

# The Roles of Family Environment, Parental Rearing Styles and Personality Traits in the Development of Delinquency in Chinese Youth

Fengxian Jin<sup>1</sup>, Zaohuo Cheng<sup>1</sup>, Xinmin Liu<sup>1</sup>, Xiaoqin Zhou<sup>1</sup>, Guoqiang Wang<sup>1</sup>

<sup>1</sup> Wuxi Mental Health Center, Nanjing Medical University, Wuxi, Jiangshu 214151, P.R. China.

## ABSTRACT

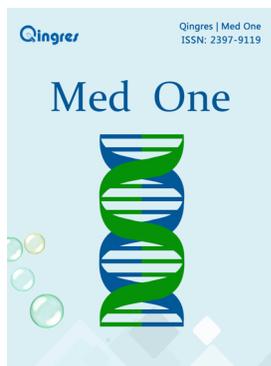
**Background:** Youth delinquency is a major public health problem worldwide. The family environment, parental rearing styles, and personality traits have been demonstrated to be important factors in juvenile delinquency. This study investigated the family environment, parental rearing styles, and personality traits in Chinese juvenile offenders.

**Methods:** A total of 290 juvenile offenders and 188 juvenile controls, who had no delinquency record, between 12 and 25 years of age completed: a Family Environment Scale-Chinese Version (FES-CV), a Family Upbringing Styles questionnaire (FUSQ), a Big Five-factor Inventory (FFI-R), and, a Barrett Impulsiveness Scale (BIS-11).

**Results:** Cohesion, expressiveness, and active-recreational orientation scores were significantly higher, and conflict, achievement orientation, and moral-religious emphasis scores were significantly lower in offenders than in controls ( $p < 0.05$ ,  $p < 0.01$ ,  $p < 0.001$ ). Scores along all 10 FUSQ dimensions were significantly lower in offenders than that in controls ( $p < 0.001$ ). Openness and agreeableness scores were significantly lower, while impulsivity scores were significantly higher in offenders than that in controls ( $p < 0.001$ ).

**Conclusion:** Family environments, parental rearing styles, and personality traits affected the development of young delinquency.

**Key Words:** Young Delinquency; Family Environment; Parental Rearing Styles; Personality



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## 1 INTRODUCTION

Juvenile delinquency is a major public health problem worldwide. In most countries, juvenile delinquency is defined as when an individual, under 17 years old, participates in illegal behavior and is charged as an adult. Juvenile delinquency, as studied, often includes individuals older than 17<sup>[1]</sup>. Recently, juvenile delinquency in China has increased with trends towards younger offenders, more complex types of crimes, and more diverse criminal tricks<sup>[2, 3]</sup>. The number of arrested young offenders is increasing. Some scholars argue that the increase may be caused by a more aggressive criminal justice system which results in more arrests rather than a “real” increase in young offenders criminal behavior<sup>[4]</sup>.

Many studies have investigated the psychosocial factors of juvenile delinquency and concluded that family environment, parental rearing styles, and personality traits may be important factors that affect juvenile delinquency<sup>[5, 6]</sup>. However, these research findings have not yet been socially accepted, and the instances of juvenile delinquency continue to increase. This study investigated the effects of family environment, parental rearing styles, and personality traits in the development of juvenile delinquency to hopefully provide a scientific basis and practical guidance for effective prevention of juvenile delinquency.

## 2 SUBJECTS AND METHODS

### 2.1 Subjects

A total of 290 arrested juvenile (12-18 years old) and young adult (19-25 years old) offenders were recruited from detention, juvenile detention, and juvenile education, centers in Jiangsu and Anhui province by a convenience sampling method. Of the 290 offenders were 85.17 % were male and 14.83 % were female with an age range of 14 to 25 years, and a mean age of  $19.64 \pm 2.84$  years. Of the 290 offenders, 216 (74.48 %) had received elementary and middle school education, 33 (11.38 %) high school, and 41 (13.79 %) college education. Of the offenders 279 (96.21 %) were Han, and 11 (3.79 %) were members of recognized national minorities. Of the 290 offenders, 103 (35.52 %) were the only child, while 187 (64.48 %) had siblings. There were 188 (male 80.85 %, female 19.15 %) juveniles without no prior delinquency record which were recruited from several middle schools (19, 10.11 %), high schools

(47, 25.00 %), and colleges (122, 64.89 %) as controls. Juvenile control ages ranged from 14 to 25 years old with a mean age of  $19.24 \pm 2.91$ . All 188 controls were Han (100 %) with 111 (59.04 %) being the only child, and 77 (40.96 %) having siblings. No statistically significant differences in gender and age were observed between offenders and controls ( $p < 0.05$ ).

