The aim of this study is to analyze risk factors that affect school dropout of multicultural adolescents

Jung A Oh¹, Yun Tae Jung², and Young Joo Lee³
¹Dept. of Social Welfare, Chungbuk National University, 28644, Republic of Korea
²Director of Research and Development, Cheongju Welfare Foundation, 27902, Republic of Korea
³Dept. of Social Welfare, Baekseok Culture University, 31065, Republic of Korea

January 27, 2018

Abstract

The aim of this study is to analyze risk factors that affect school dropout of multicultural adolescents. Decision tree analysis was done by using SPSS 23.0 program. According to the result, discrimination and stereotype of multicultural family was the most important variable of school dropout of adolescents. In addition, aggressive behavior and low positive parenting attitude of mother affected intention of school dropout of multicultural adolescents. Above three factors are complexly interrelated to each other, and act as main risk factors that affect school dropout of multicultural adolescents. On reflection of characteristics of multicultural family, it was found that intention of school dropout was not
increased by one single factor, but it was increased by interaction of various risk factors. Based on these results, policies and practical proposal which can prevent school dropout of multicultural adolescents were suggested.

**Key Words**: Intention of school dropout of multicultural adolescents, Discrimination, Stereotype, Aggression, Parenting attitude.

1 **INTRODUCTION**

Development of science technology such as transportation and electronic communication expanded area of physical space. Borders between nations became indistinct, and the meaning of homogeneity weakened. Active exchange in various societies among nations reinforced global interdependence in politics, economy and culture. For example, trade made in economic level and expansion of investment established World Trading Organization (WTO), which promoted active development of transnational corporations. According to various political issues in transnational scale, each country interchanges relative influence, or share lifestyle and culture by selling movie, music and books through global market. This feature is also known as globalization restructured modern society, and through active exchange among nations, the world has expanded to a unit of analysis.

This globalization phenomenon also influenced expansion of personal exchange. Variety of ethnicity in Korean society induced transition from homogeneous society to a multicultural society. According to data from National Statistic Office, foreigners living in Korea are 1.74 million which is 4% of total Korean population (51.33 million), and its number is steadily increasing. In case of international marriage, total marriage with foreigner was 21,274 in 2015, and this was 7% of the total marriage. This shows quick increase compared to 1.2% in 1992. Increase in international marriage is directly related to increase in the number of children from multicultural family. In fact, total birth from multicultural family 2015 was 19,729, and this was 4.5% of total birth. Compared to 2.8% in 2008, this increase is also very fast. Like this, figure from various statistic data shows that Korea is becoming a multicultural society.
Thus, central and local government make effort to support stable settlement of multicultural family and expand support for their children. However, emigrant and multicultural families are still facing various social problems. Stereotypes about underdeveloped southeast Asian countries, income inequality, lack of support in administrative task are typical problems. Yet our society face this problem with tepid response.

Problems such as social discrimination and stereotypes, being unable to adapt to cultural difference and economic difficulty naturally affects children from multicultural families. There were 99186 multicultural adolescents in 2016, and this is ten times increase compared to 9389 in 2006. For stable education, central government made various policies, but multicultural adolescents who are giving up their study is increasing. These youths select deviation from public education because of psychological problems such as anger, burden, solitude, inferiority, fear, sense of being different, and problems related with adapting to school environment such as difficulty in understanding rules and customs, gap of academic ability and language problem (Brownfield & Sorenson, 1993). Deviation of multicultural adolescents by maladjustment of school environment can lead to various delinquency, and this can lead to vicious cycle of poverty of multicultural families.

School dropout means stopping going to school before finishing public education process, whether it is one’s will or not (Chirte, 2010). The word school dropout was used in various other words such as stopping school academic process, dropouts, early leaver, de school adolescent, child who refuse school, adolescent outside school (Blackmore & Low, 1982). As more attention to school dropout was given in 1990, the word drop-out was used to describe adolescents who stopped going to school. However, as the word dropout highlighted negative aspect such as falling behind or deviation, the word was designated and rearranged in a national scale.

Thus, after ‘Dropout Youth Comprehension Plan’ was established, people started using ‘Dropout Adolescent’, and according to Framework Act on Juveniles article 42, these adolescents were defined as ‘dropout adolescents’. This has meaning of ‘stopping study in lifelong education level’, so adolescents were seen in more neutral perspective. Even though support for dropout adolescent was deleted in ‘adolescent welfare support law article 17’, education
office in Seoul, Kwangju, Busan and Chungbuk continues support as well as defining dropout adolescent through legislation of self-government by regulation. This study defined dropout adolescent as adolescents who postponed obligation of public education after entering elementary or secondary school, as well as adolescents who was suspended or expelled from the school, so it can be said as ‘dropping out from regular school life’.

