

*Analysis of Factors Influencing Dropout Among Adult Learners in Korea:
A Study Utilizing the Nontraditional Undergraduate Student Attrition Model*

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Abstract

This research aims to investigate the relationship among factors affecting dropout of adult college students in Korea. Nowadays, with a decline in the traditional aged students (age range of 19 to 24), there has been a significant rise in the proportion of nontraditional, older, part-time adult university students in Korea. Many of these non-traditional learners pursue higher education for career development, re-skilling or reemployment purposes. Nevertheless, a number of adult college students choose dropout due to insufficient motivation or barriers to sustain academic commitments. Despite the growing prevalence of adult learners in Korean universities, there is a limited amount of research analyzing the factors influencing dropout considering the context of Korean adult learners. Therefore, this study aims to utilize Bean & Metzger's (1985) Nontraditional Undergraduate Student Attrition Model to analyze the factors influencing student departure (stop-out and dropout) among adult learners in Korea. For the analysis, this study utilized Korean Educational Longitudinal Study (KELS) which is one of the most representative national longitudinal panel data collected by Korean Educational Development Institute. According to Bean & Metzger' (1985) and previous studies about student attrition, the influence of background characteristics, academic variables, environmental variables and academic and psychological outcomes were analyzed. The results showed that the influence of academic variables had significant influence on the dropout intention. However, the influence of student engagement or social integration had no significant effect on the dropout intention. Based on these results, theoretical and practical implications were discussed.

Keywords: Adult Learners, Dropout, Student Departure, Nontraditional Student

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Introduction

Traditionally, university students in East Asian countries such as Korea and Japan were predominantly composed of students within the traditional age range of 19 to 24. However, these days, new student population is rising in higher education: adult learners. Adult learners are also called non-traditional students, which means that students who are older than 24, or are the part-time students, or have regular jobs or dependents to take care, or some combination of these factors (Bean & Metzner, 1985). The rising demand for higher education among adult learners is caused by various reasons. As the introduction of new technologies, the industrial structure is changing, too. In addition, the flexibility in the labor market has been increased. Also, the life expectancy is increasing. Therefore, some people trying to get higher education degree for higher pay and promotion or changing their career. Some people purely pursue higher education for their personal development (Bowers & Bergman, 2016; Choi, 2006; Sogunro, 2015).

The increase of adult learners is a global phenomenon. For example, in fall 2022, approximately 2.9 million students over the age of 25 were enrolled in an undergraduate degree program in the U.S. (U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 2022.). In 2021, the adult participation rate in lifelong learning was 11% in the EU (Eurostat, 2024. 6.). In the case of Korea, the number of adult learners is increasing with the effort of government policies and the demand of adult learners. Recently, most of the universities in Korea are struggling to fill their admission quota. Because of low birth rate in Korea, the population around school-aged is getting declined, and now Korea is expected to be a world's oldest population in near future. Figure 1 shows that the admission quota of higher education institutions exceeds the 18-year-old population in 2020. In 2024, 169 universities in Korea failed to fill their admission quotas, which are the amount of 85% of whole 4-year institutions in Korea (Seo & Kim, 2024).

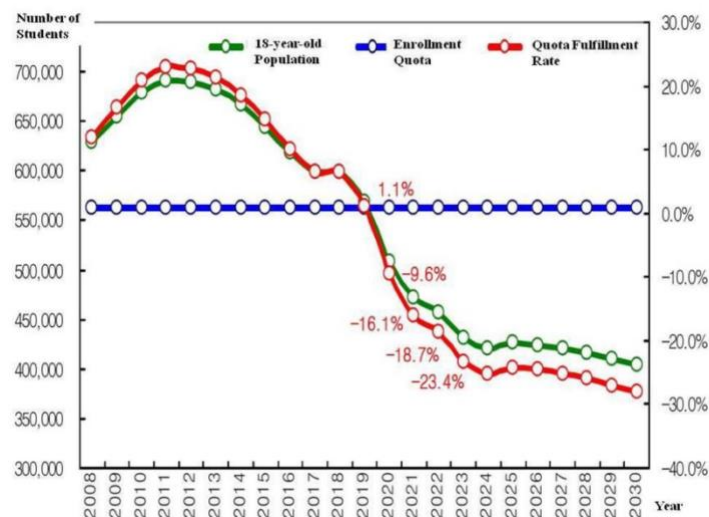


Figure 1: The Estimated Trend of University Enrolment Quota and 18-Year-Old Population.

Source: Kwon. (2013). pp. 40.