### 2.2 Study Tools

#### 2.2.1 Family Environment Scale, Chinese version (FES-CV)

The FES-CV has 90 items with 10 dimensions: cohesion, expressiveness, conflict, independence, achievement orientation, intellectual-cultural, active-recreational orientation, moral-religious emphasis, organization, and control. Each dimension contains 9 items to evaluate different aspects of the family environment. Higher dimension scores indicate more positive family environments<sup>[7]</sup>.

#### 2.2.2 Family Upbringing styles questionnaire (FUSQ)

FUSQ is a self-rating scale containing 120 items in 10 dimensions: accepted-rejected, democracy-dictatorship, respect-humiliation, care-shield, tolerance-indulgence, encourage-punishment, understanding-blame, warmth-rough, discipline-control, expectations-demands. Each item was scored 1-5 points according to frequency. Higher dimension scores represent more positive way of family education<sup>[8]</sup>.

#### 2.2.3 Big Five-factor Inventory, Short Version (FFI-R)

FFI-R is a self-rating scale containing 60 items covering 5 dimensions: neuroticism, extroversion, openness, agreeableness, and conscientiousness for evaluation of personality traits. Each dimension contains 12 items and each item is scored from 1 to 5 points<sup>[9]</sup>.

#### 2.2.4 Barrett Impulsiveness Scale (BIS-11)

BIS-11 is a self-rating scale containing 30 items under three dimensions: attentional, motor, and non-planning impulsiveness. Each item is scored 1 to 5 points. Higher scores indicate more obvious characteristics of impulsivity<sup>[10]</sup>.

### 2.3 Study Procedure

Both group-based, and individual, surveys were conducted. The questionnaires were collected at the time of administration. Investigators explained the study's purposes and questionnaire content using survey guidance language before the administering the survey. Subjects were allowed to ask questions. The survey was started after confirming that subjects understood the survey.

### 2.4 Statistical Analysis

Data were analyzed using SPSS 18.0. Student's t test was used to compare scores between two groups.  $p < 0.05$  was considered statistically

significant.

## 3 RESULTS

### 3.1 Comparison of Family Environments

Independent sample student's t-test showed that cohesion, expressiveness, and active-recreation orientation scores were significantly higher. Conflict, achievement orientation, and moral-religious emphasis scores were significantly lower in offenders than that in controls ( $p < 0.05$ ,  $p < 0.01$ ,  $p < 0.001$ ) (Table 1).

**Table 1. Comparison of Family Environment Scores between Juvenile Offenders and Juvenile Controls ( $\bar{x} \pm s$ )**

	Juvenile offenders (n=290)	Juvenile controls (n=188)	t	p
Cohesion	6.65±2.24	7.70±1.64	4.76	<0.001
Expressiveness	5.20±1.82	5.55±1.52	2.2	0.028*
Conflict	3.26±2.35	2.64±1.94	-3.13	0.002**
Independence	5.16±1.50	5.20±1.39	0.28	0.78
Achievement orientation	6.17±1.85	5.82±1.69	-2.08	0.038*
Intellectual-cultural	2.80±1.98	3.60±2.20	4.01	<0.001
Active-recreation orientation	4.42±2.43	5.13±2.35	3.14	0.002**
Moral-religious emphasis	5.50±1.57	4.92±1.52	-3.97	<0.001
Organization	6.10±1.96	6.30±1.81	1.07	0.285
Control	3.64±2.17	3.25±1.88	-2.1	0.036*

\* $p < 0.05$ , \*\* $p < 0.01$ .

### 3.2 Comparison of family upbringing styles

Independent sample student's t-test showed that the scores for all 10 Family Upbringing Styles Scale

dimensions were significantly lower in offenders than that in controls ( $p < 0.001$ ) (Table 2).

