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CHARACTERISTICS OF UNRULY & DELINQUENT ADOLESCENTS ADMITTED TO A PSYCHIATRIC INPATIENT UNIT*

청소년 병동에 입원한 비행 청소년의 특성에 관한 연구

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=ABSTRACT=

Objective : This study was performed to identify and understand the characteristics of adolescents who had a history of police arrest and/or were adjudicated unruly/delinquent by the juvenile court.

Method : The study employed a retrospective reivew of coumputer-recorded data set on 210 consecutive admissions to an adolescent psychiatric inpatient unit. Three groups(No Police Contact, N=115 ; Police Contact Only, N=60 ; Adjudicated, N=35) were compared on the areas of a) cognitive and educational performance b) emotion : anxiety, depression, suicidality c) personality d) family and life experiences. Standardized assessments were administered to all subjects using WISC-III, Kaufman Test of Educational Achievement, Millon Adolescent Personality Inventory, Reynolds Adolescent Depression Scale, Revised-Chilren's Manifest Anxiety Scale, Suicide Ideation Questionnarie, Suicide Behavior Interive, Life Events Checklist, and Family Environmental Scale. A subgroup of the subjects, 60 cases also received a standardized interview by Child Assessment Schedule.

Results : The characteristic findings of the delinquent group(the police contact only and adjudicated subjects combined) included (1) a high rate of adoption, sexual promiscuity, out of home placement, and repeated psychiatric hospitalization, (2) low verbal IQ scores and educational achievements, (3) high impulsivity, low social conformity, and high forcefulness in personality inventory, (4) low activity-recreation orientation and low moral religious emphasis in family environment, (5)a high frequency of adverse life experiences, (6) among 3 groups, the Police Contact Only group showed the lowest depression, anxiety and suicidal ideation scores, (7) a high diagnostic frequency of conduct disorder, ODD, and ADHD.

Conclusions : The adolescent psychiatric inpatients with a delinquent history presented with a certain clinical, family, psychometric characteristics that warrant specific clinical intervention strategies for

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their cognitive deficits, an impulsive personality style, family dysfunction with adverse life experiences and disruptive behavioral disorders, different from the rest of adolescent psychiatric inpatients.

KEY WORDS：Juvenile · Delinquent · Psychiatric inpatient · Characteristics.

Introduction

Although juvenile delinquency is commonly associated with the current DSM-IV（American Psychiatric Association, 1994）diagnosis of conduct disorder, it's not a psychiatric diagnosis. It's a socio-legal term（West, 1985）.

The definition of juvenile delinquency varies according to different view points. Generally three definitions are used：（a）delinquency as a juvenile act which result in an arrest or a referral to juvenile authorities；（b）delinquency as any juvenile act which violates the low；（c）delinquency as an incidence of deviant youthful career, whether or not the specific delinquent acts are recorded. Because of it's selectiveness or exclusiveess, the first definition, which is associated with official reporting, may be overly narrow and conceptually deficient（Pink and White 1985）.

The juvenile delinquency is also developmentally defined. Juvenile delinquency is cited for an offence that would be classified as a crime if commited by an adult. On the other hand, unruly behaviors, truancy, use of alcoholic beverages which are not offences if committed by adults are considered as status offenses.

The term, juvenile delinquency begins to be referred only at an age when young people are thought to have acquired criminal responsibility. In the UK this age is currently set at 10 years. However this age varies from country to country, with a range extending from 7 to 18 years. There is also an upper age limit for juvenile delinquency determined by the each state's or country's definition of " minor ". That age is set at 17 years currently in UK, at 18 in U.S.A., but in other countries it is as high as 21（Sheldrick, 1994）. The trends in the U.S. have been to treat adolescents like adult criminals by trying them in adult courts.

As West（1985）pointed out, the number of young people classified as delinquent depends on other factors too, such as the standards that the enforcing agencies try to uphold, the readiness of teachers, parents and members of the public to report incidents to the police, the resources allocated to detection and collection of evidence, as well as policy regarding the choice between prosecution and warning of juveniles.

Although there is no agreement on the extent to which delinquency is homogeneous or heterogeneous, or on it's subtypes, delinquents have many features in common. It has been noted that juvenile delinquents often exhibit aggression, emotional disturbance , poor peer relationships, hyperactivity and attentional deficits. Also numerous family studies have shown that delinquency tends to be much more frequent in adolescents coming from families characterized by large size；poverty；parental criminality；marital conflict；poor parental supervision；cruel, passive or neglecting attitudes；and erratic or harsh discipline（West and Farrington 1973；McCord 1979；Wedsworth 1979）.

