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Mediating Effects of Growth Mindset in the Relationship between Employment Stress and Happiness of University Students in Korea

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Abstract

Background/Objectives: The present study was carried out to examine the mediating effect of growth mindset in the relationship between employment stress and happiness of 364 college and university students in Korea.

Methods/Statistical Analysis: Data were collected and subjected to frequency analysis, reliability analysis, correlation analysis, and SPSS macro process.

Findings: Correlation analysis showed that employment stress was negatively correlated with happiness and growth mindset while happiness was positively correlated with growth mindset. Employment stress had a direct and significant effect on happiness. Growth mindset had a mediating effect in the relationship between employment stress and happiness.

Improvements/Applications: The results will be useful for increasing happiness of university students with high employment stress.

Key Words : Employment Stress, Happiness, Growth Mindset, University Students.

1 Introduction

Employment is one important developmental task of university students in adolescence. Because college students are graduating while they are seeking employment at the same time as, they are expected to have stresses.

Job stress is defined as mental stress, physical stress, or suffering due to repeated job failures and prolonged unemployment [1]. These mental and physical stresses include family anxiety such as lack of confidence in preparation for work, lack of credit and qualification necessary for employment, stressful family environment such as responsibility for family economic support, school environment stresses such as lack of interest at school level and advisor, and emotional stresses related to personal psychological anxiety [2].

Happiness is defined as 'a relatively continuous feeling of well-being, not momentary feelings or moods, due to cognitive and emotional evaluations of one's life'. It is 'the extent to which individuals judge the quality of their lives positively' [3,4]. Such happiness or subjective well-being, appears to be relatively stable over time and consistent across situations [5,6,7,8]. Happy people are more likely to be satisfied with all their options following both trivial choice such as fancy dessert and ego-threatening decision such as prospective colleges compared to unhappy ones [9]. In addition, a happy individual may develop a rich network of positive associations while an unhappy individual has a thin network of negative ones [10].

Dweck [11] has discovered growth mindset and suggested two sets of minds: fixed mindset in which individuals believe that intelligence is a static trait and growth mindset in which individuals believe that intelligence can be developed by various means (for example, through effort and instruction). Dweck [11] has further asserted that "Individuals with a fixed mindset believe that their intelligence is simply an inborn trait - they have a certain amount and that's it. In contrast, individuals with a growth mindset believe that they can develop their intelligence over time". Accordingly, a person with growth mindset believes that intelligence can be devel-

oped and that the human brain is like a muscle that can be improved through training. This stimulates desire for improvement [12]. It has been reported that teaching students to have growth mindset can increase their scores and academic achievement [13,11,14]. In addition, it has been reported that a growth mindset can promote hope through mediating mother's parenting stress and hope [15].

It has been reported that the relationship between job stress and job satisfaction has negative correlation with subjective well-being [16]. Job stress can increase depression and hopelessness [17]. In addition, self-efficacy, positive coping, and depression can affect job stress [18]. These results suggest that job stress can reduce happiness.

However, no study has reported the effect of job stress on the growth mindset. It has been reported that job stress in college students has a negative correlation with ego-resilience [16]. This indicates that job stress is related to growth mindset.

According to a study on the effect of growth mindset on happiness, relatively happy people are more likely to think more positively about themselves [19]. They feel that they have more personal control [20]. They rate their recent experiences in their lives to be more pleasant than unhappy ones [21]. In addition, high self-control can lead to self-efficacy and self-confidence in life as well as positive confidence in the future which can promote happiness [22]. Therefore, growth mindset is expected to affect happiness.

Based on previous results, it is expected that growth mindset might be able to mediate in the relationship between job stress and happiness because a growth mindset can affect happiness. However, no study has reported the effect of growth mindset in the relationship between job stress and happiness in college students preparing for employment. Therefore, the objective of this study was to examine whether a growth mindset could mediate in the relationship between job stress and happiness in college students preparing for employment. In order to achieve this goal, the following research questions were asked: 1) What is the correlation among job stress, happiness, and growth mindset? 2) What is the structural relationship between job stress, happiness, and growth mindset? 3) Does growth mindset mediate in the relationship between job stress and happiness?

2 Methods

2.1 Research Model

Employment stress of university students preparing for employment was set as an independent variable and happiness was set as a dependent variable. Regarding the relationship between these two variables, growth mindset that could increase happiness but decrease employment stress was set as a mediating variable. The research model is shown in Figure 1.

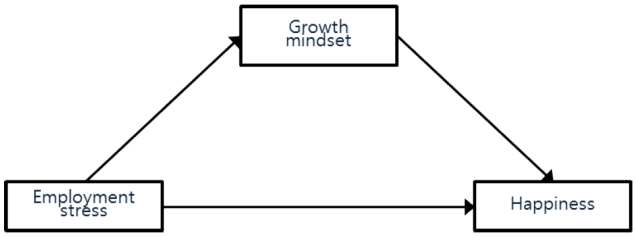

Figure 1: Research Model

2.2 Participants

Subjects for a survey were selected using purposive sampling method. Subjects of the survey were college and university students who were close to employment in one of two colleges and two universities in Chungnam and Daejeon metropolitan cities. The total number of subjects was 364, including 200 (54.9%) males and 164 (45.1%) females. Their mean age was 20.9 years (range, 18 to 27 years).