In these circumstances, reforming university curriculum and learning environment for adult learners has been discussed as an option for universities to fill admission quota. The Korean government has been promoted establishing degree program for adult learners under the policy named “Lifelong education at universities for the Future of Education (LiFE)” since early 2010s (Na, Park & Kim, 2024). In 2023, officially 49 universities (about 1/4 of

universities in Korea) participated in this project (<https://univ.nile.or.kr/nile/>), and there are many other universities operating degree program for adult learners. Among researchers there is a consent on that now establishing a learning system to meet the demand of adult learners is the major task for most of Korean universities (Choi & Park 2018, Lee, 2008; Rhee, 2021).

Although many universities are trying to provide degree program for adult learners, large number of adult learners choose dropout due to many reasons. However, to date, there has been limited research on adult learners enrolled in regular degree program in Korean context. There have been some studies about adult learners, but most studies focusing on learners enrolled in distance education institutions (Kwon et al., 2020; Kim, 2017; Yang & Jung, 2019; Shin et al., 2020; Jung et al., 2018). There is even less research on the topic of student retention of adult learners. Considering this situation, the purpose of this study is the analyze the factors influencing dropout intention among adult learners in Korea, especially focusing on Bean & Metzner's nontraditional undergraduate student attrition model.

Theoretical Backgrounds

Characteristics of Adult Learners

According to previous research, it is known that adult learners have different characteristics with traditional-aged students. Usually, adult learners have clear purpose for entering degree program than traditional aged students (Ku et al., 2015). Also, adult learners are more likely to be employed full or part time, and more likely to be parents or have dependents (Kim & Han, 2012). Because of these characteristics, usually adult learners have trouble to secure study hours (Choi, 2006; Jeong, 2019). Moreover, since the adult learners often resume 'learning' and 'studying' activities for a while, they are more likely to have difficulty with learning skills and need assistant for learning (Kim, 2022).

Student Attrition Theories and Models

For a long decade, student attrition has been one of the major concerns for researchers. Therefore, there are various kinds of theories and models that explain student attrition in higher education in various perspectives (Bean & Eaton, 2000; Cabrera, Nora & Castaneda, 1993; Pascarella & Terenzini, 1980; Tinto, 1993; Kerby, 2015). For example, Tinto's student dropout model (1993) is one of the most well-known student attrition models, with strengths in explaining student stop-out and dropout. However, including Tinto's model, most of student attrition models were developed focusing on traditional-aged students, who are recently graduated high school, under age 25, enrolled full time, and residing at or near their college.

However, considering the characteristics of adult learners, traditional student retention models, which emphasize influence of social and academic integration, student involvement, student engagement, or the influence of peer groups may not appropriate for adult learners. In other words, these factors may not important when we consider the characteristics of adult learners. In this perspective, it is required to analyze the dropout factors of adult learners, with theoretical backgrounds focusing on adult learners.

There is research that develop student attrition model for adult learners. Bean & Metzner (1986) developed student attrition model in 1986 based on the combination of turnover theories of industrial workers and student attrition models. The model is consisted of 6

categories of factors: personal backgrounds, academic variables, environmental variables, social integration variables, academic outcome, psychological outcomes, intent to leave, and dropout (see Figure 2). This model considers that environmental variables such as finance and hours of employment and academic variables such as study hours have direct and most important effect on dropout intention and dropout decision. On the other hand, this model considers that social integration variables have “possible effects” on the dropout intention and decision.

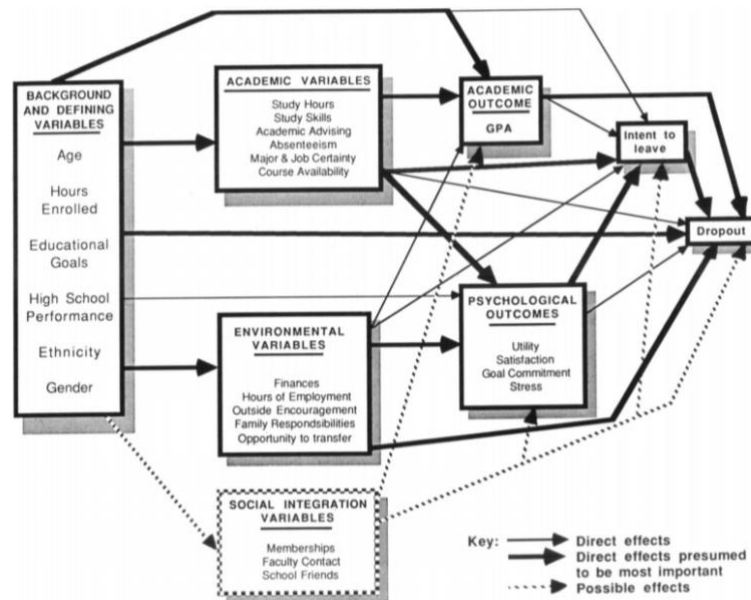


Figure 2: Analysis framework.
 Source: Metzner & Bean. (1987). pp. 17.