**Table 2. Comparison of Family Education between Juvenile Offenders and Juvenile Controls ( $\chi \pm s$ )**

		Juvenile controls (n=188)	Juvenile offenders (n=290)	t	p
Accepted-rejected	Father	47.59±6.50	43.19±6.53	7.21	<0.001
	Mother	47.65±6.54	43.41±6.38	7.03	<0.001
Democracy-dictatorship	Father	46.02±8.58	41.32±6.71	6.37	<0.001
	Mother	45.23±7.18	41.20±6.99	6.09	<0.001
Respect-humiliation	Father	50.34±6.93	46.77±7.28	5.32	<0.001
	Mother	49.93±7.66	46.82±7.12	4.53	<0.001
Care-shield	Father	43.54±5.08	41.71±5.46	3.66	<0.001
	Mother	43.66±4.66	41.90±4.68	4.02	<0.001
Tolerance-indulgence	Father	48.44±6.50	42.70±6.35	9.58	<0.001
	Mother	48.74±6.73	42.41±6.21	10.53	<0.001
Encourage-punishment	Father	48.96±7.05	44.14±7.41	7.8	<0.001
	Mother	49.53±7.00	44.34±7.76	7.42	<0.001
Understanding-blame	Father	44.26±7.25	39.43±7.19	7.15	<0.001
	Mother	45.16±7.13	40.78±7.73	6.24	<0.001
Warmth-rough	Father	48.65±6.77	45.52±7.29	4.71	<0.001
	Mother	48.82±6.83	46.08±7.77	3.94	<0.001
Discipline-control	Father	43.02±5.60	39.65±5.62	6.4	<0.001
	Mother	42.29±5.30	39.08±5.52	6.31	<0.001
Expectations-demands	Father	45.18±4.84	43.77±4.62	3.2	0.001
	Mother	45.22±4.47	43.71±4.57	3.56	<0.001

### 3.3 Comparison of personality and impulsivity

Openness and agreeableness scores were significantly higher in offenders than that in controls ( $p < 0.001$ ) (Table 3). Impulsivity scores were significantly lower.

**Table 3. Comparison of Personality Traits between Juvenile Offenders and Juvenile Controls ( $\bar{x} \pm s$ )**

	Juvenile controls (n=188)	Juvenile offenders (n=290)	t	p
Agreeableness	43.83±4.62	41.47±5.11	5.13	<0.001
Conscientiousness	42.75±6.50	41.63±6.38	1.86	0.063
Extraversion	40.51±7.28	40.01±6.29	0.77	0.443
Neuroticism	33.11±7.98	34.36±6.97	-1.8	0.073
Openness	42.16±6.43	37.92±4.83	7.74	<0.001
Impulsivity	73.83±13.78	86.16±16.10	-8.94	<0.001

## 4 DISCUSSION

Previous studies have shown that most juvenile offenders had little education, often performing poorly in school, and their family economic status is poor, and often came from single parent, or broken, families<sup>[11]</sup>. The present study did not analyze socio-demographic variables, but focused primarily on the family environment, parental rearing styles, and individual personality traits.

Consistent with previous reports<sup>[6, 12]</sup>, the families of offenders had low cohesion, low education, and more conflicts. In addition, the study also found that the families of offenders had high control, high moral-religious emphasis, and low emotional expressiveness. This is inconsistent with previous reports<sup>[6, 12]</sup>. In general, the families of offenders exhibited three high (conflict, control, moral-religious emphasis) and three low (cohesion, education, emotional expressiveness) features. The three high features indicate an intense family atmosphere; conflicts and disputes occur often; and there are more control features than constraints in the family. The three low features indicate that emotional expressivity between family members is low; family

members lack communication and emotional care skills; and family members lack learning motivation. Offenders who do not receive warmth and affection from in their family environments, often try to avoid the family and obtain support, or care, from social or governmental resources, the mix with peer groups with anti-social qualities, which provides a doorway to illegal behavior.

Consistent with most reported studies<sup>[13, 14]</sup>, juvenile offenders experienced more negative parental rearing styles, such as indulgence, punishment, rejection, blame, control, and dictatorship. Previous studies pointed out that supervision, principles, and emotional care are important aspects to maintaining healthy family relationships and promote the healthy growth in children. In contrast, parental rearing styles that are harsh, unstable, or loose are often seen in reports on antisocial children and juvenile offenders<sup>[14-17]</sup>. These negative parental rearing styles can affect the mental health or development of personality traits in children and adolescents, and can subsequently cause the formation of negative cognitive processing

and hostile defiance, and children may eventually develop into offenders<sup>[18]</sup>.

Consistent with previous reports<sup>[19, 20]</sup>, this study found that juvenile offenders exhibited low openness and agreeableness, and high impulsivity. Eysenck asserts that criminal offenders are different from normal individuals in their innate character. Criminal offenders differ from the normal in terms of neuroticism, extroversion, and psychoticism. Offenders are more emotionally unstable and more irrational behaviors. They have a lower emotional response, more hostile attitudes, and behaviors<sup>[21]</sup>. Zhou *et al* study reported that 80 % of violent offenders and 75 % of non-violent offenders with exhibit conduct disorders<sup>[22]</sup>. These studies suggest that personality traits, or conduct disorders, are

important variables in juvenile delinquency. Family environments and parental rearing styles may also interact with personality traits, resulting in delinquent behavior.

In summary, juvenile offenders experienced low family cohesion, low expressiveness between family members, high conflicting family atmosphere, experienced a more negative parental rearing style, and exhibited personality traits of low agreeableness, low openness, and high impulsivity.

## CONFLICT OF INTERESTS

The authors declare no conflict of interests.

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