ABSTRACT

A status study: analyzing the students at high risk for interruption in education

Researchers: Choi, Sang-keun

Yang, Soo-kyung

Nam, Ki-gon

Research Assistants: Kwon, Kyoung-lim

Yeon, Bo-ra

Providing support for youths who dropout is an important policy issue that many countries in the world have recognized as a social problem. In the case of South Korea, the percentage of middle and high school dropouts ("dropouts") has decreased from the end of 1990's, when the collection of such data began, hit the lowest point in the year 2005 and since then has shown an increasing trend. Most of the dropouts lose the opportunity to build up their human resources from educational system due to various reasons, including personal situations or problems with their family or social environment, and consequently must endure the comparatively lower incomes once they enter the work force. The lower incomes of the dropouts translate into lower taxes to the respective governments, leading to potential economic loss to the society as a whole. Further, the interruption in education increases the dropout's exposure to delinquency or criminal



activities, potentially leading to increased social costs and welfare costs. In addition to those mentioned above, the interruption in education causes various negative consequences, to the dropouts themselves, as well as the society as a whole.

To solve the issues caused by and from the interruption in education, the most important measure is to prevent the potential dropouts from actually dropping out of school by quickly identifying the high risk students and providing appropriate intervening measures. To that end, this research tries to figure out the number of the high risk students who are in danger of dropping out of high schools and middle schools, and the attributes and behavioral characteristics of these high risk students. Further, based on the actual condition study of the high risk students and the estimate number of such high risk students, the research will try to provide practical and meaningful suggestions for supportive measures. To reach that research goal, the research was conducted as following:

First, define interruption in education and high risk students for interruption in education, then set the study model; Second, analyze the actual condition of the dropouts and the attributes and behavioral characteristics of the high risk students; Third, from the characteristics of the dropouts, extrapolate the different levels of the dropout risks, and estimate the number of currently enrolled students falling in each risk level; Fourth, through a comparative study between the characteristics of the dropouts and currently enrolled students, identify high risk students; Fifth, calculate and analyze social economic costs caused by interruption in education; Sixth, study major developed countries' conditions and support strategies for dropouts and draw their implications for South Korea's educational policy; and Seventh, establish and suggest supportive measures for high risk students.

Both questionnaires and interviews were used in the research. To find out the actual conditions of dropouts and high risk students, 12,800 enrolled students and 703 dropouts from 120 high and middle schools were sampled, with recovery rate of 96.7% and 83.1%, respectively. From the responses, cross analysis, variance analysis and CART analysis were conducted. To identify factors that materially influence the interruption in education and provide more focused and relevant questions in the questionnaire, twenty dropouts were interviewed initially, and ten individuals were asked back for a second and more in-depth interview.

Questionnaire's survey area and items were comprised of the dropouts' perceptions regarding individual attributes (degree of behavioral problems while in school, maladjustive attitude in learning, level of academic awareness, psychological attributes), peer group attributes (friends' degree of behavioral problems), family attributes (positive and negative influences from the parents), school attributes (satisfaction in school life while in school, relationships with the teachers).

Attributes of the dropouts and the enrolled students

- Individual attributes: The average degree of behavioral problems of dropouts while in school is 3.13, which is 1.55 higher than that of the currently enrolled students, dropouts had higher (3.38) degree of maladjustive attitude in learning than the enrolled students (2.34). The enrolled students had higher level of academic awareness (3.3) than the dropouts (2.56), as well as higher psychological attributes (3.15) than the dropouts (2.7)
- Peer group attributes: The dropouts' close friends while in school showed higher average level of behavioral problems (3.4), whereas the average for currently enrolled students' friends was 2.06.



- Family attributes: The enrolled students had higher perception of positive parental influences (3.68) than the dropouts (2.54), while the dropouts had higher perception of negative parental influences (2.56) than enrolled students (2.14).
- School Attributes: The enrolled students were more satisfied with their school lives (2.99) than the dropouts while they were enrolled in school (2.58), and the enrolled students have better relationships with the teachers (3.1) than the dropouts (2.84).

■ Estimated Number of students per risk level

- Individual attributes: Among currently enrolled high school and middle school students, 2.0% or 81,037 students were estimated to be at high risk level based on the behavioral problems, 12.9% or 510,934 students were at high risk level based on the level of academic awareness, 7.7% or 304,055 based were at high risk level on the maladjustive attitude in learning, and 20.2% or 800,743 students were at high risk level based on psychological attributes.
- Peer group attributes: Based on the level of behavioral problems of the close friends, 10.2% or 404,451 students were estimated to be at high risk level.
- Family attributes: Among currently enrolled high school and middle school students, 11.8% or 468,617 students were estimated to be at high risk level based on their perception of positive parental influences, and 24.6% or 978,116 students were at high risk level based on their perception of negative parental influences.
- School Attributes: Among currently enrolled high school and middle school students, 29.5% or 1,172,090 students were estimated to be at high risk level based on their level of satisfaction with their school

lives, 24.5% or 974,514 students were at high risk level based on their school system attributes, 30.6% or 1,214,364 students were at high risk level based on their relationships with the teachers.

■ Discriminant analysis of students at high risk of dropout and social and economic Cost Analysis

For the discriminant analysis of students at high risk of dropout, CART (Classification and Regression Tree) analysis was utilized, and for social and economic cost analysis, due to the limitation of data, the analysis was based on two main factors: 1) the cost related to the loss of income due to interruption in education and 2) the cost related to the increased criminal activities resulting from dropouts. To estimate the decrease in income tax revenue, data of 10 years from KLIPS (Korean Labor and Income Panel Study), 2007 was used, and to estimate the criminal cost increase, the criminal analysis data from Supreme Public Prosecutor's Office was used.

After CART analysis of currently enrolled students' likelihood of dropping out of school, 3.1% or 123,156 students were estimated as high risk students. If 123,156 students were to drop out of school, the social and economic cost to the society is estimated to be 11,590,200,000,000 Korean Won.

■ Policy Recommendation

After careful examination of the suggested measures of various prior researches and considering the causes of attributes of Korea's dropouts, the following is recommended to establish a measure toward reducing the number of high risk students for dropout.

First, there is a need for heightened sense of responsibility on the



family and the teachers for the instances of dropouts. Second, the reality has to be changed in that it is too easy for students to enter. dropout, and graduate from the schools. Third, there has to be a more aggressive investment policy for the students who show low level of accomplishment and maladjustment tendencies. Fourth, a consultative body needs to be formed among the governmental departments in charge of the policy for the youths at risk.