

A Mediated Effect of Grit on Relationship between Life Stress and Adaptations to College Life among Male Nursing Students

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남자간호대학생의 생활스트레스와 대학생활 적응간의 관계-그릿의 매개효과

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Abstract This study was conducted to promote male nursing students' adaptation to college life by identifying life stress, grit, and degree of adaptation to college life, and the effect of grit mediating effect on the relationship between life stress and college life adjustment. became The subjects of this study were 209 male nursing college students enrolled in nursing departments in 5 major cities. The collected data were analyzed with SPSS/WIN 25.0. Life stress showed a significant negative correlation with college life adaptation and grit, but grit showed a positive correlation with college life adaptation. As a result of mediating effect verification, the final model explained 43.5% of college life adaptation. Therefore, in order to improve male nursing students' adaptation to college life, it is required to develop a program that can lower life stress and increase grit and college life adaptation level.

Key Words : Male nursing students, Life stress, Adaptations to college life, Grit, Mediating effect

요약 본 연구는 간호남학생의 생활스트레스, 그릿, 대학생활적응 정도를 파악하고, 그릿의 매개효과가 생활스트레스와 대학생활적응의 관계에 미치는 영향을 파악하여 남자간호대학생의 대학생활 적응을 촉진하기 위해 수행되었다. 연구 대상자는 5개 도시의 간호학과 남자 간호대학생 209명으로 편의표집을 하였다. 수집된 데이터는 SPSS/WIN 25.0으로 분석하였다. 생활스트레스는 대학생활적응과 그릿에 유의한 부적 상관관계를 보였으나 그릿은 대학생활적응에 정적 상관관계로 나타났다. 매개효과 검증결과 최종모델은 대학생활적응의 43.5%를 설명하였다. 따라서 남자간호대학생의 대학생활적응을 향상시키기 위해서 생활 스트레스를 낮추고, 그릿과 대학생활 적응수준을 높일 수 있는 프로그램 개발이 요구된다.

주제어 : 남자간호대학생, 생활스트레스, 대학생활적응, 그릿, 매개효과

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Received February 20, 2022

Accepted April 20, 2022

Revised March 20, 2022

Published April 28, 2022

1. Introduction

Successful college life of students in nursing major has significant meaning related to future nursing specialist's qualitative capability in current medical field which are requiring more professionalism and practical ability for nurses. But students in nursing major faces high stress because of tension from study that treats human life, and of heavy workload from academic curriculum which parallel theory and clinical practice[1]. Especially male nursing students are facing hardship in adapting to college life because of narrow inter-personal relationship in special condition of being minor male among major females, feeling foreign, lacking in exchanging information, misunderstanding and conflict caused by gender differences like perceptual structure, behavioral pattern, and way of expression[2,3]. Also as male nurses are increasing, still social perception and clinical practice environment are not familiar to male nurses also created difficulties[4]. To start over academic achievements and personal relations which are severed by mandatory military duty also aggravate difficulties in adapting to college life[5]. Male students who entered the nursing department failed to adapt to the department and dropped out of school more often than female students[6]. It was reported that male nursing students had difficulties adapting to the practice of male nurses in the clinical field after graduation [7]. In a study of male nurses in Taiwan, the turnover rate of male nurses was reported to be 23.6% within 1 year and 44.7% within 5 years [8]. As a result, if male nurses choose to change jobs due to personal organizational maladaptation and decreased job satisfaction, it will act as a loss to not only personal career management but also to the supply and demand of manpower for medical

service sales [9]. Thus we think to derive successful college life for male nursing students, preceding efforts to understand, and improve related influencing factors is necessary.

Effective college life adaptation positively, and reasonably resolve complex stress or conflicts one faces during college life, in order to not only successfully achieve academic achievement but also be course preparing advance into society[2]. College student's stress not adequately controlled cause negative effect on college life adaptation related to self confidence, academic motivation, downslide in grades. In particular, male nursing students who chose to major in Nursing are experiencing difficulties compared to male students in other majors due to gender stereotypes, female-centered educational environment, and psychological conflicts from clinical practice[3]. Effective coping stance to manage stress is important[4,5]. So to understand their life stress is considered in need.

