

Early Maladaptive Schemas Characterizing Different Types of Adolescents

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Abstract

The goal of this study was to find out whether early maladaptive schemas (EMS) can be differentiated between the gifted adolescents and delinquent adolescents. Two groups of adolescents were recruited as participants to be surveyed. 144 gifted adolescents were taken from a gifted science and math education center, and 115 delinquent adolescents who had committed crime were taken from 4 police stations in the area of Gyungnam province in Korea. The Korean version of the Schema Inventory for Children was used to measure the level of the early maladaptive schemas (EMS). Stepwise discriminant function analysis yielded a function containing 5 maladaptive schemas (failure, unrelenting standards, vulnerability to harm and illness, loneliness/mistrust/abuse, and subjugation), classifying 75.29 accurately into either gifted adolescents or delinquent adolescents. These results suggested that the types of adolescents (gifted adolescents, and delinquent adolescents) can be predicted based on early maladaptive schemas. The findings are discussed from the perspective of Schema Therapy and school counseling.

Keywords: gifted adolescents, delinquent adolescents, maladaptive schemas, discriminant function analysis

1. Introduction

Adolescence is the period of physical and psychological development between childhood and adulthood. If adolescents adapt well during this time, they can successfully adapt to adulthood. Significant differences were found between gifted adolescents and non-gifted adolescents in mental health and social adaptation; gifted adolescents scored higher than non-gifted adolescents on Openness to Experience and had lower score on Neuroticism [1]. In addition, gifted adolescents received less negative nominations and more socially accepted by their teacher [2]. However, delinquent adolescents had less positive emotional experiences and most negative emotional experiences than non-delinquent adolescents [3]. Delinquent adolescents scored lower than non-delinquent adolescents in the independence and cooperativity leadership [4].

The difference between these adaptations of gifted and delinquent adolescents can be associated with their parenting styles. There were many studies that emphasized the importance of parenting in the development and well-being of children and adolescents [ex, 5, 6]. Adolescents can be molded best by the parents in their life. Experiencing parents' maltreatment is an established risk factor for adolescents' mental health problem and delinquency. Parenting styles have had significant contributions to adolescents' delinquent behaviors [7, 8, 9, 10] and mental health [8, 9]. Early life experiences of parenting

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were stored in internal working models of adolescents and can be reflected more specifically by cognitive schemas.

Schema therapy (ST: Young, Klosko, & Weishaar) [11] has a great emphasis on childhood experiences as the key to understanding and treating psychopathology. In ST, early maladaptive schemas (EMS) are thought to result from the child's interactions with caregivers. ST postulated that EMS develop from the unmet core emotional needs (secure attachment to others, autonomy, competence, and sense of identity, freedom to express needs and emotions, spontaneity and play, realistic limits and self-control) [11]. Healthy schemas develop when the core needs of child are met. This enables children to develop positive images about other individuals and the world as a whole [12]. ST specifically postulated that unmet secure attachment during childhood result in the most damaging EMS in adulthood [13].

Parenting styles are significant predictors of EMS [14]. EMS as predictor of the adolescent's girls' runaway [15], and divorce in marital relationships [16]. Thus, it is important to examine if the EMS can be to predict the types of adolescents. However there is not much such research and it needs to be done. The goal of this study was to find out whether the types of adolescents (gifted adolescents, and delinquent adolescents) can be predicted based on early maladaptive schemas.

2. Method

2.1 Participants & Procedures

Two groups of adolescents were recruited as participants to be surveyed. A comprehensive aptitude test was conducted for 68 elementary school students and 85 middle school students attending K University Gifted Science and Math Education Center located in a large city in Yeongnam Province. Before conducting individual psychological testing results interpretation, The Korean version of the Schema Inventory for Children was conducted on 144 respondents at waiting time. The participants of this sample were 61 elementary school students (42.36%), 83 middle school students (57.64%), 84 boys (58.33%) and 60 girls (41.67%). A total 115 delinquent adolescents who had committed crime were taken from 4 police stations in the area of Gyungnam province in Korea. A risk assessment tool and Personality Assessment Inventory for the juvenile offenders was conducted on with The Korean version of the Schema Inventory for Children. The participants of that sample were 95 boys (78.26%) and 20 girls (21.74 %). The total participants of this study were 144 gifted adolescents (55.60%) and 115 delinquent adolescents (44.40%).

2.2 Measures

Schema Inventory for Children scale, developed by Rijkeboer and de Boo [17], was translated into Korean by Song and Lee [18]. The scale consisted of 34 items on four-point response format. The scale consisted of 9 maladaptive schema subscales (Loneliness/Mistrust/Abuse, Vulnerability, Defectiveness, Failure, Subjugation, Unrelent Standards, Self-Sacrifice, Enmeshment, and Insufficient Self-Control). The internal consistency for maladaptive schema subscales within the current sample were .74, .72, .59, .67, .68, .51, .61, .71, and .58, respectively.

