

The Relative Levels of Grit and Their Relationship with Potential Dropping-Out and University Adjustment of Foreign Students in Korea

Sheri N. Slick*, Chang Seek Lee**

Dep. of Aviation Tourism, Hanseo University*

Dept. of Child and Adolescent Welfare, Hanseo University**

Korea유학생의 grit 수준과 잠재적 중도탈락 및 대학생활적응과의 관계

쉐리 슬릭*, 이창식**

한서대학교 항공관광학과*, 한서대학교 아동·청소년복지학과**

Abstract The study aimed to investigate the relative levels of grit and their relationship with potential dropping-out and university adjustment of foreign students in Korea. The subjects of this survey were gathered through purposive sampling, and 335 subjects were collected from university students in South Korea. First, the grit was significantly and positively correlated with emotional adjustment, social adjustment, university satisfaction, and academic adjustment, and was negatively correlated with potential dropping-out of university. Drop-out potential is negatively and significantly correlated with all subgroups of university life adjustment. Second, the grit is higher than the mid-point and drop-out potential is very low. Emotional adjustment and university satisfaction are the highest among the subgroups of university life adjustment but social adjustment is the lowest among them. Third, it was found that foreign students in the mid and high grit clusters are lower in mean drop-out potential rates than those in the low grit cluster. And foreign students in the mid and high grit clusters are higher than those students in the low university life adjustment group.

Key Words : Grit, Drop-out Potential, University Adjustment, Foreign Students, Korea

요약 이 연구는 한국 유학생의 grit 수준과 잠재적 중도탈락 및 대학생활적응과의 관계를 규명하고자 하였다. 연구의 대상은 335명의 한국에 있는 유학생이었다. 첫째, grit는 잠재적 중도탈락과는 부적 상관관계를 보였고, 정서적응과 사회적응, 대학생활 만족 및 학업적응과는 정적 상관관계를 보였다. 둘째, grit는 중간 점수보다 높았고 잠재적 중도탈락은 매우 낮았다. 정서적응과 대학만족은 대학적응보다 높았으나 사회적응은 하위 영역 중 가장 낮았다. 셋째, grit 수준이 높고 중간인 군집이 낮은 군집보다 잠재적 중도탈락은 낮았으나, 대학생활적응의 전체 하위영역은 높았다. 끝으로 유학생의 대학생활 적응을 위한 제언을 하였다.

주제어 : 그릿, 잠재적 중도탈락, 대학생활 적응, 유학생, 한국

* This study was undertaken with the support of a research grant in 2014 from Hanseo University.

Received 5 June 2014, Revised 6 July 2014

Accepted 20 August 2014

Corresponding Author: Chang Seek Lee(Hanseo University)

Email: lee1246@hanmail.net

© The Society of Digital Policy & Management. All rights reserved. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

Attending university can be a difficult time for students. For many, it is the first time in their lives that they have had to manage their own time, money, schoolwork, and personal decisions. Foreign students face the additional burden of adapting to a new cultural environment, as well as an educational climate that may be different from that in their home country. Moreover, foreign students do not have the safety net that domestic students may be able to draw on due to the proximity of family and other community members. Thus, foreign students are a vulnerable student population [6]. These vulnerable students run the risk of drop-out potential of university.

Based on a literature review conducted on other student populations, grit was selected as a hypothetical factor contributing to university completion or non-completion. Grit is the "perseverance and passion for long-term goals" [2]. It is the quality that allows a person to continue to work at something even through failure or when it seems that there is no immediate payoff. A gritty person does not require immediate positive feedback [2].

Duckworth et al [2]. noted after interviewing professionals in investment banking, painting, journalism, academia, and law that grit seemed to be a necessity to high achievement, with individuals often showing surprise that incredibly gifted peers did not end up at the top of their field, yet incredibly hard-working individuals wowed them with their achievements. In the Terman's longitudinal study of mentally gifted children, there was only a 5 point separation of IQ scores between the most talented men and the least talented men [7]. What separated the professors, lawyers, or doctors in this particular group were non-cognitive skills: "Perseverance, Self-Confidence, and Integration toward goals"[7]. It has been found by Ericsson & Charness [4] that in fields like athletics, arts, and chess, one needs over 10

years of daily "deliberate practice" to become an expert in their field and that over 20 years of practice was an even stronger indicator of world-class performance.