Based on Bean & Metzner’s research and other research on student attrition or student retention in and outside of Korea, this study suggested an analysis framework (see Figure 3). The framework includes institutional characteristics, student engagement, scholarship, and attend period in addition to Bean & Metzner’s model, based on the literature review.

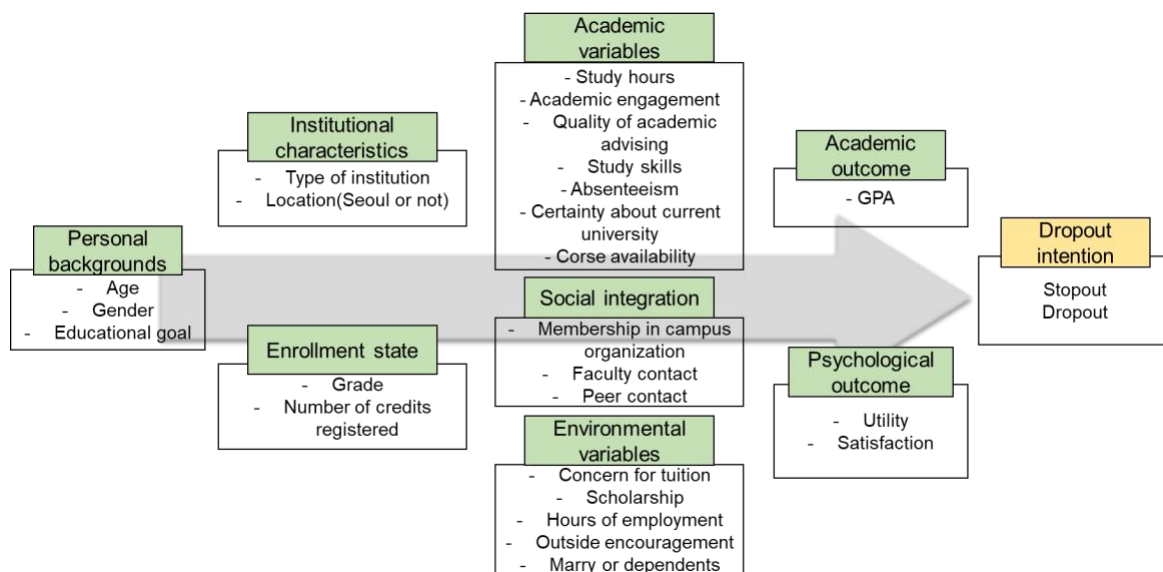


Figure 3: Analysis framework.

Methods

Data Source

The data utilized for the analysis was from KELS. KELS is one of the most representative large scale, longitudinal national survey designed for making educational policy. In 2005, 6,908 7th graders were sampled from the whole middle schools in Korea, and follow-up surveys were conducted every interval years until 2020. For this study, 9th follow-up (2018) and 10th follow-up (2020) were utilized. The samples were selected along with following steps. First, university students or university students / employees were selected. Then, students who entered their current university after 24 years old were selected. In other words, some students who entered university right after high school graduation in 2011 to 2015 and attend university until 2018 were excluded. Then the samples who attend at university outside of Korea and have too many missing values in variables were excluded. After final steps, 295 samples were included for the analysis. The sample statistics are shown in Table 1.

		N	%
Institution type	Community college	64	21.7
	4-year University	231	78.3
Age	27	210	71.2
	29	85	28.8
Attending periods	1 year	74	25.1
	2 years	112	38.0
	3 years	68	23.1
	4 years	41	13.9
Employ status	Employed	146	49.5
	Not employed	149	50.5
Marital status	Married / living with partner	17	5.8
	Not married	278	94.2
Total		295	100.0

Table 1: Sample statistics

Measurements and Analysis

The variables were measured based on the literature reviews. The list of the variables and measurements are shown in Table 2. For the analysis, validity and reliability were tested for each variable. The range of reliability was $\alpha=.702 \sim .962$. Then the stepwise regression analysis was conducted for each dependent variable.