2.3 Statistical Analyses

Using SAS 9.3, A discrimination function analysis was performed to assess prediction of membership in the two groups (gifted adolescents and delinquent adolescents) from 9 predictors (Loneliness/Mistrust/Abuse, Vulnerability, Defectiveness, Failure, Subjugation, Unrelent Standards, Self-Sacrifice, Enmeshment, and Insufficient Self-Control). Since the evaluation of assumption of homogeneity of variance-covariance matrix appeared valid ($\chi^2(21, N = 259) = 28.00, p < .05$), we used pooled covariance matrix to classify the groups adopting the

first discriminant function. We had no reasons for assigning some predictors higher priority than others,

stepwise discriminant function analysis was conducted.

3. Results

First, we examined the group differences in predictor variables between the gifted adolescents and delinquent adolescents. Second, we conducted discriminant function analysis using the predictor variables to derive a discriminant function for each set of adolescents.

3.1 Group Differences on the Predictor Variables

The delinquent adolescents are significantly different from the gifted adolescents on every measure employed in the present investigation. The former is higher on the measures of Vulnerability, Defectiveness, Failure, and Subjugation but is lower on the measures of Unrelent Standards, Self-Sacrifice, Enmeshment, and Insufficient Self-Control (Table 1)

Table 1. Group Differences (Gifted Adolescents vs. Delinquent Adolescents) on Predictor Variables

Predictors	Gifted Adolescents (<i>n</i> = 115) <i>M</i> (<i>SD</i>)	Delinquent Adolescents (<i>n</i> = 114) <i>M</i> (<i>SD</i>)	<i>t</i> (227)
Loneliness/Mistrust/Abuse	9.75(2.69)	10.03(2.66)	-.82
Vulnerability	8.42(2.66)	10.30(2.75)	-5.57***
Defectiveness	4.54(1.46)	5.51(1.48)	-5.29***
Failure	4.44(1.31)	5.69(1.70)	-6.66***
Subjugation	8.15(2.18)	9.14(2.58)	-3.33***
Unrelent Standards	8.17(1.74)	7.52(1.60)	3.11***
Self-Sacrifice	9.13(1.65)	8.14(1.53)	4.94***
Enmeshment	9.01(2.01)	7.02(1.94)	8.05***
Insufficient Self-control	5.54(1.75)	6.46(1.64)	-4.32***

p* < .05. *p* < .01. ****p* < .001.

3.2 Discriminant Analysis

A discriminant analysis was carried out for criterion variable using all the predictor variables. For those two groups differing in membership, the discriminant function was able to classify 81.92% people correctly, yielding eta square of 37.6%. A stepwise discriminant function analysis showed that five predictors are sufficiently enough to correctly classify 75.29% of the people on the group membership. Failure, unrelenting standards, vulnerability, loneliness/mistrust/abuse, and subjugation constitute the discriminant function. The canonical correlation between the five predictors and the groups is .526, and eta square is 27.7% (Table 2 & 3).

Table 2. Stepwise Discriminant Function Analysis Classifying Group Membership

Step	Included Predictor	Wilk's λ	<i>F</i>	<i>p</i>
1	Failure EMS	.853	44.37	<.001
2	Unrelent Standards EMS	.814	12.30	<.001

3	Vulnerability EMS	.793	6.79	<.01
4	Loneliness/Mistrust/Abuse EMS	.738	18.91	<.001
5	Subjugation EMS	.723	5.23	<.05

* Degree of freedom for each F statistics is (1, 257), (2, 256), (3, 255), (4, 254), and (5, 253) each step.

Table 3. Classification Results When the 5 EMS %Stepwise Discriminant Function Analysis Classifying Group Membership

Actual Group	No. of Cases	Predicted Group Membership	
		Gifted Adolescents	Delinquent Adolescents
Gifted Adolescents	144	114 (79.17%)	30 (20.83%)
Delinquent Adolescents	115	34 (29.57%)	111 (70.43%)

Note. Percentage of grouped cases correctly classified is 75.29%

4. Conclusions

The five subscales of EMS (Failure, Unrelent Standards, Vulnerability, Loneliness/Mistrust/Abuse, and Subjugation) are all shown to be differentiating the gifted adolescents and delinquent adolescents. Discriminant function of five subscales of EMS accounted for 27.7% of variances but the function of two variables remarkably accounted for 18.6%. Among five subscales, Failure EMS is able to represent most variances of group membership. The discrimination function of five subscales of EMS classified correctly 75.29% of those gifted adolescents, and delinquent adolescents.

The present results indicate that, among subscales of EMS, Failure EMS is the foremost variable differentiating the gifted adolescents and the delinquent adolescents. In conclusion, the current study shows that, compared to the talented adolescents, the delinquent adolescents have higher level of Failure EMS, Unrelent Standards EMS, Vulnerability EMS, Loneliness/Mistrust/Abuse, and Subjugation EMS.

The present study provides intervention strategies for improving mental health in Korean adolescents via field research. More research is needed to identify other variables associated with Korean adolescents' mental health.

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