Factors Affecting Major Satisfaction of College Students

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Abstract. This study examined the correlation between the major satisfaction and self-regulated learning engagement such as class participation, flexible thinking and explanation to peers, social interactions with peers and with professors and learning study group, and academic achievement and factors affecting major satisfaction of college students in Korea. The sample comprised 205 females and 348 males. A survey instrument entitled “National Assessment of Student Engagement in Learning” for Korean Universities’ developed from Korean Educational Development Institute (KEDI) was used to collect data about the major satisfaction of college students. Self-regulated learning engagement and explanation to peers, social interactions with peers and with professors and learning study group, and academic achievement were significantly correlated with major satisfaction. The result of a multiple regression analysis showed conducted. And interaction with professors, explanation to other students and study group experiences affect significantly major satisfaction of college students.

Keywords: major satisfaction, self-regulated learning engagement, social interaction, academic outcome

1 Introduction

Student satisfaction is an important indicator related to their academic goal (Liao & Hsieh, 2011), academic performance (Graunke & Woosley, 2005), and later job satisfaction (Nauta, 2007). Chang and Smith (2008) and Noel-Levitz (2011) indicated that college students who are satisfied with school are more likely to be successful. Many researchers contended that the student satisfaction is worthy of investigation, because of its critical importance to academic achievement. Although there has been a fair amount of research on psychological factors associated with college satisfaction, there is little empirical attention that has focused on major satisfaction. However major field is a more immediate environment composed of people and activities with which a student is in daily contact (Nafziger, Holland, and Gottfredson, 1975; p. 132).

Major Satisfaction is an important component of various theories of college student retention and academic gain (Sarah & Crede, 2015). High satisfaction with one’s major can lead to lower drop-out rates, higher persistence, and greater commitment to
the program and the department (Ali & Ahmad, 2011; Allen & Seaman, 2003; Noel-Levitz, 2011; Yukseturk & Yildirim, 2008). Major satisfaction has been found to be related to overall level of well-being and life satisfaction (Lounsbury & Gibson, 2006). Unfortunately, an estimated 50% to 75% of all college students are thinking and drop-out or changing majors which is a disruptive, consequential, and time-consuming process according to literature (Logue, Lounsbury, Gupta, & Leong, 2007; Steel & McDonald, 2000). And more than one-third of college students actually change their major, many presumably because of some dissatisfaction with their major situation, and yet we have little insight and information into how these decisions are made (Walls, 2009).

In Korea, the Ministry of Education announced the university structural reform plans which downsize 160,000 in terms of student numbers by 2022 (Kim, Lee, & Choi, 2015). Most university authorities are trying to reinforce university education quality and competitiveness by establishing long-term vision and strategies for university development, expanding resources for the higher education, and developing its appropriate management system. The school authorities concentrate their energy on increasing enrollment and retention of students through improving major satisfaction and academic gains. Major satisfaction of college students enables institutions to prioritize areas for improvement and facilitates the development of strategic planning (Noel-Levitz, 2011).

Major satisfaction has been mainly focused to associated with academic performance (Graunke & Woosley, 2005), self-efficacy (DeWitz & Walsh, 2002), certainty of career plans (Nauta, 2007) and to be potential as a proxy for later job satisfaction (Corts, Lounsbury, Saudargas, & Tatum, 2000). Unlike academic achievement, there are very few researches on affecting factors of major satisfaction. One study found a positive relationship between major satisfaction and grade point average of college students (Guan, Shiye, Liu, & Yum, 2006). A great number of researches have consistently revealed positive outcomes depending on interaction with faculty and educational outcomes (Kuh & Hu, 2001; Smart et al., 2000, etc.), cooperation with peers and the achievement (Ki & Sax, 2007), and self-regulated learning habits or learning strategies (Connor, 2011; Zimmerman & Martinez-Pons, 1990), respectively.

Most studies have found that there are very positive relations between the academic outcomes and those elements; the more interactive with professors they are, the better outcome there is; the more collaborative with peers they are, the better achievement there is; the more self-directed they become, the greater result there is. And those characteristics make college students feel better. Even though there was an effort to examine those relationships, and plenty of studies dealt with outcomes according to either interactional or self-regulated learning separately, there are only few studies to compare the outcomes depending on both interaction with faculties/peers and self-regulated learning. This comparison would be very important, since our study gives critical insights to learners that they can find their own effective ways of learning and priorities.