Variable name	Measurement	Mean	SD
<u>Dependent variables</u>			
<i>Dropout intentions</i>			
Stop-out intention	5 Likert scale: "I am thinking about leave college for a while and finish degree program later"	2.31	1.162
Dropout intention	5 Likert scale: "I want to dropout"	2.16	1.070

Variable name	Measurement	Mean	SD
Independent variables			
<i>Personal backgrounds</i>			
Age	Birth age, 0= age 27, 1= age 29	0.29	0.454
Gender	0=female, 1=male	0.42	0.495
Educational goal	Desired degree: 0=undecided, 1=high school ~ 5=PhD	2.57	1.602
<i>Institutional characteristics</i>			
Type of institution	0=community college, 1=4-year institution	0.78	0.413
Location	0=not Seoul province, 1= Seoul province	0.53	0.500
<i>Enrollment state</i>			
Grade	Number of years attending current institution	2.26	0.987
Number of credits registered	Number of credits registered in is semester	2.77	1.940
<i>Academic variables</i>			
Study hours	8 Likert scale for: Use time for Study, 1=never ~ 9: more than 21 hours per week	3.58	1.969
Academic engagement	Mean of 6 questions such as “asking questions in the class”	2.98	0.720
Quality of academic advising	Mean of 2 questions such as “Professors are enthusiastic about the education of students”	3.43	0.728
Study skills	Mean of 2 recoded questions such as “Classes and assignments felt difficult”	1.70	0.728
Absenteeism	Mean of 3 questions such as “skip classes for no reason”	2.79	0.823
Certainty about current university	Mean of 2 questions such as “I am satisfied with the decision to attend my current university”	3.32	0.766
Course availability	5 Likert scale: “There are various courses that students want”	3.16	0.929
<i>Social integration</i>			
Membership in campus organization	Use time for campus organization, 1=never ~ 9: more than 21 hours per week	1.42	0.948
Faculty contact	Mean of 6 questions such as “How often do you exchange greeting with professors?”	2.69	1.400
Friend contact	Mean of 6 questions such as “How often do you have conversation about personal matters with friends?”	2.63	1.459
<i>Environmental variables</i>			
Concern for tuition	5 Likert scale: “anxiety over tuition fees”	0.27	0.444
Scholarship	0=no scholarship in the previous semester, 1=earn scholarship in the previous semester	2.03	0.951
Hours of employment	working hours per week	2.19	2.332
Outside encouragement	Mean of 4 questions such as “Parental involvement in course selection”	2.04	0.943
marry	0=not married, 1=married	0.03	0.181
<i>Academic outcome</i>			
GPA	Average grade level	3.20	0.992
<i>Psychological outcomes</i>			
Utility	Mean of 2 questions such as “I found out why I am attending college and what I want to get”	3.38	0.718
satisfaction	Mean of 5 questions such as “satisfaction about the quality of class”	3.28	0.720

Table 2: List of the variables and measurements.

Results

The results of the analysis were shown in Table 3 and Table 4. The adjusted R squares were .283 and .356 for each dependent variables, which were decent level of goodness-of-fit.

Category	Variables	DV: Stop-out		
		B	s.e	β
	(constant)	3.376***	.989	
Personal backgrounds	age	.095	.204	.037
	Gender	- .313	.167	-.129
	Educational goal	.001	.053	.002
Institutional characteristics	Type of institution	.351	.208	.119
	location	- .056	.176	-.023
Enrollment state	Grade	.008	.091	.006
	Number of credits registered	- .210***	.057	-.253
Academic variables	Study hours	- .090	.048	-.147
	Academic engagement	.070	.138	.042
	Quality of academic advising	- .336*	.148	-.206
	Absenteeism	.020	.113	.013
	Study skills	- .334**	.108	-.225
	Certainty about current university	.329*	.143	.215
	Course availability	.171	.099	.140
Social integration	Membership in campus organization	- .035	.086	-.030
	Faculty contact	.167	.100	.184
	Friend contact	.007	.093	.009
Environmental variables	Scholarship	- .177	.170	-.072
	Concern for tuition	.144	.088	.115
	Hours of employment	.066	.043	.128
	Outside Encouragement (parent's care)	.149	.090	.119
	marry	.662	.449	.097
Academic outcome	GPA	- .081	.100	-.071
Psychological outcome	Utility	- .112	.156	-.069
	satisfaction	- .092	.174	-.059

$R^2=.379$, adjusted $R^2=.283$

Table 3: Factors Affecting Stop-out intention of Adult Learners.