Recently Farrington（1995）showed in his long term prospective follow-up study that the childhood predictors of criminality can be grouped into six major conceptual categories：（1）socioeconomic deprivation,（2）poor parental child rearing,（3）family deviance,（4）low intelligence and attainments,（5）hyperactivity-impulsivity-attention deficit,（6）antisocial child behavior such as troublesomeness, dishonesty and laziness.

There have been many other studies examining biological, social, psychiatric, neurological, and cognitive areas of delinquent characteristics. However, most studies compared the delinquents with general populations or normal control groups. We undertook a study of comparing unruly and delinquent adolescent inpatients with adolescents inpatients who did not have a unruly or delinquent history, on demographic variables, cognition, educational achievements, emotions, suicidality, personality, life events, family environment, and psychiatric diagnoses. We expected to find specific vulnerabilities associated with unruly/delinquent behaviors among se-

verely disturbed adolescents.

We hypothesized that unruly/delinquent inpatients would have more adverse life experiences, history of out of home placements, and past psychiatric history ; more deficits in cognitive and educational perfomance ; higher suicidality due to their impulsivity ; more externalizing than internalizing problems ; more diagnoses of disruptive behavioral disorders.

Method

1. Subjects(Table 1)

The subjects consisted of 210 adolescents who were consecutively admitted to an adolescent psychiatric inpatient unit(Kobaker Center) at the Medical College of Ohio. Kobaker Center mainly manages short term emergent cases showing emotional or behaviour problems. So above 210 subjects' main problems were suicidal attempt/ideation or aggressive acting out by emotional upset. Psychotic adolescents were excluded in this study.

The subjects(n=210) can be characterized as follows : male=43.8%, female=56.2% ; mean age=15.0±1.3 ; ethnity=White 84.4%, Black 15.6% ; socioeconomic status(SES) by Hollingshead Two-Factor Index, mean=2.4±0.6.

We classified adolescent inpatient subjects into three groups by the history of contact with police and/or juvenile court : a group with no police contact(n=115), a group with a history of police contact only(n=60), and a group with a istory of adjudication by juvenile court(n=35). the police contact only group were adolescents who had been arrested mainly for unruly behaviors or misdemeanours, but not prosecuted. The adjudicated group consisted of adolescents who had been prosecuted and disposed by the juvenile courts.

The demographic characteristics of the group with no police contact(n=115) were : male 35, female 80 ; mean age=14.9±1.3 ; White 99, Black 16 ; mean SES=2.4±0.5. A group with police contact only(n=60) was : male 37, female 23 ; mean age=15.0±1.4 ; White 50, Black 10 ; mean SES=2.4×0.6. The adjudicated group was(n=35) : male 20, female 15 ; mean age=15.1±1.2 ; White 28, Black 7 ; mean SES =2.3±0.6.

In demographic data, except for gender difference (χ^2 [1,2]=18.65, p<.001), there were no statistically significant differences among the three groups in age, race, socioconomic status.

Table 1. Demographic and clinical characteristics of 3 groups(N=210)

	No police contact (N=115)	Police contact only (N=60)	Adjudicated (N=35)	Significance p
Gender	M : 35, F : 80	M : 37, F ; 23	M : 20, F : 15	< .01
Age	14.9±1.3	15.0±1.4	15.1±1.2	ns
Race	W : 99, B : 16	W : 50, B : 10	W : 28, B : 7	ns
SES[1]	2.38	2.35	2.31	ns
Family constellation				
1. natural parents	37.3%	29.3%	35.5%	
2. single parents	37.3%	34.5%	29.0%	
3. natural & step	12.7%	17.2%	19.4%	
4. other	12.7%	19.0%	16.1%	ns
Adootion history	5.9%	21.2%	7.4%	< .05
PPHH	14.4%	20.7%	42.4%	< .01
SMPH	58.3%	43.5%	47.4%	ns
Special education	20.0%	31.7%	22.9%	ns
Sexual activity	45.2%	45.7%	83.3%	< .01
Discharge to family	90.4%	76.7%	68.6%	< .01
Length of stay	28.9±11.2	27.5±12.2	27.5±11.1	ns

