researchers, of the scale that the original version was developed by Blanchard and Henle (2008), and the adaptation to Turkish, validity, and credibility done by Kalaycı (2010) was used. For determining the constructs causing cyberloafing activities of students, 12 point scale proposed by Doorn (2011) was used. Both scales are self-reporting kind of assessment instrument. In the application part of this study, data gained by students was used; structural equation model was practiced upon revealing the relation between cyberloafing activities and reasons of cyberloafing activities.

3. Conclusions and Implications

Descriptive statistics regarding cyberloafing activities of respondents are given in Table 1. According to this table, it has been reached the finding (mean=4.20; std. deviation=0.91) that students mostly check their e-mails during lesson. Being smaller standard deviation has indicated that the respondents have shown a homogeneous distribution. Visiting the social networks (facebook, twitter, etc) is in the second rank (mean=3.74; std. deviation=1.23). With mean=3.47; std. deviation=1.26 finding, visiting the newspaper sites is in the third rank as cyberloafing activities applied by students.

Table 1. Descriptive Statistics of Cyberloafing Activities

| Cyberloafing Activities | Mean | S. D. |
|--|-------------|--------------|
| I engage cyberloafing in order to | | |
| M1. ...shop online. | 2.07 | 1.15 |
| M2. ...visit holiday/ travel sites. | 1.42 | 0.79 |
| M3. ...visit interesting (picture, video, mottos, etc.) sites. | 2.80 | 1.08 |
| M4. ...collect information about notions unrelated to lesson. | 2.69 | 1.02 |
| M5. ...search out biographic information of persons in search engines. | 2.20 | 1.13 |
| M6. ...pursue interesting subjects in search engines. | 2.61 | 1.18 |
| M7. ...visit web sites about banking or finance. | 1.42 | 0.84 |
| M8. ...visit online shopping sites. | 2.03 | 1.16 |
| M9. ...visit auction sites (i.e. ebay.com, amazon.com) | 1.65 | 0.92 |
| M10. ...visit chat rooms. | 1.64 | 1.03 |
| M11. ...book accommodation for travel/holiday. | 1.28 | 0.66 |
| M12. ...visit sites about finding job or career. | 2.00 | 1.09 |
| M13. ...play online game. | 1.84 | 1.09 |
| M14. ...develop my personal web page. | 2.04 | 1.15 |
| M15. ...check my e-mails. | 4.20 | 0.91 |
| M16. ...visit my discussion groups. | 2.84 | 1.25 |
| M17. ...visit virtual communities. | 2.73 | 1.19 |
| M18. ...download file. | 2.87 | 1.39 |
| M19. ...read blog pages. | 2.29 | 1.07 |
| M20. ...visit news groups and notice boards. | 3.11 | 1.19 |
| M21. ...receive and send instant message. | 2.67 | 1.19 |
| M22. ...visit news sites. | 3.47 | 1.26 |
| M23. ...visit web sites about sports. | 2.28 | 1.40 |
| M24. ...to check the weather forecast. | 2.31 | 1.15 |
| M25. ...visit social networks. | 3.74 | 1.23 |

Descriptive statistics regarding cyberloafing behaviors of respondents can be given in Table 2. According to this table, the cyberloafing behaviours of students have been seen as “recover from work” (mean=3.12; std.

deviation=1.09), “take a rest” (mean=3.63; std. deviation=0.91), “relax” (mean=3.43; std. deviation=1.10). These three approaches are related to recover construct of cyberloafing behaviors. In addition to this, as an indicator of addiction construct, it has been seen that students have adopted “follow developments on sites” approach as a justification of inclining cyberloafing activities.

Table 2. Descriptive Statistics of Cyberloafing Behaviors

| Cyberloafing Behaviors | Mean | S.D. |
|--|------|------|
| G1. ...recover from work (Recovery) | 3.12 | 1.09 |
| G2. ...avoid work tasks (Deviant) | 2.03 | 1.04 |
| G3. ...learn new skills (Development) | 2.61 | 1.08 |
| G4. ...follow developments on sites (Addiction) | 3.23 | 1.06 |
| G5. ...take a rest (Recovery) | 3.63 | 0.91 |
| G6. ...avoid thinking of work tasks (Deviant) | 2.68 | 1.25 |
| G7. ...development myself (Development) | 2.97 | 1.17 |
| G8. ...visit one or multiple sites daily (Addiction) | 2.82 | 1.32 |
| G9. ...relax (Recovery) | 3.43 | 1.10 |
| G10. ...postpone work tasks (Deviant) | 2.47 | 1.25 |
| G11. ...acquire abilities (Development) | 2.59 | 1.15 |
| G12. ...visit one or multiple sites out of habit (Addiction) | 1.94 | 0.97 |

Cyberloafing activities and internal factors that incline students to such activities were researched by structural equation model, and model predictive values are given in Figure 1. In addition, model-data fit has been found in satisfactory level (RMSEA=0.075; CFI=0.94; NNFI=0.93; IFI=0.94).