One of noncognitive component, recently being highlighted 'Grit' can be defined as pertinacious and passion toward long-term aim, and mean to not give up and hold on facing struggles[6]. Likewise Grit is considered as a personal characteristics relatively less varying depending on time and situation, also known to have relation with academic motivational factors such as self-efficacy, achievement goals, and optimistic attributions[6]. In previous research High levels of grit have been reported to have positive effects on nursing students' college life adaptation ability, college life stressor control[10], clinical performance improvement[11], and successful employment[12]. Therefore it can be judged as a mediating factor to overcome male nursing student's various stress they face while adapting to college life. Therefore it can be judged as a

mediating factor to overcome male nursing student's various stress they face while adapting to college life. Therefore various influencing factors should be identified in order to promote college life adaptation of male nursing student, and as their number grows, related studies are also increasing. But until now studies conducted on male nursing students were qualitative researches about gender role conflict, academic adaptation, academic experience, military duty experience, clinical experience and self esteem conducted on few students. Thus this study is conducted in order to understand Grit's mediated effect on relation between male nursing student's college life stress and college life adaptation, and suggest baseline data in promoting college life adaptation for male nursing college students.

2. Method

2.1 Study Design

This study is descriptive research study designed to identify level of life stress, Grit, college life adaptation and understand mediated effect of Grit between each variables.

2.2 Subjects of study and data collection method

The subjects of this study were male nursing college students enrolled in nursing departments located in 5 cities. The data collection period June 1st to July 30th 2019. Students were informed with purpose of study and promised anonymity of the data. Number of subjects are calculated using G*Power program 3.1.9.4, for multiple regression analysis to have significance level .05, effect size .15, power .90, with independence variables being Grit, and level of life stress required minimal sampling number be 88, for One way ANOVA to have significance level .05, effect size .25, power .90

required minimal sampling number be 207. This study was designed, considering drop outs, to have total subjects be 230, eliminated 21 insufficient inquiry, and analyzed final 209 subjects.

2.3 Tools of study

2.3.1 Life Stress

Measuring life stress scale, 27 question out of 4 category (academic achievement, economic problem, future problem, values problem) which adhere to study object were used from Chon et al [13]'s life stress tool for college students. Each question is measured with score scale of 5, higher number meaning higher life stress. Credibility of the tool in Chon's setting was Cronbach's $\alpha = .91$. In this study it was .96.

2.3.2 Grit

To measure Grit, Original Grit Scale (Grit-O) tool developed by Duckworth et al [6], translated by Lee & Sohn [14] is used. This tool consist of 12 questions with two sub-category which are; Consistency of interests, and Perseverance of effort. Each questions are in score scale of 5, higher number meaning higher Grit. Lee & Sohn [8]'s study had Cronbach's $\alpha = .79$, this study had .80.

2.3.3 College Life Adaptation

Tools developed by Jeong and Park [15] was used for College Life Adaptation. This tool consist of total 19 questions under 5 categories (Interpersonal Relationship, Academic activity, Career Preparation, Individual Psychology, and Social Experience. Scores are in 5 point scale, higher being well adapted to college life. Tools in developed study was Cronbach's $\alpha = .86$. In this study be .92.

2.4 Data analysis methods

To analyze data, SPSS/WIN 25.0 was used. General characteristics and main variables of study subjects are analyzed through descriptive statistics. To verify difference in main variables dependent to General characteristics, independent t-test and ANOVA was used, Post verification was analyzed with Scheffe test. Correlation between variables are identified with Pearson's correlation coefficients. Grit mediated effect in study subject's life stress and adaptation to college life relations were analyzed by multiple regression analysis method applied Baron & Kenny[10]'s 3-step mediated effect verification procedure. Statistical significance test was verified through bootstrapping.

3. Results

3.1 General Characteristics and difference verification

General characteristics of this study subjects are as shown in Table 1. Average age of study subjects is 22.7. Grades are 1st 35(16.7%), 2nd 58(27.8%), 3rd 94(45.0%), 4th 22(10.5%). Motivation for admissions are Aptitude 88(42.1%), Employment rate 106(50.7%), K-SAT 13(6.2%), and etc 2(1.0%) as in order. Military duty status are Served be 128(61.2%), Incomplete 77(36.8%), and exempt 4(1.9%). Residential types are home with family 69(33.0%), school dormitory 52(24.9%), and live by self 88(42.1%). Clinical practice experiences are Yes 109(52.2%), No 100(47.8%). Satisfaction with major is satisfaction 95(45.5%), normal 93(44.5%), and dissatisfaction 21(10.0%) as in order.