"Grit overlaps with achievement aspects of conscientiousness but differs in its emphasis on long-term stamina rather than short-term intensity. The gritty individual not only finishes tasks at hand but pursues a given aim over years. Grit is also distinct from dependability aspects of conscientiousness, including self-control, in its specification of consistent goals and interests" [2].

Adults of equal age with more education were grittier than those with less education and grit increased with age, even when education level was controlled for [2]. Duckworth et al. [2] believe that a person learns from experience that quitting, changing goals, and repeatedly starting over again are not helpful strategies for success, so older individuals are more likely to be grittier than younger individuals. It is even possible that novel paths and a low threshold for frustration are adaptive early in life so that young people can find the more promising paths. However, eventually, novelty must wear away and development should take hold, because excellence takes time [4].

It has been found that gritty students have higher GPAs than their less gritty peers [2]. Among relatively bright individuals, people who are less smart than their peers work harder and more determinately than smarter people [2] [5].

It should be noted that the scope of my research questions concerns the applicability of psychological models to understanding the university drop-out potential and university adjustment of foreign students. It is to be expected that there are many complex factors at play, including cultural or economic factors that may be beyond the control of the university or the student. There may also be institutional factors, such as the availability of informed counseling services or specialized support services such as language training. However there have been few researches on

psychological characteristics to explain drop-out potential. Regarding this trends, this research focused on whether the grit could explain drop-out potential. In addition, as the subject are foreign students studying in Korea, the relationship between grit and university life adjustment was focused with drop-out potential. Based on the need of research, this study aimed to investigate the relative levels of grit and their relationship with potential dropping-out and university adjustment of foreign students in Korea. These results will provide some initial answers that will help prepare educators in Korea for an increased role in helping foreign students to have successful university careers.

2. Methods

2.1 Subjects

The subjects of this survey were gathered through purposive sampling, and 335 foreign students were collected from university students in Seoul and Chungcheongnam-do Province in South Korea. 41.5% of the subjects were male, and 58.5 % were female. 5.7% of the respondents were in their first year of university, 8.7% were in their second year, 18.5% were in their third year, and 31.0% were in their fourth or more undergraduate year of university. 33.7% of the respondents were graduate students. 2.4% of the respondents did not reply to this question.

2.2 Instruments

2.2.1 Grit-S

Grit was assessed using the scale which had been developed by Duckworth and Quinn [3]. This scale has eight items rated on a five-point Likert scale (1 = not like me at all, 5 = very much like me). Cronbach's $\alpha = .552$ for the entire scale.

2.2.2 Drop-Out Potential

The potential for dropping-out of university was

assessed by a short, 4 question scale rated on a five-point Likert Scale (1 = Never, 5 = Always) developed by the authors. Two example items from the scale are "I think about drop-out potential (quitting) university sometimes" and "I have talked with someone about drop-out potential of university." The reliability of the drop-out potential scale was Cronbach's $\alpha = .841$.

2.2.3 University Life Adjustment

In order to measure the degree of university life adjustments, the scale of university life adjustment, which was developed by Baker & Siryk [1], was used. The scale had a total of 67 questions; however only 34 questions were utilized to measure university life adjustments. The scale was rated on a five-point Likert scale (1 = never, 5 = always). The higher the points were, the higher the levels of university life adjustment would be and the Cronbach's α of emotional adjustment was .747, the Cronbach's α of social adjustment was .769, the Cronbach's α of university satisfaction was .665, and the Cronbach's α of academic adjustment was .665.

