FACULTY-STUDENT INTERACTION, SCHOOL SATISFACTION AND HAPPINESS AMONG UNIVERSITY STUDENTS

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Abstract. This paper focuses on the relationship among university student’s interactions with faculty, school satisfaction, and happiness in Korea. The sample for the study consisted of 280 undergraduates in metropolitan areas of South Korea. The data were collected through a faculty student interaction scale, school satisfaction scale, and happiness scale. The study found that a structural equation modeling analysis showed good model fit indexes, directly and indirectly. Faculty-student interaction has a direct and indirect effect on a student’s happiness. As well, faculty student interaction indirectly affects happiness through school satisfaction. To sum up the findings, there is clear evidence that positive faculty student interaction directly predicts the happiness of university students, and indirectly predicts happiness via school satisfaction. The finding of this study offers profound information on the happiness of university students in Korea, and provides fundamental data that can help improve quality of life.

Keywords: faculty student interaction, school satisfaction, happiness.

INTRODUCTION

We all pursue happiness and want to live a better life at home, in school and in society. Recently, happiness has been recognized as an important field of research, along with positive psychology (e.g., Diener, 2000; Csikszentmihalyi and Hunter, 2003; Lyubomirsky et al., 2005). According to a report by KDI (Korea Development Institute, 2011), Korea is ranked 27th in terms of quality of life, remaining in the lower ranks of the Organization for Economic Cooperation and Development (OECD) and G20 member states. This proves that the quality of life and happiness of Koreans are extremely low. In particular, the average happiness index of university students was found to be 56.2 (JOBKOREA survey, 2011). This indicates that students are not happy with university life in Korea, and that they need help and attention. Pursuing happiness is an important factor for an individual’s well-being and health (Duckworth, Steen, & Seligman, 2005; Fredrickson, 1998; Lyubomirsky, King, & Diener, 2005). In particular, since well-being in early adulthood forms a major foundation in later life, it is important to explore the happiness and well-being of university students.

There are multiple factors affecting happiness, most of which can be summarized as self-esteem, optimism, internal-external locus of control, and interpersonal relations (Lee, 2011). The faculty-student interaction is a typical example in university life. Faculty members perform multiple roles, such as providing assistance in learning, supporting individual growth and development, acting as role model, and offering advice in life. Therefore, by building a positive and close interaction with members of the faculty, students can have a more in-depth understanding of the contents they learn. Moreover, they can better explore new learning material and receive more advice and encouragement regarding social relations and future careers (Arredondo, 1995).

Faculty-student interaction has a positive effect not only on the health of students but also on their self-efficacy, academic success, and school adaptation (Arredondo, 1995; Astin, 1993; Eimers, 2000; Lamport, 1993; McGlynn, 1992; Santos & Reigadas, 2000). Decker, Dona, & Christenson (2007) stated that faculty-student interaction is an important element in predicting social and emotional functions of students. Positive faculty-student interaction affects students’ social and academic outcomes, ultimately reducing school dropout rates and helping them achieve their academic and occupational ambitions in the future (Dika & Singh, 2002). However, studies on faculty-student interaction have mostly been focused on exploring constructs or on scholastic achievements. Moreover, while there have been discussions on individual characteristics, there was an extreme lack of research on school variables, i.e. affective domain of students in university life. Therefore, it is necessary to focus on various faculty-student interaction variables and explore how they affect the well-being and happiness of students. University students have difficulty in actively interacting with the faculty. Close and frequent interaction between student and faculty is more likely to enhance student’s initiative and progress (Komarraju, Musulkin, & Bhattacharya, 2010).

Accordingly, it is necessary to more thoroughly analyze faculty-student interaction of university students, and explore their school life and satisfaction.