Category	Variables	DV: Dropout		
		B	s.e	β
	(constant)	3.981***	.816	
Personal backgrounds	age	.222	.168	.098
	Gender	.006	.138	.003
	Educational goal	.008	.043	.011
Institutional characteristics	Type of institution	.063	.172	.024
	location	- .212	.145	-.102
Enrollment state	Grade	.029	.075	.028
	Number of credits registered	- .103*	.047	-.143
Academic variables	Study hours	- .128**	.039	-.239
	Academic engagement	.108	.113	.075
	Quality of academic advising	- .184	.122	-.129
	Absenteeism	.060	.093	.044
	Study skills	- .272**	.089	-.210
	Certainty about current university	.010	.118	.007
	Course availability	.036	.081	.034
Social integration	Membership in campus organization	- .064	.071	-.063
	Faculty contact	.117	.082	.147
	Friend contact	.062	.077	.085
Environmental variables	Scholarship	- .260	.140	-.122
	Concern for tuition	.055	.072	.050
	Hours of employment	.008	.035	.018
	Outside Encouragement (parent's care)	.194**	.074	.179
	marry	.257	.371	.043
Academic outcome	GPA	- .201*	.083	-.201
Psychological outcome	Utility	- .129	.129	-.092
	satisfaction	.053	.144	.039

R²=.442, Adjusted R²=.356

Table 4: Factors Affecting Dropout intention of Adult Learners.

For stop-out intention, number of credits registered in previous semester had negative effect on stop-out intention. Quality of academic advising and Study skills had negative effect, too. However, certainty about current university had positive effect on stop-out intention. For dropout intention, number of credits registered previous semester decreased dropout intention. Study skills also decreased dropout intention. From these results, it is possible to conclude

that adult learners who have enough time for taking many credits and have time and energy to commit on study does not have intention to leave college.

Social integration and environmental variables, academic and psychological outcomes had no significant effect on stop-out intention. Social integration was also not significant for dropout intention, and among environmental variables, outside encouragement, especially parent's care about college life had significant effect on dropout intention. In the previous research, if there's someone who cares about adult learner's study, it is more likely to continue their degree program. However, in this case, parent's care for 30-around-aged adult learner could be a burden. Lastly, high GPA had significant effect to decrease dropout intention.

Conclusion

Based on the results, some implications could be discussed. First, for the adult learner's retention, academic commitment is the most important factors. The level of difficulty about understanding the class contents and academic commitment had significant influence on both stop-out and dropout intention. Also, the time for taking courses and study, and academic performance were the significant predictor of student attrition. It is possible to conclude that the academic commitment is the most important factors for adult learner's retention. In addition, for adult learners, academic advising of professors is critical for retention. The results showed that the quality of academic advising (professors' care and interest about students, emphasizing class and student learning) significantly decreased the level of stop-out intention.

However, for adult learners, academic engagement and social integration had no significant influence on stop-out and dropout intention. The psychological outcomes such as satisfaction and utility had no significant effect on both stop-out or dropout intention. Academic and social engagement, and satisfaction is one of the most powerful predictors for traditional-aged student retention. However, since adult learners have more practical and clear purposes for attending college (Kim et al., 2013), it could be inferred that engagement and psychological status are not important standards for dropout decision (Bean & Metzner, 1987).

Some theoretical and practical implications could be suggested based on the results of this study. First, it is required to develop student attrition model for adult learners in college, considering their characteristics. In most cases, adult learners go to college for practical and clear purposes compared to traditionally aged students. Therefore, it could be referred to that the quality of curriculum and the lectures, the quality of academic advising are more important than social integration on campus. In addition, adult learners usually taking courses while they have a regular job or take care of dependents, so they have limited time and interest for socializing on campus. More research is required to figure out how to increase adult learners' retention, considering the characteristics of adult learners and their motivation.

Second, future studies need to measure 'dropout decision', rather dropout intention. It is well known that dropout intention is the most powerful predictor of dropout decision (Metzner & Bean, 1987; Tinto, 1993). Therefore, it is meaningful to measure dropout intention, because it is possible to prevent dropout behaviours before the students decide to leave college. However, for developing more precise student attrition model, future studies need to include actual dropout decision.

For practical implication, the universities which operating curriculum for adult learners should provide support for their learning. Most of adult learners are having trouble with learning, because usually they left official education for a while. Usually, student service programs such as learning community or peer mentoring requires additional time commitment and makes students to stay on campus longer. However, adult learners had not enough time to participate those programs. It is required to develop and provide learning assistant program especially designed for adult learners. Considering this situation, it is essential to develop and provide appropriate learning assistant program for adult learners. For example, learning assistant programs such as “how to use time efficiently for reading materials while you take care of your dependents” could be helpful for adult learners.

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