Variables difference dependent to general characteristics are verified as shown in Table 1. For Life Stress, significant difference could be

found in military duty served($F=3.66$, $p=.026$, and satisfaction with major($F=8.07$, $p<.001$). Life stress was higher in incomplete military duty(2.38 ± 0.62) than served(2.16 ± 0.62), in dissatisfaction(2.51 ± 0.67) higher than satisfaction(2.07 ± 0.60), normal(2.38 ± 0.60) in satisfaction with major. Grit showed significant difference in satisfaction with major($F=8.77$, $p<.001$). College life adaptation showed significant difference in reason for application($F=6.69$, $p<.001$), satisfaction with major ($F=10.50$, $p<.001$). Specifically Grit was higher in satisfaction(3.52 ± 0.57) for satisfaction with major than normal (2.28 ± 0.44), dissatisfaction(3.08 ± 0.53). College life adaptation showed difference significantly higher in aptitude(3.61 ± 0.65) to employment rate(3.23 ± 0.64) for reason for application, satisfaction(3.61 ± 0.71) for satisfaction with major to normal(3.22 ± 0.59) or dissatisfaction(3.16 ± 0.49).

3.2 Level of Life stress, Grit, College life adaptation and their correlation

Level of Life Stress, Grit, and College Life Adaptation are as shown in Table 2.

Life Stress of male college nursing students were 2.25 ± 0.63 out of 5 point scale. The sub-domains of Life stress were

Table 1. General Characteristic's of the subjects

(N=209)

variables	classification	n(%)	Life Stress			Grit			College Life Adaptation		
			Mean	SD	t/F(p)	Mean	SD	t/F(p)	Mean	SD	t/F(p)
Grade	1st	35(16.7)	2.31	0.62		3.34	0.51		3.49	0.61	
	2nd	58(27.8)	2.40	0.72	1.96	3.29	0.57	.979	3.25	0.67	1.48
	3rd	94(45.0)	2.16	0.57	(.122)	3.40	0.53	(.404)	3.42	0.70	(.222)
	4th	22(10.5)	2.18	0.54		3.50	0.47		3.52	0.61	
reason for application	Aptitude ^a	88(42.1)	2.20	0.60		3.42	0.54		3.61	0.65	
	Employment rate ^b	106(50.7)	2.26	0.62	.99	3.34	0.50	1.291	3.23	0.64	6.69
	K-SAT grade ^c	13(6.2)	2.52	0.82	(.398)	3.22	0.67	(.279)	3.22	0.65	(.001)
	Etc. ^d	2(1)	2.14	0.26		3.88	0.77		4.06	0.45	a)b,c
military duty	Served ^a	128(61.2)	2.16	0.62	3.66	3.43	0.55		3.41	0.65	
	Incomplete ^b	77(36.8)	2.38	0.62	(.026)	3.28	0.47	3.126	3.37	0.71	.08
	Exempt ^c	4(1.9)	2.57	0.42	b)a	2.96	0.76	(.056)	3.42	0.51	(.923)
residential type	Home-family	69(33.0)	2.26	0.68	2.88	3.36	0.61	.487	3.42	0.62	.21
	Dormitory	52(24.9)	2.41	0.56	(.058)	3.31	0.45	(.615)	3.34	0.64	(.811)
	Live by self	88(42.1)	2.15	0.61		3.40	0.52		3.41	0.72	
experience of clinical practice	Yes	109(52.2)	2.23	0.58	-.55	3.37	0.50	.122	3.40	0.61	.20
	No	100(47.8)	2.28	0.68	(.581)	3.36	0.57	(.903)	3.38	0.73	(.839)
satisfaction with major	Satisfaction ^a	95(45.5)	2.07	0.60		3.52	.57		3.61	0.71	10.49
	Normal ^b	93(44.5)	2.38	0.60	8.07	2.28	.44	8.773	3.22	0.59	(.001)
	Dissatisfaction ^c	21(10.0)	2.51	0.67	(.001)	3.08	.53	(.001)	3.16	0.49	a)b,c

Academic achievement 2.39±0.52, Values problem 2.21±0.45, Economic problem 2.21±0.45, Future problem 2.19±0.54. Grit were 3.37±0.53 out of 5 point scale. The sub-domains of Grit were Consistency of interest 3.21±0.51, Perseverance of effort 3.52±0.52. Adaptation to College Life 3.39±0.67 as shown in Table 2.