M : male F : female W : white B : black SES[1] : Hollingshead's socioeconomic status
PPHH : past psychiatric hospitalization history SMPH : significant medical problem history ns : not significant

2. Assessment

Standardized assessments were administered to all subjects(n＝210) in the areas of a) cognitive and educational performance：Wechsler Intelligence Scale for Children-3rd edition(Wechsler 1991), Kaufman Test of Educational Achievement(Kaufman and Kaufman 1985), b) anxiety and depression：Reynolds Adolescent Depression Scale(Reynolds 1987a), Revised-Children's Manifest Anxiety Scale(Reynolds and Richmond 1985), c) suicidality：Suicide Ideation Questionnarie (Reynolds 1987b), Suicide Behaviors Interview(Reynolds and William 1990), d) personality：Millon Adolescent Personality Inventory(Millon et al. 1982), e) family：Family Environmental Scale(Moos and Moos 1986), f) life experiences：Life Events Che-cklist (Johnson and McCutcheon 1980).

Reynolds Adolescent Depression Scale(RADS；Reynnolds 1987a)：The RADS is a 30 item(four point) self-report inventory developed for adolescents based on DSM-Ⅲ(American Psychiatric Association 1980) and DSM-Ⅲ-R(American Psychiatric Association 1987) criteria for major depression. The RADS yields a total summation score as well as four subscales including Generalized demoralization, Despondency and worry, Somatic vegetative complaints, and Anhedonia. The RADS has extensive information on it's reliability and validity(Reynolds 1987a). The total score and four subscale scores were used for the analysis.

Revised Children's Manifest Anxiety Scale(RCMAS：Reynolds and Richmond 1985)：The RCMAS is a 37 item(" Yes " or " No " two point scale) self-report instrument used to assess general anxiety for children between the ages of 6 and 19 years of age. The RCMAS consists of a total summation score, as well as subscales for Physiological anxiety, Worry and oversensitivity, Social concern and concentration, and builtin Social desirability subscale. The RCMAS is one of the most extensively used self-report measures for symptoms of anxiety for children and adolescents and has demonstrated good reliability and validity (Reynolds and Richmond 1985). The total score and four subscale scores were used for the analysis.

Suicide Ideation Questionnarie(SIQ：Reynods 1987b)：The SIQ is a self-report inventory designed to assess one aspect of suicidal behavior-suicidal ideation in adolescents and young adults. The SIQ is a 30 items on a 7-point scale which assesses the frequency with which the cognition occurs in the past month. This scale has demonstrated good reliability and validity (Reynolds 1987b). The total score was used in this study.

Suicide Behaviors Interview(SBI；Reynolds and William 1990)：The SBI is a semistructured clinical interview measure of suicidal behaviors designed for use with adolescents, ages 12 - 19 yrs. The SBI consists of total 19 item questionnares, 4 general status questions and 15 suicide behaviors questions, and the severity of suicidal behavior is checked on 5-point scale. In this study the total score was utilized.

Millon Adolescent Personality Inventory(MAPI；Millon et al. 1982)：The MAPI is a 150 item " True " or " False " two-point scale) self-report personality questionnaire developed specifically for adolescents based on Millon's theory of personality functioning. The MAPI consists of eight basic personality style subscales(Introversive, Inhibited, Cooperative, Sociable, Confident, Forceful, Respectful, Sensitive), eight expressed concern subscales(Self-concept, Personal esteem, Body comfort, Sexual acceptance, Peer security, Social tolerance, Family rapport, Academic confidence), and four behavioral correlates(Impulse control, Social conformity, Scholastic achievement, Attendance consistency). The MAPI also contains one reliability and one validity scale. In this study 20 subscales raw scores were compared between groups.

Family Enviromental Scale(FES；Moos and Moos 1986)：The FES in a 90 item(" Yes " or " No " two point scale) assessment tool which consists of ten areas of family functioning cincluding：Cohesion, Independence, Achievement orientation, Intellectual-cultural orientation, Activity-recreational orientation, Moral reliegious emphasis, Organization, Expresiveness, Conflict, and Control. The FES can be completed by youths 12 years of age and older, as well as parents. The FES has been one of the most extensively researched family environment scales which is based on a family system theroy of family functioning. In this study only adolescents completed FES. The total score and nine subscale scores were compared.