Although major satisfaction have apparently not been studied specifically with respect to self-regulated learning engagement, social interaction and academic achievement, it is reasonable to expect to find some of the same significant relationships between those variables and major satisfaction as were found between
those and academic gains. Our rationale for such an expectation is based in part on the idea that major satisfaction is a component of school satisfaction for college students (Chang and Smith, 2008; Nauta, 2007, Noel-Levitz 2011), and school satisfaction is closely related with academic performances (Guan, Shiye, Kiu, & Yum, 2006).

Therefore, this research examined the following research: 1. Are the major satisfaction of college students associated with self-regulated learning engagement (class participation, flexible thinking, explanation to peers), social interactions (with peers, with professors and learning study group), and academic achievement? 2. What are the factors that significantly contribute to the major satisfaction of college students?

2.1 Participants

In this study, 555 students at a large private university in Korea were participated, who answered a survey, called ‘National Assessment of Student Engagement in Learning for Korean Universities’ developed from Korean Educational Development Institute (KEDI). The university is one of a prestigious university in Korea, which is ranked seventh from the 2013 university assessment. The participants consist of 205 females and 348 males.

In the case of age, twenties accounted for 94%, the highest rate of participants. Among them, 539 students (79.5%) have Korean nationality, 10 students (1.8%) have foreign nationality, and only four students (0.7%) have dual nationality. Along with this information, they belong to the department of humanities (9.0%), sociology (23.3%), education (6.7%), engineering (42.1%), natural science (8.9%), medical science (2.9%), art (4.0%), and the like. In terms of their years of college, it appears that participants have studied for 1~2 semester (25.1%), 3~4 semester (23.5%), 5~6 semester (21.0%), 7~8 semester (26.9%), and over eight semester (3.4%).

2.2 Measures

The survey questionnaire in this study has been developed by KEDI, which is based on CEQ(Course Experience Questionnaire) developed in the United States and AUSSE(Australian survey of Student Engagement) developed in Australia. The survey is composed of fifty seven questions in total, and for this research we used question number 13 about GPA, number 29 including 3 questions related to study experience, number 36 including 3 items about class participation experience, number 38 composed of 2 questions related to interaction with peers, number 39 including 4 questions related to learners’ thinking ability & flexible thinking, number 40 including 2 questions about explanation to other students, and number 49 including 13 questions related satisfaction of their major. Four point Likert scale ranging from ‘hardly ever’ to ‘often’ was used in this questionnaire.

Questions of ‘learning study group’ are composed of ‘study group related to the major classes’, study group for the contents except the major classes, and ‘study group about career path and getting a job’. In the case of class participation, the questions are such as ‘how many times students ask during the class’ and ‘how much
the students they participate in presentation or discussions. Questions of interaction with other students include the content about 'how much students help each other in order to achieve class assignment. Also, questions of thinking ability, thinking flexibility and explanation ability to peers consist of the items, such as the frequency of ability to associate with experience or ideas from class, ability to find a solution, to apply to the real world, and the ability to explain to peers. Along with these questions, thirteen major satisfaction questions include various elements, such as a feedback from professors, explanation, the amount of student’s learning and the like. Lastly, questions of interaction with professors include five items in total, such as how much do they interact with each other discussing about course registration, contents of class, grades and their career.

2.3 Data Analysis

In order to answer the research questions, collected data was analyzed as follows using SPSS statistical program (Ver. 18.0). First, descriptive analysis was conducted in order to examine the characteristics of participants, such as a sex, age, years of college, and their department. Second, the equivalence of a factor variance was checked and then t-test was conducted in order to examine difference between interaction with peers and interaction with professors, self-regulated learning engagements, and major satisfaction in accordance with their sexes and GPA. Third, we used Multiple Linear Regression, to examine how three factors; interaction with peers, interaction between professors and students and self-directed learning; affect their GPA.