The happiness experienced by university students in early adulthood affects their health and quality of life in middle and late adulthood as well (Lee, 1997). Nonetheless, the happiness of university students has received relatively little attention compared to that of children, adolescents and married women. Most studies on university students have covered weight control (Lee & Kim, 2011), gender roles (Kwak, 2002), eating behaviors (Lee & Lee, 1994), and careers (Lee & Yoo, 2009). Therefore, the aim of this study was to examine the association among faculty–student interaction, school satisfaction and happiness in the sample of Korean undergraduate students.
LITERATURE REVIEW

2.1 Faculty student interaction
Education is carried out through dynamic interaction between faculty and students. In particular, faculty-student interaction in university life is an important index that shows the teaching-learning status of a university (Chickering, 1969; Pascarella, 1980). Faculty-student interaction occurs in a formal and informal form, and it may occur in class or away from class. This faculty-student interaction plays a significant role in the academic success of learners (Jacobi, 1991).

Ryu (2010) stated that positive faculty-student interaction determines the direction, quantity or quality of learning. Faculty and students interchange a variety of aspects through interaction, such as academic contents, personal concerns and career paths (Terenzini & Pascarella, 1980). This interchange helps university students achieve cognitive and affective growth (Kim & Sax, 2009). Active interaction between faculty and students has potential effects on future studies, academic performance, and school satisfaction of students (Pascarella, 1980; Endo and Harpel, 1982; Fusani, 1994; Myers, Martin, and Knapp, 2005; Halawah, 2006). Therefore, faculty-student interaction is also associated with the efficiency and competitiveness of university education.

The quality of faculty-student interaction perceived by learners affects school satisfaction of students (Baker, Davis, Dilly & Lacey, 2002). Humans feel psychological well-being when they perceive a higher level of support in the social support system (Cohen & Wills, 1985). Support experience in relationships has positive effects on well-being and self-esteem (Baumgardner & Crothers, 2009), quality of life (Rudnick & Kravetz, 2001), happiness (King et al., 2014) and health (Myers & Diener, 1995).

2.2 School satisfaction
Positive academic and social experiences of students in university life lead to school satisfaction. Astin (1994) proved that active faculty-student interaction is closely related to school satisfaction of university students. Chan et al. (2005) also stated that positive interpersonal relations are closely related to satisfaction in university life. In other words, students have high satisfaction in university life if they can interact with the faculty easily and are satisfied with the advice provided on academic and personal issues.

Ku and Hu (2001) argued that faculty-student interaction affects university students’ perception of the school environment, constantly affecting their achievement and satisfaction as a result. Students who are satisfied with school are more eager to participate in school activities, but those who are unsatisfied with school have a decreased interest in learning or may abandon their studies. As such, satisfactory faculty-student interactions affect the school satisfaction of university students, and are consequently associated with academic success and continuance of students (Vito, 2007).

2.3 Happiness
People who build harmonious interpersonal relations and who adapt well to society tend to experience psychological comfort and happiness. Happiness is an important element for an individual’s well-being and health (Duckworth, Steen, & Seligman, 2005; Fredrickson, 1998; Lyubomisky, King, & Diener, 2005). School satisfaction is an indicator of quality of life (e.g., Huebner, Ash, & Laughlin, 2001). School satisfaction creates positive emotions for individuals, which ultimately affects their happiness. If people experience positive and satisfactory emotions about their lives, they experience happiness as a result.

Studies on the happiness of university students are mostly classified into individual factors such as self-esteem and environmental factors such as income. However, happiness is affected by multiple factors that include not only income or individual factors but also religion, family and social relations (Diener and Emmons, 1985; Frey and Stutzer, 2000). 50% of happiness is determined by education and genetics, while of the remaining 50%, 40% is determined by interpersonal relations and work, and 10% by income and environment (Lyubomirsky, Sheldon, & Schkade, 2005). Accordingly, interpersonal relations represent a major portion of the factors that affect happiness. A study by Cho & Park (2011) also proved that students feel greater happiness if their interpersonal relations in university life are positive and they have higher satisfaction with their majors. In university life, the faculty-student relationship represents a major part of interpersonal relations.

Diener (1984) stated that in human happiness, people’s subjective judgment on how they feel about their life is more important than any objective judgment. Therefore, school satisfaction, as perceived by the university students, will also be an important standard of judgment for their happiness. A study by Jang (2009) also verified that satisfaction in life is a valid indicator that explains happiness, and Seo (2010) also presented satisfaction in life as a variable affecting happiness. Thus, previous studies prove that interpersonal relations and satisfaction in life are important factors that affect the happiness of university students.

