Academic Flow and Cyberloafing

Listyo Yuwanto

Universitas Surabaya (UBAYA), East Java, Indonesia

Academic flow is a motivational process that is important for students in the learning process. Academic flow causes students to concentrate, enjoy, and intrinsic motivation in the learning process. Conversely, students with low academic flow will experience cyberloafing. Limitations of research relationship between academic flow and cyberloafing in academic context so far became the basis of this research. Research subjects were 314 students through incidental sampling. Result showed a negative significant correlation between academic flow and cyberloafing ($r = -0.312$, $p = 0.001$). There is a negative correlation between cyberloafing and absorption ($r = -0.220$, $p = 0.011$), enjoyment ($r = -0.232$, $p = 0.024$), and intrinsic motivation ($r = -0.265$, $p = 0.003$). This means that the higher students academic flow score is, the lower the cyberloafing score will be on students, such as chat, games, music, and videos that are not related to the learning process. It is necessary to manage the learning process in achieving flow conditions, especially regarding the expectancy and value as personal resources. The results are discussed further.

Keywords: academic flow, cyberloafing, expectancy, value

Introduction

Flow is a positive psychological condition proposed by Csikszentmihalyi (2014) who definded the conditions when the individual entirely involved in the activities undertaken. Bakker (2008) described three characteristics of flow that is absorption, enjoyment, and intrinsic work motivation. Absorption is the ability to focus or concentrate on activity. Enjoyment is a positive affect or comfort when doing the activity. Intrinsic work motivation is an internal drive as a driving force to do the activity.

Flow can occur in various areas of life, such as work, playing music, exercising, and academic. Flow that occurs when running academic activity is called academic flow. Academic flow is required by students when conducting lectures, studying, and doing assignments (Yuwanto, 2013). Referring to the job demands-resources model (JDR) theory (Bakker & Demerouti, 2007), flow includes the motivational process that leads to positive outcomes. Flow can cause individual performance to be better than when not experiencing flow (Csikzentmihalyi, 1990).

Benefits of flow when running academic activities, such as students can be more focused, innovated or creative (Csikszentmihalyi, 2014). Flow can increase motivation so that can increase student involvement in academic activity. Learning materials become more easily absorbed so that better learning outcomes can also be achieved by optimizing learning along with flow conditions (Yuwanto, 2011). Low flows have negative impacts, such as lack of focus, unmotivated, and no enjoyment of activity so prefer to do other activities. One form of behavior that arises when it does not reach the condition of academic flow is cyberloafing.

Listyo Yuwanto, Master Psychology, Faculty of Psychology, Universitas Surabaya (UBAYA).

Cyberloafing is a relatively new topic in scientific literature (Doorn, 2011). Cyberloafing was originally a concept that developed in industrial and organizational areas and was categorized as deviant behavior. Cyberloafing is defined as employees voluntary non-work related use of company provided email and Internet while working (Lim, 2002). Some forms of cyberloafing are as follows: browse sports-related web sites, shop online for personal goods, check non-work-related e-mail, browse investment-related web sites, send non-work-related e-mail, browse entertainment-related web sites, play online games, download non-work-related information, download online games, chat with other people in online chat rooms, and post messages on non-work-related items (Blau, Yang, & Ward-Cook, 2006).

Along with its development, cyberloafing also occurs in academic context including in higher education (Yasar & Yurdugul, 2013). One of the areas where internet is intensively used is the education sector (Arabaci, 2017). Cyberloafing in academic context can be defined as the students' tendency and/or behavior to use internet for the things irrelevant to the course during course hours (Kalayci, 2010). According to Yasar (2013), there are four forms of cyberloafing activity: individual, social, search, and news. These are individual (shopping, travel, job search, carrier, and online banking), social (personal or group chat, social networking sites, discussion boards, instant messaging, and e-mail), search (searching, pictures, video on search engines, etc.), and news (news, sport, weather sites and bulletin boards etc.).

Based on literature searches using several databases, such as Emerald, Springer Link, Google Schoolar, and Proquest, researchers found limited research on the relationship between academic flow and cyberloafing. This research empirically examines the relationship between flow and cyberloafing.

Method

Research subjects 314 (28.1% are male and 71.9% are female) students who are willing to be the subject of research (incidental sampling). In order to measure academic flow, the research uses the Flow Inventory for Student (Yuwanto, 2011) that consist of three aspects which are absorption, enjoyment, and intrinsic motivation. The Flow Inventory for Student consist of four item absorption, three item enjoyment, and three item intrinsic motivation. The Flow Inventory for Student has reliability of Cronbach's $\alpha = 0.765$.

Cyberloafing is measured using "cyber loafing activities scale" developed by Blanhard and Henle (2008), adopted to Turkish by Kalayci (2010), and updated by Yasar (2013). "Cyber loafing activity scale" consists of 23 with four dimensions (individual, search, social, and news). Cyber loafing activity scale has reliability Cronbach's coefficients $\alpha = 0.940$ for individual, 0.770 for search, 0.840 for social, and 0.760 for news (Keser, Kavuk, & Numanoglu, 2016).

In order to find the correlation between academic flow and cyberloafing, the product moment correlation technique from Pearson is used.