Table 2. Level of Life stress, Grit, College life adaptation (N=209)

Variables	sub-domains	Mean±S.D.
Life Stress	Total	2.25±0.63
	Academic achievement	2.39±0.52
	Economic problem	2.21±0.45
	Future problem	2.19±0.54
	Values problem	2.21±0.56
Grit	Total	3.37±0.53
	Consistency of interest	3.21±0.51
	Perseverance of effort	3.52±0.52
College Life Adaptation		3.39±0.67

show positive correlations as shown in Table 3.

Table 3. Correlation of Life stress, Grit, College life adaptation (N=209)

Variables	Life Stress	Grit	College Life Adaptation
Life Stress	1		
Grit	-0.49**	1	
College Life Adaptation	-0.59**	0.56**	1

**p<0.01

3.3 Correlation of Life stress, Grit, College life adaptation

Correlation of Life Stress, Grit, and College Life Adaptations are negative correlation between Life Stress to Grit(r=-.49, p<.01), Life Stress to College Life Adaptation(r=-.59, p<.01). While Grit to College Life Adaptation (r=0.556, p<.01)

3.4 Grits mediated effect in relationship between Life Stress and College Life Adaptation

Grit's mediated effects in relationship between Life Stress and College Life Adaptation is as shown in Table 4. Tolerance limit of

multicollinearity in regression analysis is .829 above .01, Variance Inflation Factor, VIF be 1.308 below 10 having no multicollinearity problem. Also Durbin-Watson index be 2.019, having no autocorrelation problem and satisfying recognition of independence standard making regression model suitable.

In 3 step mediating effect varification procedure by Baron & Kenny (1986), independent variable Life Stress in 1st step regression analysis affected significant effect to mediating variables Grit ($\beta=-.49$, $p<.001$), explanation power being 23.3%. 2nd step independent variable Life Stress showed significant effect in dependent variables, College Life Adaptation ($\beta=-.59$, $p<.001$), explanation power be 34.1%. At 3rd step, parameter Grit showed significant effect to dependent value College Life Adaptation ($\beta=.36$, $p<.001$), explanation power be 43.5%. At 3rd step, setting Grit as a parameter, Life Stress showed significant effect on College Life Adaptation, but regression coefficient decreased from $-.59$ at 2nd step to $-.42$, showing partial mediate effect of Grit as shown in Fig 1 and Table 4. Bootstrapping was used to identify general significance of indirect effectiveness, minimal and maximum value of 95% confidence interval being .274 to .616 not including 0, turned out significant.

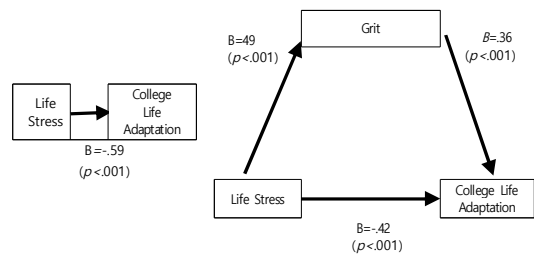


Fig. 1. Grits mediated effect in relationship between Life Stress and College Life Adaptation

4. Discussion

This study is conducted to find out Grit's mediated effect in relation to male nursing major student's life stress and college life adaptation. The subjects of this study were 209 male students majoring in nursing across the country.

The level of life stress of the subjects of this study was 2.25 points. In the study of E. S. Kim & S. Kang[20] using the same scale as in this study, female students showed higher levels of stress than male students, and the male students' life stress score was 2.14, similar to this study. Compared with the study of Cha & Lee[16], the stress score of nursing students was 2.31 and that of general college students was 2.36, showing higher scores for general college students than for nursing students. Suggests that nursing students have a fixed career path after graduation and can cope with difficult times due to youth employment difficulties. Among the sub-domains of life stress, academic stress was the highest, which is consistent with previous studies [17-19]. In the case of nursing students, it is considered that academic stress was caused by a strict curriculum that combines theory and clinical practice, and the burden of studying such as national exams.