Life Event Checklist(LEC；Johnson and McCutcheon 1980)：The LEC is a 46 items checklist of major life events experienced by adolescents. For the purpose of this study, only the raw number of good and bad events that had occurred over the last 12 months were utilized. The LEC has been used extensively in studies of coping by adolescents and has been shown to have adequate reliability and validity.

A subgroup of the subjects, randomly selected 60 cases received a semistructured standardized interview by Child Assessment Schedule(CAS；Hodges 1987). There are three parts in the interview schedule：11 content area questions, onset and duration questions, and interviewer observational judgements. In this study, content areas and DSM-Ⅲ-R diagnosis(American Psychiatric Association 1987) were compared. High score of all 11 content area means subject's poor social adaptation and having many pathologic symptoms.

3. Analysis

Means were compared for age, socioeconomic status (Hillingshead 1975), length of stay, and all standardized scales including CAS content areas. For comparisons between three or two groups, one way analysis of variences(ANOVA) was performed. Post hoc pair-wise comparisions were conducted using the Fisher's least significant difference(LSD) test to deterime statistically significant differences between pairs of groups.

Percentages were calculated for gender, race, family constellation, adoption history, past psychiatric hospitalization history, significant medical problem history, sexual activity, special education history, discharge to family, and diagnostic frequency by CAS. Chi square analysis were done for group comparisons on nominal data.

For the majority of comparisons, 3 groups were analyzed separately but on a certain parameters, e.g. diagnostic distribution, two groups-Police Contact Only and Adjudicated group were combined as a unruly/delinquent group for comparison with No Police Contact group. Regrouping was done to increase the statistical discrimination power and for the similarity of the two combined groups.

Results

1. Clinical characteristcs(Table 1)

The past psychiatric hospitalization history was significantly higher in the delinquent group：the No Plice Contact group 14.4%, the Police Contact Only group.

20.7%, and the Adjudicated group 42.4%($\chi^2[2]=8.75$, $p<.01$). However, in terms of past medical problems history, there was no significant difference(No Police Contact 58.3%；Police Contact Only 43.5%；Adjudicated 47.4%).

The Adjudicated group had a history of more sexual acting out than other groups(No Police Contact 45.2%, Police Contact ONly 45.7%；Adjudicated 83.3%； $\chi^2[4]=13.8$, $p<.01$).

The Adjudicated group was discharged to out-of-home placement more often than other groups(No Police Contact 9.6%；Police Contact Only 23.3%；Adjudicated 31.4%； $\chi^2[12]=29.2$, $p<.01$).

The Police Contact Only group had a more adoption history than other groups(No Police Contact 5.9%；Adjudicated 7.4%；Police Contact Only 21.2%； $\chi^2[2]=8.75$, $p<.05$).

There was no difference in the history of special educational placement between three groups(No Plice Contact 20.0%, Police Contact Only 31.7%, Adjudicated 22.9%).

2. Intelligence and educational performance (Table 2)

The unruly/delinquent group(both Police Contact Only and Adjudicated groups) showed low full IQ scores in the Wechsler Intelligence Scale for Children, 3rd edition ($F[2, 207]=4.59$, $p=.011$). Especially, the unruly/delinquent group showed low vernbal IQ($F[2, 207]=6.01$, $p=.003$). However performance IQ and discrepancy between performance IQ and verbal IQ were not significantly different between groups.

Also, in the Kaufman Test of Educational Achievement, spelling scores($F[2, 186]=3.68$, $p=.027$) and reading scores($F[2, 186]=3.67$, $p=.027$) were significantly low in the unruly/delinquent groups but there was no significant difference in math scores.

3. Personality(Table 3)：

Among 20 subscales of Millon Adolescent Inventory, 10 subscales were significantlly different($p<.05$). The five most significant different subscale scores were as follows in order；Impulse controle($F\ [2, 164]=9.92$, $p=.001$), Respectful($F\ [2, 164]=8.02$, $p=.005$), Social conformity($F\ [2, 164]=8.06$, $p=.0005$), Forceful($F\ [2, 164]=7.50$, $p=.0008$), and Cooperative($F\ [2, 164]=6.24$, $p=.0024$). There were no differences in Confident, Self-concept, Personal esteem, Attendance consistency, and Peer security subscales.

