

STUDENT CREATIVITY IN THE COLLEGE CAMPUS ENVIRONMENT: ITS CORRELATION WITH CREATIVE EDUCATION ENVIRONMENT AND CAMPUS SATISFACTION

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ABSTRACT

Creativity is one of the keys to the sustainable development of colleges and their students. Focusing on this issue, this study builds up a theoretical framework which involves the antecedents and consequences of creativity in the college campus environment. Based on the existing literature, the study argues that creative campus environment can significantly influence student creativity. In addition, it proposes that student creativity can significantly affect their satisfaction with the campus. The evidence gathered from the preliminary group discussions with college students in Japan has partially approved the theoretical model. Directions for future studies and implications for college campus management are also discussed.

Keywords: student creativity; campus environment; campus satisfaction

1.0 INTRODUCTION

Sustainability is considered as the "continued development or growth, without significant deterioration of the environment and depletion of natural resources on which human well-being depends" (Business Dictionary, 2017). This term, and the importance that it carries, was firstly observed in the early 1970s (Hosey, 2016). Nowadays, sustainability has become a critical part of the development plans of many countries and businesses. According to Hosey (2016), "sustainability is not a trend, it is an ethic, and it can never become unfashionable."

One of the tools that human beings have to achieve sustainability is education (The United Nations Educational, Scientific and Cultural Organization [UNESCO], 2017). Under the Education for Sustainable Development initiative, UNESCO supports countries to focus their education efforts on the key issues of climate change, biodiversity, disaster risk reduction, water, cultural diversity, urbanization and lifestyles. UNESCO (2017) stresses that "empowering learners to live responsible lives and to address complex global challenges means that education has to promote competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way." In addition, "new approaches to learning" must be discovered and implemented in order to sustain the long-term development goals (UNESCO, 2017). In other words, creativity (as in "empowering," "critical," "imagining" and "new" used in the statements of UNESCO) should be defined as the key of sustainability education. Academically speaking, creativity is regarded as the "mental characteristic that allows a person to think outside of the box, which results in innovative or different approaches to a particular task" (Business Dictionary, 2017).

Education may be undertaken in the small context of families, or in the larger context of schools and/or colleges. In such environments, learners or students always are

included in the major purposes, processes, and outcomes of the education plans. Student's satisfaction with campus environment (Makino and Mori, 2002), in particular, is one important indicator of the success of education activities. This observation holds true with sustainability education. However, how creativity and satisfaction are linked together in the education campuses and in the case of students remains an unknown issue. In addition, can a creative learning environment create student creativity is another issue that needs further validation, although it has been proved in the work context (Amabile et al., 1996; Ceylan et al., 2008).

The purpose of this paper, therefore, is to build up a theoretical framework on the correlations among the three major variables of creative campus environment, student creativity, and student's satisfaction with campus (campus satisfaction). In addition, a preliminary empirical study is implemented to initially validate the framework. The following sections will discuss the foundation of, and the exploratory evidence on that theoretical framework.

2.0 LITERATURE REVIEW

2.1 Relationship between creative environment and creativity

In a longitudinal study in the U.S. (1987-1995), Amabile et al. (1996) surveyed leaders and members of 306 projects whose creativity levels are defined as either low or high. The findings revealed that high-creativity projects received more positive evaluations of work environment criteria as compared to low-creativity projects. For example, while the "supervisory encouragement" element of the former projects got a mean value of 3.10, that of the latter projects was only 2.63. On the contrary, the "organizational impediment" factor of the low-creativity projects was given a score of 2.46, while the average evaluation of that of the high-creativity projects was 1.91.

In another experimental study with 60 managers in Turkey, Ceylan et al. (2008) found that the existence of several elements in the offices can potentially create more creativity. Specifically, "window" can explain 41.8% of the variance of potential creativity ($t = 2.328$, $p = 0.031$), while "computers" can explain 48.7% of that of the same variable ($t = 2.366$, $p = 0.029$). It should be noted that "window" and "computers" are regarded as the important components of high-creativity offices.

2.2 Relationship between creativity and satisfaction

Shalley et al. (2000) reported the findings of a study conducted with approximately 2,000 respondents (average age of 39) in the U.S. It is noted among the findings that the "required creativity" of the job significantly and positively affected job satisfaction ($b = 2.32$, $p < 0.01$). In addition, this variable also significantly but negatively influenced the "intention to leave" ($b = -2.06$, $p < 0.01$).