3. PURPOSE OF THIS STUDY
The aim of this study was to examine the association among faculty-student interaction, school satisfaction and happiness in a sample of Korean undergraduates. Based on the literature review, two SEM analyses were employed. In the Model 1, the path from the faculty student interaction to school satisfaction have been examined. The path from school satisfaction to happiness has also been examined.
In Model 2, Paths from faculty-student interaction to happiness as mediated through school satisfaction have been examined. Figure 1 shows the hypothesized model.

Figure 1. The hypothesized model.

4. Method

4.1 Participants
The participants of this study were 280 university students in Korea. They were selected from universities located in the metropolitan areas of South Korea. Of the study population, 179 participants (63.9%) were female and 101 participants (36.0%) were male. Of those students, 73(26.1%) were in 1st year, 106(37.9%) were in 2nd year, 49(17.5%) were in 3rd year, and 52(18.6%) were in 4th year. The students ranged in age from 20-32 years, and the mean age is 21.9.

4.2 Measures

Faculty-student interaction scale
The faculty student interaction was assessed through faculty student interaction scale (Choi, 2016). The scale consists of 9 items, three subscales: academic interaction, personal interaction, general interaction. The items are evaluated between 1(strongly disagree) to 5(strongly agree). The scale includes items like “Instructor encourages students related to tests,” “I communicate with my instructor about assignments” and “I contact my instructor over email”. Cronbach’s alpha internal consistency coefficient was found to be .85.

School satisfaction scale
School satisfaction was measured by University life satisfaction scale (Ahn & Cho, 2015). This study used three items of this scale. The scale includes items like “How satisfied are you in the school you are currently attending?” The item was evaluated between 1(strongly disagree) to 5(strongly agree). Cronbach’s alpha internal consistency coefficient was found to be .72.

Happiness
This study examined happiness with Happiness scale (Park & Kim, 2009). The scale includes items like “I am happy now” “I enjoy my life” The item response options are very unhappy (1), unhappy (2), not so happy (3), happy (4), and very happy (5). Cronbach’s alpha internal consistency coefficient was found to be .81.

4.3 Data Analysis
Data analysis was conducted using SPSS 19. Correlation coefficients were calculated to investigate the relationships between the variables. Cronbach’s α. coefficient was used to evaluate the reliability of the scales. To test direct and indirect effects among the variables the researcher has used structural equation model, and AMOS 20.0 was used to perform these analyses. The simple model used here comparing model 1 and 2. Maximum likelihood (ML) estimation was used to assess the fit of this structural equation model. χ2 (Chi-Squared statistics), χ2/df (degree of freedom), RMSEA (Root Mean Square Error of Approximation), CFI (Comparative Fit Index), and NFI (Normed Fit Index) were used to assess the model fit. For CFI, NFI .90 and higher value show an acceptable fit, and RMSEA < .08 is accepted as a good fit.

5. Results

5.1 Descriptive statistics and interrelations of variables
In table 1, descriptive statistics and interrelations are presented. The results showed that all correlations among variables were statistically significant. Table 1 show that faculty-student interaction and school satisfaction correlated positively with happiness. Correlation coefficients were moderate. Descriptive statistics are also presented.
Table 1. Descriptive Statistics and Correlations among variables

<table>
<thead>
<tr>
<th>variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Faculty Student Interaction</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. School satisfaction</td>
<td>.192**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3. Happiness</td>
<td>.600**</td>
<td>.378**</td>
<td>1</td>
</tr>
<tr>
<td>M</td>
<td>14.86</td>
<td>11.73</td>
<td>10.25</td>
</tr>
<tr>
<td>SD</td>
<td>2.86</td>
<td>1.59</td>
<td>1.81</td>
</tr>
</tbody>
</table>

Note: N=280, **p<.01

Grade differences can be found in Table 2. Analyses showed grade-related differences in Faculty-student interaction and in happiness. The 1st and 2nd year students had a higher level of faculty-student interaction than 4th year students. The 2nd and 3rd year students experienced more happiness than the 4th year students. Moreover, school grade comparisons showed that the 2nd year students perceived their happiness and faculty student interaction more positively than those in other grades.