2.3 Data Analysis

Data for the present study was analyzed using descriptive statistics, correlation analysis, one-way analysis of variance, hierarchical cluster analysis, and multivariate analysis of variance (MANOVA).

2.4 Designation of Grit clusters

Using the Grit-S scale, a hierarchical cluster analysis was performed following Ward's [8] cluster analytic technique. The analysis strongly supported a three-cluster solution. Cluster 1 appeared to be theoretically consistent with low grit (lower scores on the scale) whereas Cluster 2 appeared to be consistent with high grit (individuals reporting the highest scores on the grit scale). Participants in Cluster 3 had scores that we significantly higher than those found in Cluster

1, but significantly lower than those in Cluster 2. Thus, these individuals were identified as being the mid grit cluster. Average scores for the clusters are reported in Table 1. Results yielded 145 individuals in the low grit cluster, 64 individuals in the mid-grit cluster, and 103 individuals in the high grit cluster.

〈Table 1〉 Grit Scale Scores by Cluster

	Grit
Cluster 1 (low grit)	
N	145
Mean	2.97
SD	0.41
Cluster 2 (high grit)	
N	103
Mean	3.76
SD	0.44
Cluster 3 (mid grit)	
N	64
Mean	3.34
SD	0.29

3. Results

3.1 Correlation between grit, dropping-out, and Korean university life adjustment

Pearson correlation analysis and descriptive statistics for all variables in the study are reported in Table 2. The grit scale was significantly and positively related to emotional adjustment, social adjustment,

university satisfaction, and academic adjustment, and the grit scale was negatively correlated to dropping-out of university. Secondly, drop-out potential is negatively and significantly correlated to all subclusters of university adjustment.

Grit (M=3.30, SD=.35) is higher than the mid-point and drop-out potential (M=1.48, SD=.67) is very low. Emotional adjustment and university satisfaction are the highest among the subgroups of university adjustment but social adjustment is the lowest among them.

3.2 Means of Grit on Drop-out potential and University Adjustment

A multivariate analysis of variance (MANOVA) was then conducted with the grit clusters serving as independent variables and drop-out potential, emotional adjustment, social adjustment, university satisfaction, and academic adjustment serving as the dependent variables. The means and standard deviations are shown in Table 3. A significant main effect was found, Pillai's Trace = .171, F(10,610) = 5.685, p The multivariate effect size was from .035 to .130. To control for Type I errors, Duncan's comparisons were performed. It was found that the mid and high grit clusters are lower in mean drop-out potential rates than the low grit cluster. And all groups of university

〈Table 2〉 Correlations and Descriptive Statistics of Grit, Drop-out Potential, Emotional Adjustment, Social Adjustment, University Satisfaction, and Academic Adjustment

	Grit	Drop-out potential	Emotional Adjustment	Social Adjustment	University Satisfaction	Academic Adjustment	M	SD
Grit	1						3.30	.35
Drop-out Potential	-.209**	1					1.48	.67
Emotional Adjustment	.279**	-.404**	1				3.94	.73
Social Adjustment	.357**	-.213**	.435**	1			3.32	.66
University Satisfaction	.354**	-.463**	.425**	.464**	1		3.94	.71
Academic Adjustment	.461**	-.421**	.567**	.507**	.603**	1	3.73	.63

**p<.01

〈Table 3〉 Multivariate Analysis of Variance on Grit Clusters

	Low	Mid	High	<i>F</i>	<i>Sig.</i>	<i>ES</i>
Drop-out potential	1.62(.75) ^a	1.32(.59) ^b	1.32(.48) ^b	8.357	.000	.051
Emotional Adjustment	3.81(.73) ^b	4.14(.71) ^a	4.07(.66) ^a	6.616	.002	.041
Social Adjustment	3.09(.61) ^b	3.59(.66) ^a	3.44(.65) ^a	16.790	.000	.098
University Satisfaction	3.76(.68) ^b	4.08(.76) ^a	4.09(.65) ^a	8.701	.000	.035
Academic Adjustment	3.50(.55) ^b	4.01(.69) ^a	3.91(.58) ^a	23.095	.000	.130

adjustment were higher in mid and high clusters of grit than the low cluster.