Choi (2004) extended the findings of Shalley et al. (2000) to the education context by another study with approximately 300 students and 30 instructors in North America. It was revealed that students' "self-rated creative behavior" and "instructor-rated creative behavior" significantly and positively correlated to "course satisfaction" ($r = 0.27$ and 0.21 , $p < 0.001$). The further analysis added that "required creative abilities" was a significant predictor of "course satisfaction" in a linear model ($\alpha = 0.20$, $p < 0.01$).

2.3 Hypotheses and theoretical model

The previous review of the literature has shown the evidence to theoretically propose that there are some linear correlations among creative environment, creativity and satisfaction. However, the context of this study is college campus, and the target of the study is college students. Thus, the two hypotheses (H) of the study are developed as follows.

H1. Creative campus environment significantly and positively affects student creativity

H2. Student creativity significantly and positively affects student's campus satisfaction

Together with these hypotheses, a theoretical model is created to visually demonstrate the correlations (Figure 1).

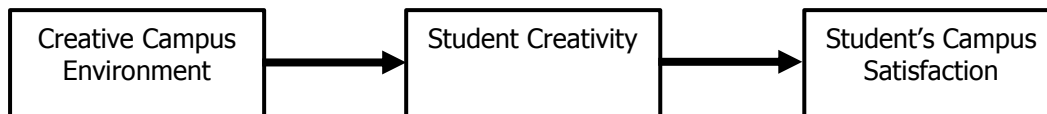


Figure 1: Initial theoretical model

3.0 EMPIRICAL STUDY

Considering the lack of the direct theoretical evidence, the proposed model was initially validated by an exploratory qualitative research. Specifically, some group discussions were conducted with high school and college students of a national college of technology (which includes both high school and university levels) in Japan to gather the data. Two unstructured discussions (Richardson et al., 1965; Rubin and Rubin, 1995) were undertaken in the late 2016 and early 2017 under that plan. The participants are the students of the researcher at the above-mentioned college, and participated in the study on a voluntary basis. Each discussion lasted for approximately 20-30 minutes, and centered on the three elements of the theoretical model (student creativity, creative campus environment, and student's campus satisfaction). The language of the discussions is Japanese, and their contents are deductively analyzed (Elo and Kyngäs, 2008) to verify the theoretical model. The major contents are then summarized and translated into English by the researcher to report in this paper. The findings are as follows.

3.1 The first discussion with the 3rd grade high school students (n = 4)

The discussion started off with a question about creativity (i.e., what is creativity?). According to the students, creativity is "the creation of the new things." Since the school in which they are attending is a technological one, the students related creativity with the industries (e.g., machines) at first. They then proceeded with the more modern creative entities, such as YouTube. However, such impressions are implanted in their heads by the "teachers."

The later discussion further revealed the images of the creative students. Accordingly, such students have their own motivations to study, and have the strong mental abilities to deal with the daily tasks on their own way. To some extents, they usually are considered as highly spirited (e.g., vigor, energetic, cheerful, and noisy). However, sometimes they may

forget about their main tasks of study, which will lead to low grades or failed exams. In other cases, the students mentioned the lack of concentration during class time.

Responded to the question of what can create creativity, the students mentioned the purpose of the school. Specifically, the kind of people that the school wants to educate and train is the foremost important factor. The purpose of the school, and that of the students, should be matched. When this condition is met, the students can enjoy their study more; in other words, some level of satisfaction can be achieved. The similar mechanism is also observed when the students described the merits that the creative students can have in the campus. Specifically, the creative students can do what they want, and can get good grades; they, therefore, can be happy with their school work. Furthermore, the creative students may be more successful in their future careers (e.g., knowing how to deal with the actual work situations). Another merit is that their work capacities are higher than those of the average employees.

Another factor which really contributes to the nurture of student creativity is "teacher creativity." According to the students, a creative teacher uses his own ideas, not the textbooks, to teach the classes. Some teachers are regarded as more creative than others. However, in a further note, the students mentioned that in the modern Japanese society at large, creativity is not encouraged since the seniors don't want their juniors to be creative.

The students also pointed out "freedom" as an important characteristic of a creative environment. Freedom, in the definition of the students, can be regarded as the number of classes that they can freely select (i.e., selective subjects). Compared to other high schools, they are enjoying more freedom. However, compared to other universities, their college is less free. The reasons are mainly counted for the limitation of facilities (e.g., smaller size), and the different purposes of the education activities (e.g., those in universities are more directed toward business activities, which may facilitate more creative ideas and human resources).