As a result of correlation analysis on the main variables of male nursing students, life stress was found to have a significant negative

Table 4. Grits mediated effect in relationship between Life Stress and College Life Adaptation (N=209)

Variables	B	SE		T(ρ)	F2(Adj. F2)	F(ρ)
1. Life Stress→ Grit	-.41	.05	-.49	-7.99 (.001)	.24 (.234)	63.78 (.001)
2. Life Stress→ College Life Adaptation	-.63	.06	-.59	-10.43 (.001)	.34 (.34)	108.76 (.001)
3. Life Stress, Grit→ College Life Adaptation						
1) Life Stress→ College Life Adaptation	-.44	.06	-.42	-6.96 (.001)	.44 (.44)	81.21 (.001)
2) Grit→ College Life Adaptation	.45	.08	.36	5.96 (.001)		

correlation with Grit and college life adjustment. In previous studies[6,21], the higher the life stress level, the lower the college life adaptation and Grit level, which is consistent with the results of this study. Also, there was a positive correlation between Grit and college life adaptation. These results are consistent with previous studies[1,2,22] that showed that the higher the Grit, the higher the college life adaptation, the higher the self-efficacy, self-resilience, and academic achievement.

The mediating effect of Grit was found to be significant in the relationship between life stress and college life adaptation of male nursing students. Life stress was found to have a negative effect on Grit and college life adjustment. Grit had a positive effect on college life adjustment. Therefore, when Grit was set as a parameter, life stress was significantly increased in college life adaptation, showing a partial mediating effect of Grit. In other words, it was confirmed that life stress itself had an effect on college life adjustment, and at the same time, the higher the life stress, the more difficult it was to adapt to college life. Its relevant to previous study results[1,2,22] that when facing stress inducing complex situations, college students lack ability to find efficient alternative plan, and make use of various strategies, have tendencies to easily yield and give up their goal and evade. Also this is relevant to study result that as college student, male or female, as their stress levels are low, they show more ambition to academic achievement, amicable to social activity, and psychological, physical discomfort decreases[22]. In this study, it was confirmed that grit can play an important role in reducing life stress and improving college life adaptation of male nursing students. It is consistent with the results of previous studies[13] that college

students with high grit between life stress and college life adaptation overcome difficulties on their own and participate more actively in school life.

In summary, this study confirmed the grit-mediated effect between life stress management and college life adaptation of male nursing students. It suggests that life stress of male students can affect college life adjustment through grit. This is not only life stress, but also Grit is an important factor to increase college life adaptability. It is necessary to develop the Grit reinforcement program to reduce life stress to help students adapt to college life.

5. Conclusion

Based on this study, It has been re-knowledged that strategies to boost college life adaptation such as lowering life stress level to promote male nursing student's adaptation to college life and developing Grit enhancing program are necessary. This study can be relevant in supporting these ideas by suggesting base line data. However narrow based study subjects can have limitation in representing nation-wide total male nursing students, thus generalization of this study result should be done cautiously.

REFERENCES

- [1] Y. K. Kwag (2013). Effect of Self-Esteem, Ego-Resilience, Social Support on Nursing student's Adjustment to College. *Journal of the Korea Academia-Industrial cooperation Society*, 14(5), 2178-2186.
DOI : 10.5762/KAIS.2013.14.5.2178
- [2] J. S. Lee, N. J. Kim, H. J. Doo, J. Y. An & Y. K. Lee (2005). Adaptation Experience of Male Students in Department of Nursing. *Journal of the Korean Academy of Psychiatric and Mental Health Nursing*, 14(2), 159-169.
- [3] M. E. Kim, S. H. Ko & E. A. Park (2014). Understanding the Gender Role Identity in Male