Table 2. Descriptive Statistics and grade differences

<table>
<thead>
<tr>
<th></th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>F/scheffe</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>15.16</td>
<td>11.75</td>
<td>10.23</td>
<td>14.86</td>
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<tr>
<td>SD</td>
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<td>1.72</td>
<td>1.99</td>
<td>2.86</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>15.49</td>
<td>11.99</td>
<td>10.53</td>
<td>14.71</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>2.99</td>
<td>1.51</td>
<td>1.93</td>
<td>3.20</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>14.71</td>
<td>11.39</td>
<td>10.49</td>
<td>13.31</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>3.20</td>
<td>1.57</td>
<td>1.32</td>
<td>1.51</td>
<td></td>
</tr>
</tbody>
</table>

ANOVA, significant grade difference (*p < .05, **p<.01, ***p<.001)

Note: N=280, 1= Faculty Student Interaction, 2=School satisfaction, 3=Happiness.

5.2 Faculty student interaction, school satisfaction, and happiness.

The aim of this study was to examine the interrelation between faculty student interaction and happiness mediated by school satisfaction. We tested structural equation modeling for the predictors, faculty student interaction, school satisfaction, and happiness. As shown in Table 3, Model 1 provided a good fit with the data, $\chi^2$ (3) = 198.726, p = .00, $\chi^2$/df=4.732; NFI = .83; CFI = .87; RMSEA = .11. Model 2 also provided a good fit with the data, $\chi^2$ (2) = 94.262, p = .00, $\chi^2$/df=2.29; NFI = .94; CFI = .95; RMSEA = .06. The model fit indices indicated an acceptable fit. The CFI and NFI index was also satisfactory. Comparisons between RMSEA of Model 1 and Model 2 indicated that Model 2 is better. Consequently, the results indicate that Model 2 fit the data well.

Table 3. Fit of the mediation model (N=280)

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$</th>
<th>$\chi^2$/df</th>
<th>NFI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>198.726</td>
<td>4.732</td>
<td>.83</td>
<td>.87</td>
<td>.11</td>
</tr>
<tr>
<td>Model 2</td>
<td>94.262</td>
<td>2.29</td>
<td>.94</td>
<td>.95</td>
<td>.06</td>
</tr>
</tbody>
</table>

Finally mediation effect was tested. The tested model (in Figure 2) showed that the faculty student interaction, school satisfaction variables formed a latent factor structure for the undergraduates’ happiness. The results confirmed the hypothesis that faculty student interaction had significant indirect effects on undergraduates’ happiness. Moreover, faculty
student interaction significantly explained undergraduates’ happiness directly. Further, the results also confirmed that school satisfaction significantly explained undergraduates’ happiness. It was assumed that the relationship between faculty student interaction and happiness was mediated by school satisfaction. Furthermore, school satisfaction could be explained by faculty student interaction. The results indicate that undergraduates who experience more faculty student interaction positively have more school satisfaction and happiness (Table 4).

Figure 2. Structural equation model regarding standardized estimates. (N=280)

Table 4. Results from the path model

<table>
<thead>
<tr>
<th></th>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSI vs School satisfaction</td>
<td>0.223</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSI vs Happiness</td>
<td>0.634</td>
<td>0.073</td>
<td>0.707</td>
</tr>
<tr>
<td>School satisfaction vs Happiness</td>
<td></td>
<td></td>
<td>0.327</td>
</tr>
</tbody>
</table>

Note: N=280, FSI= Faculty student Interaction.