Generally, variables which affect dropout of multicultural adolescent can be divided into three. These are family factors such as parental relationship, relationship with children and parenting attitude, personal factors such as depression, frustration, aggression and self-esteem, and social factors such as stereotype and discrimination.

Firstly, domestic factors of school dropout can be divided into family background and family relationship (Migali & Zucchelli, 2017). Risk of school dropout of multicultural adolescents is high when they have family background such as economic problem, domestic trouble, low academic ability of parents, lack of educational support from parents and unemployment of parents (Frank et al., 1999). In case of family relationship, if the awareness of parental conflict of multicultural adolescent is high, it affects dropout of multicultural adolescent as adaptation rate goes down.

Those parental conflict were defined as swearing, domestic violence (Migali & Zucchelli, 2017). In addition, in most of the advanced studies, parenting attitude of parents had noticeable effect on school life of children. Multicultural adolescents also had high adaptation rate of school (Bronstein et al., 1996; Astone & McLanahan, 1994) and ultimate satisfaction rate in quality of life (Haynes, 1990) and self-esteem (Cho, 2014) was higher by adapting to school life when parenting attitude was positive and gentle which came from open communication and emotional connectedness.

In addition to his, private factors like self-esteem also have effect on dropout. If self-esteem rate is high, relationship with friends and teachers is amicable (Cairns et al, 1989; Kristof et al., 2013) and this enhances school life adaptability (Dubois et al., 1994; Ladd & Price, 1987). In contrast, having low self-esteem (Chirte, 2010) or having low self-control, unstable emotion, or being lethargic gives negative impact on dropout rate (Blackmore & Low, 1982).

There are stereotypes and discrimination for social factors. Prob-
lems that multicultural adolescents have in common is low adaptability to school and dropout due to discrimination and stereotype (Kim, 2012). The root of discrimination is on behavioral stereotype, and a group which has stigma in any ways experience various kinds of discrimination (Aronson et al., 2015) Through interaction with school environment, students can make balanced relationship, but discrimination and stereotype which multicultural adolescents face make it difficult to adapt to school environment.

Because of this stereotype and discrimination, multicultural adolescents experience maladaptive behavior such as delinquency, drug abuse and maladaptive emotion such as depression, frustration, aggression. Hence, in the academic world point out that mental adaptability of multicultural adolescent should be looked by considering their private, environmental context (Achenback, 1991; Bradley, 1997).

Like this, it was found that rather than a single factor individually having effect, many factors interacting with each other affects school dropout of multicultural adolescent (Battin-Pearson et al., 2000) As a result, multicultural adolescents are dropped out because of increase in aggression, frustration, depression which comes from stereotype and discrimination as well as low self-esteem which comes from conflict with parents and process of growth. This leads to reduction of selection for next career and deprivation of opportunity of education, and due to loss of sense of belonging, risk of joining deviation group increases. Thus, this study explores predictive factor in which affects school dropout which is set as dependent variable, with the awareness that preventing school dropout of multicultural adolescents, and groundwork to prepare policies for active guarantee of education should be preceded.

Hence, the problem of school dropout of multicultural adolescents should be recognized as a social problem which should be publicly considered in national scale. As more children from multicultural family are becoming teenagers, policies which can relieve school dropout of multicultural adolescents and make them participate in public education need to be prepared. Hence, this study aims to explore prediction factor after setting up dropout as dependent variable in the recognition that making policies which guarantees active educational right and stop multicultural adolescents from stopping public education should be preceded.
Consequently, the plot of this study is to provide base line data for preparing policy or solutions which can prevent school dropout of multicultural adolescents by finding out the risk factors of school dropout.

2 MATERIALS AND METHODS

A. Subject of Investigation

The target of this study are multicultural children from primary 4 till secondary 3 who lives in Seoul, Kyeonggido, Kyeongsangnamdo, Kyeongsangbukdo, Daejeon, Chung-Cheongnamdo, Chung-Cheongbukdo. This investigation lasted from 21, July 2014 until October 13. 400 questionnaires were distributed in total, and 380 of them were retrieved. except 23 questionnaires which was unsuitable as it was insufficiently filled in, 166 from primary students, 191 from secondary students, 357 in total was used for final analysis.

B. Inter-parental Conflict

In order to measure inter-parental conflict, conflict frequency and conflict intensity from CPIC (Children’s Perception of Inter-Parental Conflict Scale) which was developed by Grych and Finham(Grych et al., 1990) was used. Each question was organized by Likert-type scale which is 'No', 'A little bit yes' and 'Yes'. Cronbach’s $\alpha$ of this study showed that conflict frequency was .67 and conflict intensity was .75.