2.3 Survey tools

For survey tools, happiness, employment stress, and growth mind scales were used.

2.3.1 Happiness

To measure happiness, Subjective Happiness Scale developed by Lyubomirsky and Lepper [23] was used in this study. This scale con-

sisted of 4 items. Each item was measured in a 7-point Likert scale. The higher the score, the higher the happiness. The reliability of this happiness scale showed Cronbach's value of 0.782.

2.3.2 Employment stress

In order to measure employment stress of university students, the scale developed by Hwang [24] based on Connell Medical Index and revised by Kang [25] was used in this study. Employment stress test consisted of 22 items of employment stress related to personality stress, family environment stress, academic stress, school environment stress, and employment anxiety stress. Each item was measured in a 5-point Likert scale. The higher the score, the higher the level of employment stress. The reliability of the employment stress scale had a Cronbach's value of 0.895.

2.3.3 Growth mindset

Growth mindset scale developed by Dweck 11 and used by Ayers [26] was utilized in this study. This scale consisted of 20 items. Each item was measured in a 5-point Likert scale. The higher the score, the higher the growth mindset. The reliability of the growth mindset scale had a Cronbach's value of 0.833.

2.4 Data Analysis

Data were analyzed using SPSS PC + Win. 21 and SPSS MACRO process, including frequency analysis, reliability analysis, correlation analysis, and Model 4 of SPSS MACRO process. Bootstrapping was applied to verify the mediating effect.

3 Results and Discussion

As shown in Table 1, there was a positive correlation between happiness and growth mindset ($r = 0.401$, $p < 0.01$). Happiness and growth mindset were negatively correlated with employment stress ($r = -0.509$, $p < 0.01$; $r = -0.353$, $p < 0.01$, respectively). This suggests that as employment stress is increased in university students, euphoria and growth mindset are decreased. On the other

hand, there was a significant positive correlation between happiness and growth mindset (r = 0.401, p < 0.01). Accordingly, the model of SPSS macro proposed by Hayes (2013)[27] was used in this study to determine whether there was a causal or mediating relationship among happiness, employment stress, and growth mindset.

Table 1: Correlation coefficient of main variables

	Happiness	Growth mindset	Employment stress
Happiness	1		
Growth mindset	.401**	1	
Employment stress	-.509**	-.353**	1

***p<.01*

As a result of path analysis, all paths were significant Figure 2. Employment stress was negatively related to growth mindset (β = -0.2408, p < 0.001) and happiness (β = -0.6268, p < 0.001). However, growth mindset was positively related to happiness (β = .5532, p < 0.001). These results showed that university students who were about to obtain employment had reduced happiness due to employment stress. However, it is possible to increase the happiness of university students because they believe that employment is possible if they try hard enough with a growth mindset. Thus, results of this study are consistent with those of Dweck [28] showing that a person with a high growth mindset sees challenges as opportunities to learn when they face challenges. They have higher resilience when they face obstacles. They also recognize that obstacles are not to be blamed, but part of learning [28].

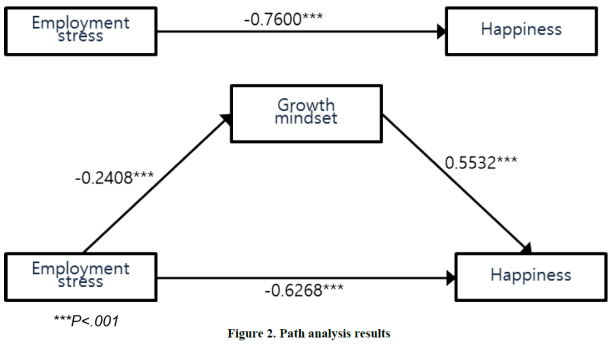

Figure 2. Path analysis results

Figure 2: Path Analysis Results

Table 2 shows results of bootstrap analysis using SPSS macro PROCESS to verify the mediating effect of growth mindset in the relationship between employment stress and happiness of university students. The mediating effect of growth mindset was verified because it did not include 0 in its 95% confidence interval (-0.2021 $\sim$ -0.0793).

Table 2: Mediation Effect result

Classification	Mediating effect		
	B	S.E.	BC 95% CI
Employment stress(X)→Growth mindset(M1)→Happiness(Y)	-.1332	.0308	-.2021 ~ -.0793

4 Conclusion

This study was conducted to determine whether growth mindset could mediate the relationship between employment stress and happiness for university students preparing to work in college and university. We have the following conclusions:

First, there was a significant inverse relationship between employment stress and happiness or growth mindset. However, the relationship between growth mindset and happiness was proportional.

Second, as a result of analyzing three pathways after setting up the research model, employment stress had negative effect on happiness and growth mindset while growth mindset had positive effect on euphoria.

Third, as a result of mediating effect, growth mindset mediated the relationship between employment stress and happiness. This result shows that growth mindset can increase the resilience even when the student is confronted by obstacles or academic achievement. If a person can increase growth mindset in advance, he or she will be able to maintain happiness and be prepared for employment.

This study analyzed the role of growing mindset in the relationship between employment stress and happiness. Future research is needed to explore the role of growth mindset in various variables to have success in life.

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