- Students. *The Journal of Korean academic society of nursing education*, 20(2), 223-233.
- [4] H. O. Jeon & E. Y. Yeom (2014). The Influence of Gender Role Conflicts, Academic Stress Coping Ability, and Social Support on Adaptations to College Life among Male Nursing Students. *Journal of the Korea Contents Society*, 14(12), 796-807.
DOI : 10.5392/JKCA.2014.14.12.796
- [5] M. Kim, S. H. Cho & K. S. Jeon (2014). Barriers and Strategies to Adaptation among Korean Male Nursing Students: A Systematic Review. *Journal of the Korean Society of Stress Medicine*, 22(3), 172-173.
DOI : 10.5977/jkasne.2014.20. 2.223
- [6] A. L. Duckworth, C. Peterson, M. D. Matthews & D. R. Kelly (2007). Grit : Pervasive and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087-1101.
DOI : 10.1037/0022-3514.92.6.1087
- [7] W. J. Kim & J. K. Kim. (2019). "Relationship between Gender stereotype, Major satisfaction and Self-leadership in male Nursing Students". *Journal of the Korea Academia-Industrial cooperation Society*, 20(10),133-139.
DOI : 10.5762/KAIS.2019.20.10.133
- [8] J. H. Lou, R. H. Li, H. Y. Yu & S. H. Chen. (2011). Relationships among self-esteem, job adjustment and service attitude amongst male nurses: A structural equation model. *Journal of Clinical Nursing*, 20(5-6), 864-872.
DOI : 10.1111/j.1365-2702.2010.03387
- [9] S. H. Chen, C. M. Fu, R. H. Li, J. H. Lou & H. Y. Yu (2012). Relationships among social support, professional empowerment, and nursing career development of male nurses: A cross-sectional analysis. *Western Journal of Nursing Research*, 34(7), 862-882.
DOI : 10.1177/019394591038460
- [10] M. R. Jung & E. Jeong. (2018). Effects Of Academic Stress, Academic Self-Efficacy and Major Satisfaction in Nursing Student on Grit. *The Journal of the Korea Contents Association*, 18(6), 414-423.
DOI : 10.5392/JKCA.2018.06.414
- [11] S. H. Cho & K. S. Yun. (2020). Effects of Grit and Critical Thinking Disposition on Nursing Students' Clinical Competence. *The Korean Society of Health Service Management*, 14(2), 117-129
DOI : 10.12811/kshsm.2020.14.2.117
- [12] S. J. Lee. (2018). The Effects of Grit and Stress on Nursing Student's Adjustment to College Life. *The Society of Distal Policy & Management*, 16(2), 269-276.
- [13] K. K. Chon, K. H. Kim & J. S. Lee (2000). Development of the Revised Life Stress Scale for College Students. *The Korean Journal of Health Psychology*, 5(2), 316-355.
<http://www.dbpia.co.kr/journal/articleDetail?nodeld=NODE06368472>
- [14] S. Lee & Y. W. Sohn. (2000). What are the strong predictors of academic achievement? -deliberate practice and grit. *The Korean Journal of School Psychology*, 10(3), 349-366.
DOI : 10.16983/kjps.2013.10.3.349
- [15] E. E. Jeong & Y. H. Park(2009). Development and Validation of the College Adjustment Scale. *The Korean Journal of Educational Method Research*, 21(2), 69-9
DOI:10.17927/tkjems.2009.21.2.69
- [16] S. K. Cha & E. N. Lee. (2014). Comparison of Stress, Depression and Suicidal Ideation between Nursing Students and Students of Other Majors. *The Journal of Korean Academic Society of Nursing Education*, 20(4), 650-658.
- [17] Y.A Song & Y. O. Ha. (2018). Factors Influencing on Life Stress among Nursing Students. *Journal of East-West Nursing Research*, 24(2), 139-145 .
- [18] E. J. Bong & Y. K. Kim (2017). Relationship between life stress, depression and smartphone addiction in nursing students: mediating effects of experiential avoidance. *Journal of the Korea Academia-Industrial cooperation Society*. 18(7), 121-129.
DOI : 10.5762/KAIS. 2017.18.7.121
- [19] J. H. Kim. (2016). Relationship between life stress perceived by college students and adjustment to college life: mediating effects of self-control and health promoting lifestyle. *Journal of the Korea Academy of Psychological Type*. 17(1), 81-10.
- [20] E. S. Kim & S. Kang. (2020). Influence of Life Stress, Body Image, and Happiness on Health Promoting Behaviors among Nursing Students. *Journal of the Korea Entertainment Industry Association*, 14(4), 421-430.
DOI : 10.21184/jkeia.2020.6.14.4.421
- [21] R. M. Baron & D. A. Kenny. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic,

and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.

- [22] I. S. Jo(2018). *A mediation effect of Hope on relationship between Male and Female College Students' Life Stress and Adaptation to College Life*. Unpublished masters thesis, Dongshin University, Naju.

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