C. Parenting Attitude

In order to measure parenting attitude, parents’ parenting attitude scale developed by Heo(2004) was used. parenting attitude is composed of supervision, mistreatment, control, affection and rational explanation, and action of father and mother was measured individually. For positive parenting attitude there are affection, supervision and rational explanation, and for negative parenting attitude there are inconsistency, over involvement, over expectation, mistreatment and neglecting.
This scale is composed of 32 questions, and Likert-type scale was used for each question, which is 'Nothing of the kind' for 1 to 'Very much' for 4. Cronbach’s α for parenting attitude was .87 for positive parenting attitude of father, .85 for negative parenting attitude of father, .80 for positive parenting attitude of mother, and .89 for negative parenting attitude of mother.

D. Self-Esteem

Self-esteem scale which was developed by Rosenberg (1965) was used to measure self-esteem. This scale composed of 10 question, and Likert-type scale was used for each question, which is 'Nothing of the kind' for 1 to 'Very much' for 4. Cronbach’s α for self-esteem was .87.

E. Stereotype and Discrimination

Stereotype and discrimination of multicultural family was composed of single question which is 'I have experience of being discriminated by other people because my family is multicultural', and Likert-type scale was used for each question, which is 'Nothing of the kind' for 1 to 'Very much' for 4.

F. Depression, Frustration, Aggression

In order to measure Depression, Frustration, Aggression, behavior assessment scale developed by Achenbach was well as Korean Youth Self Report (K-YSR) standardized by Oh, Ha, Hong and Lee (1998) was used. Likert-type scale was used for each question, which is 'Nothing of the kind' for 1 to 'Very much' for 4, and Cronbach’s α of this study showed .77 for frustration and depression, and .84 for aggression.

G. Intention of School Dropout
Intention of school dropout was composed of single question, which is 'I have ever thought of dropping out from school', and this was low 1, medium 2, high 3.

H. Analysis Method

This study used SPSS 23.0 program to do decision tree model analysis. Especially, CHAID (Chi-Squared Automatic Interaction Detection) method (Kass, 1980) based on x² suitability test was applied. CHAID algorithm is the most extensively used decision tree model, and it has advantage of allowing polyseperation, as well as separation and stopping is progressed by setting p- of chi square statistic as separation standard. In addition, splitting and merging standard of individual variable was set as 0.05 (level of significance alpha), and in order to control Type I error (alpha), Bonferroni correction technique was used. Moreover, to make child node and parent node, standard of parent node was set to 10, and child node was set to 3.

3 RESULTS AND DISCUSSION

After expectation model of dropout of multicultural adolescents' analysis, 10 final nodes, 0.447 risk estimate, 0.025 standard estimate of risk estimate, 55.3% (±2.5) classification accuracy explains overall data. The most decisively related factor of predicting intention of dropout rate was stereotype and discrimination. If stereotype and discrimination was high, 55.1% had high intention of dropout rate, and dropout rate of adolescents who were less aware of stereotype and discrimination was only 14.2%.

This shows that if stereotype and discrimination rate is high, intention of dropout also increases. In addition, after experiencing stereotype and discrimination, intention of school dropout for adolescents who had aggression above average increased to 63.4%, and if positive parenting attitude of mother is low or average, it was increased to 84.0%.

On the other hand, adolescents who had low level of awareness for stereotype and discrimination had 14.2% for intention of school dropout, and in this case if parenting attitude of father was low or
medium, it increased to 18.6%. In addition, if level of awareness for stereotype and discrimination was medium, intention of school dropout was 31.5%, and for those adolescents if their depression and frustration rate is high, their intention of school dropout was increased to 30.3%.

Figure 1: Prediction model for school dropout of multicultural adolescents

On the other hand, adolescents who had low level of awareness for stereotype and discrimination had 14.2% for intention of school dropout, and in this case if parenting attitude of father was low or medium, it increased to 18.6%. In addition, if level of awareness for stereotype and discrimination was medium, intention of school dropout was 31.5%, and for those adolescents if their depression and frustration rate is high, their intention of school dropout was increased to 30.3%.

Figure 1 shows summary of prediction of school dropout of multicultural adolescents. The highest group is school dropout intention of multicultural adolescents, and each word is arranged as highest first. Accumulated surplus rate in the right part of the figure shows efficacy of prediction which can be varied by adding each word. Table 1 shows the summary of information about prediction of multicultural adolescents.
Through this, 14th word predicts school dropout of multicultural adolescent well, as it was 6.3% of overall example composed of 25 adolescents, and dropout intention gain was 20.2%, and index was 318.2% which showed highest intention rate of school dropout among all.