3.2 The second discussion with the 3rd year college students (n = 5)

The second discussion began with the same question asked in the previous one (what is creativity?). The students defined creativity as the "thinking and making of new things." Next, the students described a creative student as the person who does things on his/her own way, or who has his/her originality. However, they noted that there is not a chance and/or necessity to be creative in their college; therefore, they don't perform their creativity. This holds true with the Japanese society as a whole. As a further note, the students said that the major/focus of the study may differentiate the creativity of the students. For example, students in the manufacturing departments may be more creative than those in the business department of their college.

Moreover, the students mentioned the discussion classes where they can talk out loud their ideas and thoughts as an example of the creative campus environment. They described a creative teacher as the one who makes them think. However, it was difficult for them to recall any concrete examples of a creative teacher that they have met. In a rare recall, they made a comparison between foreign teachers and Japanese teachers in their college. According to the students, foreign teachers are more creative. They may teach a class without relying on textbooks; they teach what the students want to study. When asked how they feel if they take a class of a creative teacher, the students said that they are happy, and they want to do their tasks. In other words, some level of satisfaction is attained.

According to the students of the discussion, the reason of why Japanese students in general are not creative is related to the education tradition in Japan. Specifically, since elementary and junior high school levels, students have not been encouraged to think and act on their own. Overall, Japanese society is not considered as a creative one, although it is creative in the fields of research and manufacturing.

4.0 CONCLUDING REMARKS

The existing literature has suggested that there is a linear correlation among creative environment, creativity, and satisfaction. The preliminary discussions with the students of a national college of technology in Japan have provided some evidence to support that theoretical framework in an education context. Specifically, teacher’s creative teaching methods (as an element of the creative campus environment) have an important impact on student creative behaviors (as the outcomes of student creativity), and in its turns, student creative behaviors can create some influence on student’s satisfaction with college campus. Moreover, it is interesting to note that teacher’s creative teaching methods can have a direct influence on student’s satisfaction, in addition to its indirect impact through student creativity. This observation is in line with that of Choi (2004), in which the latter found that the “current creative climate” of the campus has a significantly positive impact on “course satisfaction” ($\alpha = 0.22, p < 0.01$).

Based on these findings, this study proposes an alternative extended theoretical model on the correlations among creative environment, creativity, and satisfaction in an education context (Figure 2). Future studies are invited to quantitatively validate this model.

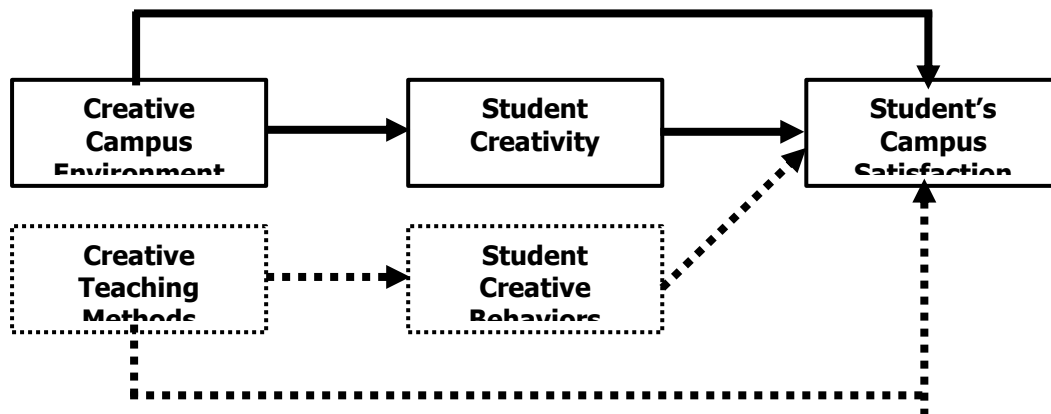


Figure 2: Adjusted theoretical model
Note. Solid line = General model; Dashed line = Sub-model

However, with the existing theoretical and empirical evidence in hands, it is reasonable to expect that student satisfaction is the outcome of both the internal factor (student creativity) and the external element (creative campus environment). When students are happy (i.e., satisfied), their behaviors can be more constructive (Nghiem-Phú, 2015). In other words, students may want to know more about and carry out more practices to attain sustainability once they are happy. Happiness, thus, should be considered as an integral part of sustainability education (O’Brien, 2010). Creating and maintaining a creative campus environment, in this sense, is the key to both student satisfaction and sustainability.

Finally, the preliminary group discussions have produced an unexpected result of the low creativity and the unnecessary of practicing creativity of Japanese students. This, coincidentally, is the problem of the Japanese society at large (Woodrow Wilson International Center for Scholars, 2004). The students who participated in the discussions mentioned the recruitment of foreign teachers as a solution to address this issue from the inside. However, a lot of time and efforts are needed before any significant changes can be sustained.

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