**Conclusion.** The purpose of this study was to explore the relationship among faculty-student interaction, school satisfaction and happiness, which are important in the university life of students. To this end, this study sought to identify the structural relationship among faculty-student interaction, school satisfaction and happiness. The results showed that first, faculty student interaction had a significant correlation with school satisfaction and happiness. Second, grade differences among variables showed that 1st and 2nd year students had a higher level of faculty-student interaction than 4th year students. The 2nd and 3rd year students experienced more happiness than the 4th year students. This comparison indicates that 1st and 2nd year students are more active in faculty-student interaction than 4th year students. Kim & Lim (2012) addressed that 1st year students have more positive relationship than other students. And also 3rd year students have more optimism than other students. Optimism is significant predictors of psychological wellbeing of undergraduates. Universities have completely different curriculums and environments from high schools. The first year of university is the time when students adapt to university life. That’s why 1st year students tend to interact with faculty more active. The fourth year is when they must end their university life as potential members of society and prepare to find work. That might reduce faculty student interaction and happiness level. On the other hand, the 2nd year is a time of focusing on major studies after the period of adaptation to university life. Accordingly, 2nd year students showed higher faculty-student interaction than 4th year students.

As for happiness, 2nd and 3rd year students showed a higher level of happiness than 4th year students. This can be understood through the unique position of the 4th year students. 2nd and 3rd year is the time of adjusting university life. And also they begin to acquire competence. This is why they can feel more emotionally positive. On the other hand, the 4th year is when students are facing the even bigger burden of finding a career and a job. In particular, 4th year students in Korea must make many preparations for employment, such as licenses and internships. Therefore, the 4th year is assumed to be the time when students are most anxious and stressful. As such, their happiness is lower than other students. Cho (2013) also addressed 4th year students have less happiness and more stress of preparing job.
A structural equation modeling analysis performed by comparing competition models showed that Model 2 was a better fit for the data than Model 1, and thus was selected as the final model. In Model 2, faculty-student interaction has indirect effects on happiness mediated by school satisfaction. First, faculty-student interaction turned out to be a predictor for school satisfaction, and university students experience higher school satisfaction if faculty-student interaction is higher. A study by Pascarella & Terenzini (2005) also showed that students with mid- to high-level faculty-student interaction feel more interest and pleasure in learning and are more actively participating than students with low-level faculty-student interaction. This supports the research findings of Rosenthal et al. (2000), who claimed that school adaptation and satisfaction are higher if learners are more actively interacting with teachers.

Faculty-student interaction had direct effects on both school satisfaction and happiness. This result indicates that faculty student interaction is important in happiness and school satisfaction of university students. Interaction between teacher and learner turned out to have a positive effect not only on school satisfaction but also on happiness. Thus, it is necessary to build an emotional bond through encouragement and empathy about issues faced by students, in addition to interacting about learning or examinations. Lillis (2012) also argued that students are more satisfied when the faculty emotionally empathizes with students. This is in line with the study by Light (2001) stating that teacher and learner obtain an empathic connection through advice and counseling.

The findings of this study emphasize that faculty-student interaction is important for happiness and school satisfaction of university students in their university life. Faculty student interaction of teacher and learner is educationally important in bringing happiness to university students and creating a satisfying campus mood. It is important to comprehensively examine faculty-student interaction, which represents a major part of human relations in university life. Previous studies mostly consist of fragmentary explorations on variables related to faculty-student interaction such as visiting the professor’s office, phone calls, or emails. With the recent development of information and communications technologies, students now mostly interact with others using online media. It is necessary to explore faculty-student interaction by applying this change of interaction to the university scene. This study aimed to more comprehensively explore faculty-student interaction including its methods and contents. As such, this study may contribute to broadening the scope of understanding faculty-student interaction.

Meanwhile, this study also verified that faculty-student interaction has direct and indirect effects on happiness mediated by school satisfaction. This result will help determine various links of university life in the happiness of university students, such as interpersonal relations and school satisfaction.

The limitations of this study are as follows. First, the research was focused on the variable of faculty-student interaction in university life. Future research must enrich the findings by including multiple variables of university life. Second, this study is a cross sectional study. Happiness is the result of other variables. However, there is a possibility that happiness leads to the other variables. As well, it would be helpful to explore individual and educational environment variables that affect the happiness of university students through a longitudinal study. Third, the research participants were not randomly assigned. Despite the limitations, this study expanded the scope of university student’s affective domain studies, especially happiness and faculty student interaction, which has been relatively lacking. Moreover, this has significant implications for student’s adaptation to university life and increased wellbeing. These attempts are expected to promote the happiness and well-being, academic success of university students, and lead to a more positive learning environment.

Ethical approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

References