This means that adolescents who are aware of stereotype and discrimination and have low positive parenting attitude of mother had high intention rate of school dropout. Next are node 5, 13, 15, 6, 7, 4, 10, 9, 12, and each was composed of 11, 10, 16, 132, 86, 19, 8, 28, 59 adolescents, and each intention rate of school dropout was 7.7%, 3.8%, 4.8%, 38.5%, 15.4%, 2.9%, 1.0%, 1.9%, 3.8%, and each Index was 275.5%, 151.5%, 118.4%, 114.8%, 70.5%, 59.8%, 47.4%, 27.1% and 25.7%.

<table>
<thead>
<tr>
<th>Node</th>
<th>Node</th>
<th>Gain</th>
<th>Response(%)</th>
<th>Index(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>25</td>
<td>6.3</td>
<td>21</td>
<td>20.2</td>
</tr>
<tr>
<td>5</td>
<td>11</td>
<td>2.8</td>
<td>8</td>
<td>7.7</td>
</tr>
<tr>
<td>13</td>
<td>10</td>
<td>2.5</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
<td>4.1</td>
<td>5</td>
<td>4.8</td>
</tr>
<tr>
<td>6</td>
<td>132</td>
<td>33.5</td>
<td>40</td>
<td>38.5</td>
</tr>
<tr>
<td>7</td>
<td>86</td>
<td>21.8</td>
<td>16</td>
<td>15.4</td>
</tr>
<tr>
<td>4</td>
<td>19</td>
<td>4.8</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>2.0</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>9</td>
<td>28</td>
<td>7.1</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>12</td>
<td>59</td>
<td>15.0</td>
<td>4</td>
<td>3.8</td>
</tr>
</tbody>
</table>

4 CONCLUSION

The aim of this study is to discuss about solutions which can prevent school dropout of multicultural adolescents by analyzing their
dropout intention prediction model. In order to do this, decision tree model was done by applying CHAID (Chi-Squared Automatic Interaction Detection) method based on x2 suitability assessment by using SPSS 23.0 program.

Firstly, stereotype and discrimination about multicultural family was the most important variable of school dropout intention. This means that stereotype and discrimination of multicultural adolescents disturb their adaptability to school, which leads to deviation.

Secondly, aggressive behavior of multicultural adolescent was one primary variable which causes school dropout intention. Adolescents who experience more daily stress are more likely to have increased aggression, so suitable program before the formation of intention of school dropout should be made.

Thirdly, improper parenting attitude of mothers had effect on school dropout intention of multicultural adolescents. This means that mothers are meaningful people to adolescents, and deviation should be prevented by proper parenting attitude for development of parent-child relationship.

Fourthly, the three factors above are complexly connected which act as primary problem factor that affects school dropout of multicultural adolescents. On reflection of special occasion of multicultural family, it was found that interaction between problem factors increased intention of school dropout. In order to establish direction of policy to prevent school dropout of multicultural adolescents based on these analysis, next points can be discussed.

First point is solution which approaches from social aspect. For communication between subjects of multicultural society, multicultural education should be reinforced which can increase adaptability of multicultural family to mainstream culture as well as acceptability of the mainstream society. By making the majority who are general family members recognize that multicultural family is production of cultural exchange, school dropout of multicultural adolescents caused by discrimination and stereotype can be prevented. In addition, education for members of multicultural family to ease their understanding of mainstream culture is necessary. This approach method can enable mutual communication and understanding of multicultural adolescents and general adolescents, which can make adaptability of multicultural adolescents favorable.
Second is a solution considering private aspect by approaching from school. Multicultural adolescents might be aggressive due to experiencing group harassment or being ostracized because of discrimination and stereotype, so a policy that provides mental health education program for understanding and controlling anger from school should be established.

Third is a solution considering aspect of family. This can be done by implementing mother education for proper function of multicultural family, which can effect adolescents. In particular, mothers had primary role of parenting children traditionally, and as this is still in effect. Hence, a program for right parenting attitude should be made and provided. In addition, an educational program which can recover emotional intimacy for bad relationship between mother and children should be implemented, and education should be obligatorily done.

On the other hand, this study has its limits. Firstly, target group was multicultural adolescent from 11 to 16 years old, and it is difficult to generalize. In addition, as all the scales were measured by self-report, it is restrictive to predict real behavior. For next study, other various statistics should be used for generalization, and deeper study should be done by carrying out case studies.

References


14