3 Result

The correlations of these variables were examined (see Table 1). All variables were significantly correlated with major satisfaction of college. The correlation coefficients significantly ranged from 0.10 to 0.60.

In order to examine the elements that affect major satisfaction, a multiple regression analysis was conducted. The result is shown in Table 2.

As a result of statistical significance test of model fit which determines the major satisfaction with the class participation, cognitive character as a flexible thinking, collaborative learning with peers and GPA as independent variables, those variables are deleted from the model because it is non-significant. On the other hand, independent variables including an interaction with professors, explanation to other students and study group experiences are meaningful to the major satisfaction ($F$=18.70, $p<.001$).

As a result of the contribution and significant test that affects the satisfaction with a major class in accordance with each factor, independent variables such as interaction with professors ($\beta=.17$, $t=3.77$, $p<.001$), explanation to other students($\beta=.14$, $t=3.18$, $p<.01$) and study group experiences ($\beta=.10$, $t=2.17$, $p<.05$) are positively related to the satisfaction with a major class. Also on the basis of standardized coefficient, it appears that the most influential factor that affects the major satisfaction is the
interaction with professors, the second of explanation to other students, and the third of study group experiences. Independent variables including the model can explain the 9.3% of the total variance ($R^2 = .093$).

**Table 1.** Correlation analysis between self-regulated learning experiences, social interactions, GPA and major satisfaction

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<td>2. Thinking ability/ flexibility</td>
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<td>3. Explanation to peers</td>
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<td>4. Cooperation with peers</td>
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<td>5. Study Group experiences</td>
<td>.37***</td>
<td>.26***</td>
<td>.32***</td>
<td>.32***</td>
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<td>6. Interaction with professors</td>
<td>.17***</td>
<td>.27***</td>
<td>.22***</td>
<td>.19***</td>
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<td>7. Major Satisfaction</td>
<td>.40***</td>
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<td>.21***</td>
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**Table 2.** Linear multiple regression analysis for predicting satisfaction with major (N=552)

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<td>Interaction with Professors</td>
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<td>.052</td>
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<td>Explanation to Other Students</td>
<td>.105</td>
<td>.033</td>
<td>.139**</td>
<td>3.18</td>
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<td>Study Group experiences</td>
<td>.089</td>
<td>.041</td>
<td>.098*</td>
<td>2.17</td>
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4 Implication and Limitation of the Study

This study has several limitations. First of all, we did not consider the Korean university culture as analyzing factors affecting major satisfaction of college students. Second, we must not jump to the conclusion in terms of the fact that the subjects of this study limits the undergraduate students in one university of Korea. Third, this study only compared the participation frequency related to learning experiences, thus did not reflect favorite learning method of study such as studying alone or together. That is, it is not clear that the participation frequency is attributed to whether the preference of the study style or the activeness towards high-achieving. Fourth, it would yield richer harvest if further studies analyze the effect of major satisfaction and academic achievement mediated by psychological, cognitive and environmental factors. Also, the further studies about the difference according to their majors, gender, and academic achievement, and gender of professors would give more information since there is a possibility that the frequency of interaction with students might be different based on the researches that there have been different interaction patterns between students and teachers, high and low achievers, male and female, and different majors.

We know that academic achievement in high school is the best precollege predictor of first-year college GPA (Noble & Crouse, 1996). We also know that study skills and student satisfaction are likely to predict class performance in high school. These findings suggest the study skills are a precursor of positive class performance with drives later achievement and persistence behavior. Certainly, academic study skills remain a central focus of college success courses and workshop.

The real question then may be not whether improved study skills alone raise academic performance but how study skills combine with social and motivational factors to ensure positive student action (Robbins, Lauver, Le, Davis, & Langley, 2004). Pascarella & Chapman (1983) found that motivation and social integration are the primary predictors of persistence. At the same time, our understanding of the role of contextual factors was limited because of the small number of codable studies found within the research literature. We do know, however, that recent research (Berger & Braxton, 1998; Berger & Milern, 1999) has shown that the salience of student social and academic integration factors is contingent on institutional characteristics such as commuter versus residential, selectivity and 2-versus 4-year programs.
References