Result and Discussion

The result of hypothesis testing in Table 1 shows a negative correlation between academic flow and cyberloafing ($r = -0.312$, $p = 0.001$). All aspects of academic flow with cyberloafing are negatively correlated. The relationship between absorption and cyberloafing ($r = -0.220$, $p = 0.011$), enjoyment and cyberloafing ($r = -0.232$, $p = 0.024$), intrinsic motivation and cyberloafing ($r = -0.265$, $p = 0.003$).

High academic flows indicate academic tasks are considered challenging, fun, or beneficial for students. This is in accordance with the opinion of Csikszentmihalyi (2014) characteristics of academic tasks play a role

in the occurrence of flow conditions. The characteristics of these tasks provide challenges and individual development. Flow as a motivational process can be achieved based on individual personal conditions. This is in accordance with the theory of job demands resources model which states the personal factors that underlie the occurrence of the process of motivational called personal resources. Some forms of personal resources such as expectancy and value can explain the occurrence of flow conditions.

Table 1

Correlation of Academic Flow and Cyberloafing

		Cyberloafing
Academic Flow	*r*	-0.312[**]
	p	0.001
Absorption	*r*	-0.220[**]
	p	0.011
Enjoyment	*r*	-0.232[**]
	p	0.024
Intrinsic Motivation	*r*	-0.265[**]
	p	0.003

Note. [**] $p = 0.01$.

High academic flow also indicate a high self-efficacy. This is in line with the statement of Csikszentmihalyi (1990) that self-efficacy facilitates the occurrence of flow conditions. Perceived tasks are not challenging, unattractive, or unhelpful to self-development makes it difficult to concentrate. Behavioral impacts, such as unmotivated tasks and not enjoying the task. Difficult students concentrate, do not enjoy academic activities, and low motivation when doing academic activities including the characteristics of low academic flow. This became the basis of the students to avoid the task and cyberloafing in the learning process.

The negative relationship between academic flow and cyberloafing is discussed further through absorption, enjoyment, and intrinsic motivation. Absorption is negatively correlated with cyberloafing ($r = -0.220$, $p = 0.011$). When students are able to focus and not easily switch attention while studying, working on paper, and discussion with lecturers, then the task has a high value. The completion of the task will not be distraksi with cyberloafing because there is an outpouring of psychic energy that is regular and continue the impact of the students are not disturbed work on other tasks. Students having self-efficacy usually have a belief that equality exists between abilities and tasks. Self-efficacy causes the students to devote their attention and concentration to academic tasks so that they are not easily disturbed by other activities including cyberloafing.

Enjoyment has a negative correlation with cyberloafing ($r = -0.232$, $p = 0.024$). Enjoyment is one of the characteristics of positive affects. When students have enjoyment like the feeling of fun and comfortable doing academic tasks, then the academic task has a high value. The tasks are considered important, fun, then in doing it also comes a sense of fun. Tasks with these consequences have an impact on low cyberloafing behavior.

Self-efficacy related to completing the academic task, it is important for students to feel the psychological comfort in doing the task. Students with high self-efficacy perceive equality of task and ability. The impact students are able to feel comfortable while working on it. The opposite of comfort while doing academic activitiy is anxiety. Anxiety occurs because students have low self-efficacy belief in completing academic tasks. Anxiety encourages students to do other activities more fun by doing cyberloafing.

The relationship between intrinsic motivation and academic procrastination is negative ($r = -0.265$, $p = 0.003$). Students with high intrinsic motivation assess the task as an important activity. Students undergoing

academic processes, such as doing assignments, discussions, lectures not because of external factors or to get rewards from others. Students undergo the academic process due to self-development. Students who have high intrinsic motivation have clear goal on the activities it does. Intrinsic motivation can prevent students from cyberloafing.

Conclusion

In conclusion, the results show that academic flows and cyberloafing are negatively correlated. Cyberloafing is a common behavior in the midst of technological developments and increasingly easy Internet access. In the academic context, cyberloafing includes behaviors that do not support the optimization of the learning process. Looking for news information that is not related to learning materials, playing games, chat with friends, or other forms of cyberloafing can disrupt academic processes, such as discussion, material understanding, recall, and completion of tasks.

Cyberloafing should be avoided to prevent the negative effects of cyberloafing. Potential negative impact of cyberloafing personally, such as stress, frustration, anger, guilt, or health problems when academic tasks accumulate or lack understanding of learning materials. Professional impacts, such as low academic grades or delays in completing tasks and studies. Cyberloafing is a manifestation of low academic flow of students. Cyberloafing is rated as a more enjoyable activity for students as a form of pleasure seeking and avoiding unattractive tasks.

Academic flow is a motivational process to prevent cyberloafing. Students avoid cyberloafing by improving academic flow. How to improve academic flow through discovering the meaning of the academic process for students. The discovery of the meaning of academic assignment for students is important. When the meaning of academic task is found, the student knows the value of the task. If the academic task has an important value then the student can focus, enjoy, and have internal motivation to do it. If the academic task has a low score for the student, the student needs to find the important value of the task.

Self-control and self-efficacy are also important factors for students in achieving flow conditions. The university is expected to help students have high value and self-efficacy in every academic activity. Procurement study skills seek the meaning and value of each academic activity. Competent faculty, adequate learning facilities need to be met in order to facilitate flow conditions.

Past studies of cyberloafing imply both positive consequences (e.g., a way of personal learning or a recovery from work activities) and negative consequences (e.g., decreased job performance or job engagement) (Doorn, 2011). Further research can examine the relationship between academic flow, cyberloafing, and the impact of cyberloafing.

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