Unstandardized parameters of model predictive have been reported in Figure 1. According to this, upon the inclining of students to cyberloafing activities, the recovery construct is probable to have an effect in the level of -0.26; however, it has been found statistically insignificant ($t=-0.63$; $P>0.05$). According to this, it has been understood that recovery construct is not one of the reasons for students to incline to cyberloafing activities. Deviant construct has an effect in the level of 0.13; however, it has been found statistically insignificant ($t=0.67$; $P>0.05$). Consequently, it has been understood that deviant construct is not one of the reasons for students to incline to cyberloafing activities. Development construct has an effect in the level of -0.20; however, it has been found statistically insignificant ($t=-0.96$; $P>0.05$). Consequently it has been understood that development construct is not one of the reasons for students to incline to cyberloafing activities. Addiction construct has an effect in the level of 0.99; however, it has been found statistically insignificant ($t=2.20$; $P>0.05$). Consequently, it has been understood that the addiction construct is one of the reasons of inclining to cyberloafing activities.

According to results of the research, level of inclining to cyberloafing activities is independent from levels of escape, salvation, and development that are internal construct. However, if the addiction levels of students increase, levels of inclining to cyberloafing activities increase. For this reason, the addiction behaviors of students should be taken into consideration while structuring education process in PC labs in higher education. Learning tasks can be arranged and structured by rehashing. Features of students shown addiction behavior can be considered.

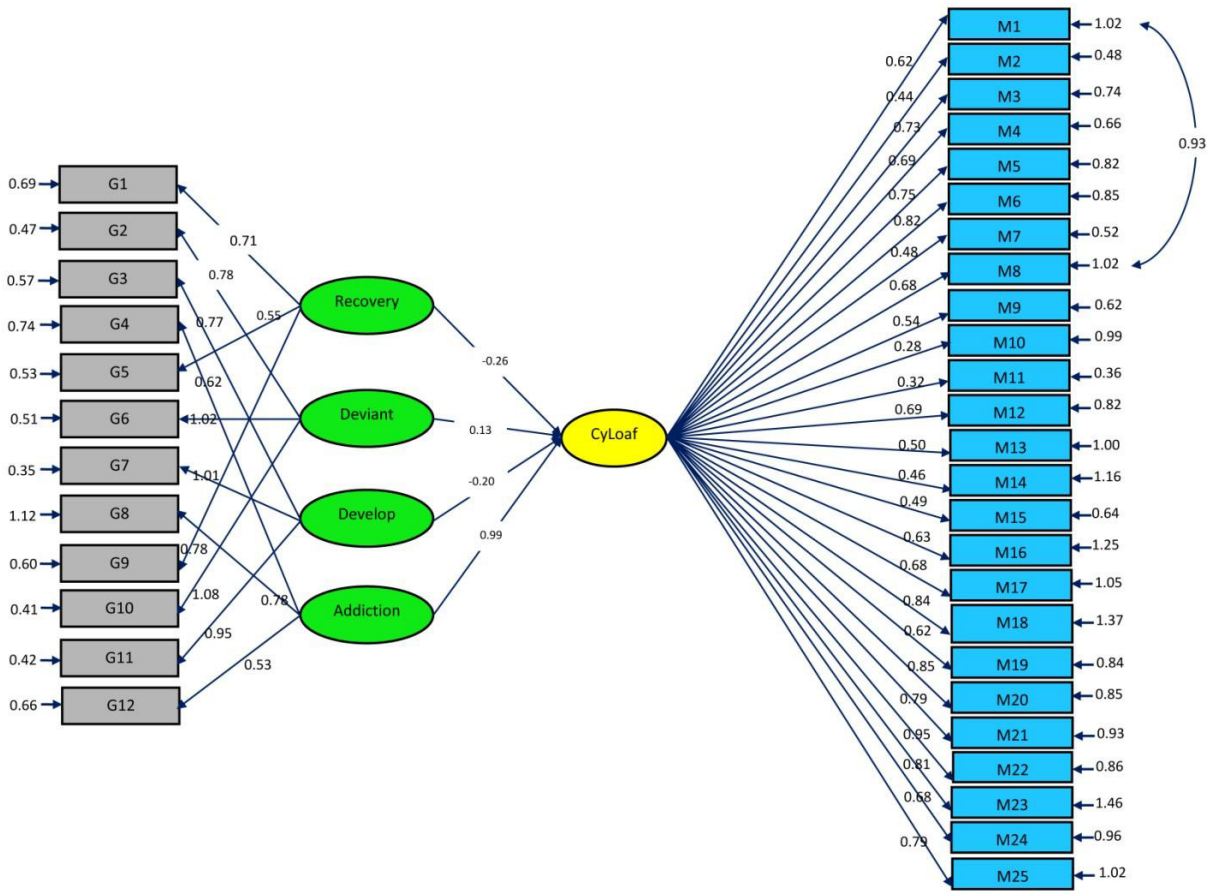


Figure 1- Structural equation modeling of Cyberloafing

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