4. Emotions(Table 4)：

While the No Police contact group showed the highest score, the Police Contact Only group showed consistently the lowest score among three group in Reynold's Depression Scale(RADS；$F\ [2, 207]=3.75$, $p=.0252$), Revised-Children's Manifest Anxiety Scale(RAMAS；

Table 2. Intelligence and educational achievement mean score of 3 groups(N=210)

	No police contact (N=115)	Police contact only (N=60)	Adjudicated (N=35)	Significance p
FIQ[1]	98.4±14.0	93.2±13.4*	92.3±10.9*	.0112
VIQ[1]	97.2±13.8	90.9±13.7*	90.6±10.6*	.0029
PIQ[1]	99.6±15.1	97.6±14.9	95.2±13.8	ns
P-V[1]	2.4±12.1	6.7±12.9*	4.7±12.7	ns
Spelling[2]	98.0±16.1	90.8±17.2*	93.0±18.4	.0273
Reading[2]	100.1±17.5	94.7±18.9	90.8±18.9*	.0274
Math[2]	94.9±17.6	90.4±18.2	93.3±17.2	ns

1：Wechsler Intelligence Scale for Children, 3rd edition　2：Kaufman Test of Educational Achievement
FIQ：Full scale IQ　VIQ：Verbal IQ　PIQ：Performance IQ　P-V：PIQ-VIQ
*：significant difference($p<.05$) with the No Police Contact group

Table 3. Millon adolescent personality inventory mean score of 3 groups(N=167)

Subscale	No police contact (N=93)	Police contact only (N=49)	Adjudicated (N=25)	Significance p
Cooperative	48.1	35.6*	35.0*	.0024
Forceful	53.7	66.8*	72.0*	.0008
Respectful	48.2	36.2*	29.8*	.0005
Impulse controle	53.7	67.3*	75.1*	.0001
Social conformity	55.4	67.6*	73.2*	.0005
Academic confidence	57.6	66.5*	73.4*	.0088
Scholastic achievement	50.5	57.5	63.3*	.0500
Family rapport	68.8	79.5*	81.1*	.0307
Social tolerance	47.7	55.3	62.0*	.0432
Body comfort	61.6	51.1*	58.6	ns
Sensive	70.2	76.1	85.2*	ns
Sexual acceptance	63.6	54.1*	56.2	.0451
Introversive	35.9	36.4	33.0	ns
Inhibited	62.0	56.0	63.4	ns
Sociable	46.2	49.5	47.9	ns
Confident	42.9	49.6	41.8	ns
Self-concept	63.7	62.0	68.1	ns
Personal esteem	71.8	67.4	73.5	ns
Peer security	62.4	55.1	54.8	ns
Attendance consistency	61.7	57.5	67.3	ns

*：significant difference($p<.05$) with the No Police Contact group

F [2, 207] =4.50, p=.0122), Suicide Ideation Questionnarie(F [2, 207] =5.15, p=.0066), and Suicide Behavior Interview(F [2, 207] =2.15, not significant).

In comparision of subscales, Despondency-worry subscale score of RADS(F [2, 207] =6.10, p=.0027) and Worry-oversensitivity subscale score of RCMAS (F [2, 207] =5.71, p=.0038) were significantlly higher in No Police Contact group than Police Contact Only group.

5. Family environment and life event(Table 5) :

Among 10 Family Environmental Scale subscores, the only Activity-recreation orientation subscore, which reflects the extent of participation in social and recreatinal activities, was significantly lower in the unruly/ delinquent groups than No Police contact group(F [2,

Table 4. Depression, anxiety, and suicidal pathology mean score of 3 groups(N=210)

	No police contact (N=115)	Police contact only (N=60)	Adjudicated (N=35)	p
1. RADS[1]				
Generalized demoralization	19.1	18.1	19.5	ns
Ddespondency & worry	27.6	23.5*	26.0	.0027
Somatic vegetative complaints	18.8	16.8*	18.0	.0356
Anhedonia	7.9	7.1	7.7	ns
Total	75.5	67.3*	73.0	.0252
2. RCMAS[2]				
Worry & oversensitivity	6.5	4.6*	6.3	.0038
Physiological	4.7	3.7*	4.2	.0442
Concentration	3.7	3.1	3.5	ns
Lie/Social desirability	2.6	2.2	1.9	ns
Total	14.9	11.3	14.0	.0122
3. SIQ	73.8±54.0	46.0±49.2*	64.7±53.5	.0066
4. SBI	11.6± 9.8	7.5± 8.9	8.0± 8.0	ns