4. Discussion

First, the grit scale was significantly and positively related to emotional adjustment, social adjustment, university satisfaction, and academic adjustment, and the grit scale was negatively correlated to dropping-out of university. Drop-out potential is negatively and significantly correlated to all subgroups of university adjustment. Grit is defined as perseverance and passion for long-time goals, and showed that grit predicted achievement in challenging domains over and beyond measures of talent [2] Therefore the result, which grit was positively correlated with drop-out potential and university adjustment, was anticipated. In addition, the results were consistent with the findings that Grit-S predicted completion of the rigorous summer training program better than the whole candidate score [3].

Second, grit is higher than the mid-point and drop-out potential is very low. Emotional adjustment and university satisfaction are the highest among the subgroups of university adjustment but social adjustment is the lowest among them. The finding that the grit score of subjects was higher than mid-point was consistent with the result of the study by Duckworth and Quinn [3].

Third, it was found that the mid and high grit

clusters are lower in mean drop-out potential rates than the low grit cluster. And all groups of university adjustment were higher in mid and high clusters of grit than the low cluster.

As the result of multivariate analysis, the levels of grit were related with drop-out potential and university adjustment. The reason is that Grit entails working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress [3]. According to the results, the lowest cluster of grit was significantly higher in drop-out potential thinking and lower in all subgroups of university adjustment of foreign students studying in Korea. To prevent drop-out potential and enhance the university adjustment of foreign students, the focus should be on the clusters of lower grit. In addition, the program to enhance the grit should also be developed.

ACKNOWLEDGMENTS

This study was undertaken with the support of a research grant in 2014 from Hanseo University.

REFERENCES

- [1] Baker, R. W., & Siryk, B., Measuring adjustment to college. *Journal of Counseling Psychology*, vol. 31, pp. 179 - 189, 1984.

- [2] Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R., Grit: perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, vol. 92, no. 6, pp. 1087 - 101. doi:10.1037/0022-3514.92.6.1087, 2007.
- [3] Duckworth, A. L., & Quinn, P. D., Development and validation of the short grit scale (grit-s). *Journal of Personality Assessment*, vol. 91, no. 2, pp. 166 - 74. doi:10.1080/00223890802634290, 2009.
- [4] Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychologist*, vol. 49, pp. 725 - 747.
- [5] Moutafi, J., Furnham, A., & Paltiel, L., Can personality factors predict intelligence? *Personality and Individual Differences*, vol. 38, no. 5, pp. 1021 - 1033, 2005.
- [6] Sherry, M., Thomas, P., & Chui, W. H., International students: a vulnerable student population. *Higher Education*, vol. 60, no. 1, pp. 33 - 46. doi:10.1007/s10734-009-9284-z, 2010.
- [7] Terman, L. M., & Oden, M. H., *The gifted child grows up: Twenty-five years' follow-up of a superior group*. Oxford, England: Stanford University Press, 1974.
- [8] Ward, J. H., Hierarchical grouping to optimize function. *Journal of the American Statistical Association*, vol. 58, pp. 236 - 244, 1963.

셰리 슬릭(Sheri N. Slick)



- 2002년 5월 : University of Southern Colorado
- 2012년 3월 : 한서대학교 평생교육학과 박사과정
- 2009년 3월 ~ 현재 : 한서대학교 항공관광학과 교수
- 관심분야 : Grit, Cultural Diversity
- E-Mail : sherislick@yahoo.com

이 창 식(Lee, Chang Seek)



- 1984년 2월 : 서울대학교(교육학석사)
- 1991년 4월 : University of the Philippines(Ph.D.)
- 1993년 2월 ~ 현재 : 한서대학교 아동·청소년복지학과 교수
- 관심분야 : 다문화교육, 기부
- E-Mail : lee1246@hanmail.net