1 : Reynolds Adolescent Depression Sclae 2 : Revised-Children's Manifest Anxiety Scale
SIQ : Suicide Ideation Questionnaire SBI : Suicide Behavior Interview
* : significant difference(p<.05) with the No Police Contact group

Table 5. Family environmental scale and life event checklist score of 3 groups(N=210)

	No police contact (N=115)	Police contact only (N=60)	Adjudicated (N=35)	p
1. Family environment scale				
Active-recreational orientation	4.7	4.	3.6*	.0213
Moral-reliegeous emphasis	4.5	4.4	3.6*	ns
Cohesion	4.3	4.1	4.3	ns
Expressiveness	3.8	3.6	3.9	ns
Conflict	4.9	5.3	5.3	ns
Independence	5.7	5.2	5.8	ns
Control	5.0	5.5	4.8	ns
Organization	4.8	4.9	4.5	ns
Achievement orientation	5.8	5.2	5.2	ns
Intellectual-cultural orientation	3.8	3.2	3.3	ns
2. Life event scale				
Good life events	4.0±2.5	3.7±2.5	4.1±3.9	ns
Bad life events	6.9±5.0	9.3±6.2*	9.9±8.2*	.0069

* : significant difference(p<.05) with the No Police Contact group

207]＝3.92, p＝.0213), and the only Moral-religious emphasis subsocre, which reflects the degree of emphasis on ethical and religious issues and values, was significantly lower in Adjudicated group than No Police Contact group(p<.05). In Life Event Checklist, bad life events score of the Adjudicated group(mean＝9.9±8.2) and the Police Contact Only group(mean＝9.3±6.2) were significantly higher(F [2, 207]＝5.09, p＝.0069) than the No Police Contact group (mean＝6.9±5.0). But good life events scores were not significantly different among the three groups.

6. Child assessment schedule(Table 6) :

In comparison of 12 subscales scores of Child Assessment Schedule between the unruly/delinquent group (Police Contact Only group and Adjudicated group, n＝28) and the No Police Contact group(n＝40), 7 subscales were statistically significant different. These were as follows in order ; Acting out(F [1, 67]＝22.52, p＝.0000), Oppositional symptom(F [1, 67]＝12.41, p＝.0008), School life(F [1, 67]＝10.94, p＝.0015), Physiological(F [1, 67]＝10.15, p＝.0022), Conduct symptom(F [1, 67]＝8.57, p＝.0047), Worry(F [1, 67]＝6.61, p＝.0124), and Fear(F [1, 67]＝5.18, p＝.0261).

Although total CAS problem scores was not different between the two groups, the No Police Contact group showed higher subscale scroes than the unruly/delinquent group in Physiological(6.5±3.0 versus 4.3±2.5), Worry(5.9±4.6 versus 3.2±3.8), Fear(1.6±2.1 versus

Table 6. CAS1 subscale and diagnostic comparison of two groups(N=68)

Subsclae	Police contact only & Adjudicated (N=28)	No police contact (N=40)	Significance p
1. CAS[1] subscore			
Peer	2.8± 2.1	2.7± 2.1	ns
Activity & hobbies	1.1± 1.0	1.5± 1.2	ns
School	11.4± 4.6	8.1± 3.7	.0015
Family	12.1± 5.9	10.8± 4.7	ns
Fears	0.6± 1.0	1.6± 2.1	.0261
Worries	3.2± 3.8	5.9± 4.6	.0124
Self-image	2.5± 2.3	3.5± 2.7	ns
Physiological	4.3± 2.5	6.5± 3.0	.0022
Acting out	19.9±10.4	9.9± 6.5	.0000
Attention deficit Sx	2.7± 2.9	1.7± 1.7	.0602
Oppositional Sx	4.6± 2.5	2.6± 2.3	.0008
Contuct Sx	2.5± 2.2	1.3± 1.5	.0047
Total problem score	83.8± 2.2	76.1±23.6	ns
2. Diagnosis by CAS[1] : %(number)			
Conduct disorder	48.0 (12)	5.0 (2)	.0002
Opositional defiant disorder	32.1 (9)	12.5 (5)	.0487
ADHD	10.7 (3)	0	.0342
Major depression	53.6 (15)	62.5 (25)	ns
Dysthymic disorder	46.4 (13)	42.5 (17)	ns
Simple phobia	14.3 (4)	27.5 (11)	ns
Overanxious disorder	3.6 (1)	22.5 (9)	.0301
Enuresis	7.1 (2)	0	ns
Seperation anxiety disorder	0	12.5 (5)	ns
Obscessive compulsive dissorder	0	12.5 (5)	ns
Social phobia	0	7.5 (3)	ns
Agoraphobia	0	5.1 (2)	ns

CAS[1] : Child Assessment Schedule

0.6±1.0). The unruly/delinquent group scored significantly higher in Acting out(9.9±6.5 versus 19.9±10.4), Oppositional symptom(2.6±2.3 versus 4.6±2.5), School life(8.1±3.7 versus 11.4±4.6), and Conduct symptom(1.3±1.5 versus 2.5±2.2). Only a trend was found in Attention deficit symptom subscale subscore (1.7±1.7 versus 2.7±2.9, p=.0602).

In comparison of DSM-III-R diagnostic distribution by CAS, the unruly/delinquent group showed a significantly higher frequency than the No Police Contact group in conduct disorder(48.0% versus 5.0%; χ^2 [1]=14.44, p=.0002), attention deficit withhyperactivity(10.7% versus 0%; χ^2 [1]=4.48, p=.0342), oppositional defiant disorder(32.1% versus 12.5%; χ^2 [1]=3.89, p=.0486). Only the overanxious disorder frequency was significantly higher in the Police Contact group (22.5% versus 3.6%; χ^2 [1]=4.70, p=.0301).

There was no significant difference in depressive disorders between the two groups. In both groups, the most frequent two diagnosis were major depression (unruly/delinquent 53.6%; control 62.5%) and dysthymia(unruly/delinquent 46.4%; control 42.5%).

Discussion

1. Clinical demographic data

There have been inconsistent reports regarding the significance of medical factors in the delinquents. Some asserted that medical problems were not significant factor, while others suggested more recently that delinquents had more adverse medical history e.g., perinatal difficulty, accident, injury, and medical illness(Lewis et al. 1985). These medical vulnerbilities were reportedly related to hyperkinesis, aggression, episodic violence, and epilepsy in delinquents.

In our study the past psychiatric hospitalization history was significantly higher in the unruly/delinquent group. This suggests that unruly/delinquent behaviours are chronic conditions associated with early onset childhood psychiatric problems. However, our study does not show a significant difference in their past medical history and special educational placement. This lack of difference may stem from the methodological flaw of our study in terms solely relying on history of patients and their families rather than employing a systematic information gathering method by contacting school and medical services.

Higher frequencies of sexual acting out and out-of-home placement by the delinquent group suggests their underlying impulsivity and difficulties of containing their behaviors in the family in addition to probably more adverse family environment.

It is of note that the Police Contact Only group showed the highest adoption history. Perhaps adopted adolescents come to psychiatric attention for their unruly/delinquent behaviors, avoiding prosecution because of adoptive parents efforts to protect them fromthe penal system and their psychological sensitivity. Such dynamics of an overrepresentation of adoptees in a psychiatric facility and an underrepresentation of them in a juvenile facility were reported previously(Kim et al. 1992).

2. Intelligence, educational achivement

There is ample evidence that delinquents as a group score lower on the tests of intelligence than non-delinquents(Hirschi and Hindelang 1977; West 1982). Thease findings may reflect test bias, cultural deprivation, the consequence of CNS injuries, innate intellectual limitations, or combinations thereof. Intelligence alone does not account for most delinquent behavior. However, the low intelligence, especially low verbal abilities may underscore the action oriented, impulsive characteristics of unruly/delinquent ado-lescents.

Learning disorders are another aspect of cognitive dysfunction characteristic of delinquents(Ledingham and Schwarzma 1984; Moffitt 1990). Their difficulties with reading and language skills contribute to their overall academic difficulties.

The unruly/delinquent subjects of our study showed very similar cognitive profiles found in previous studies, low intelligence, especially low verbal IQ, and low educational achievement, especially in spelling and reading. These results point to a need for cognitive problem-solving skill training in some cases.

3. Personality

In the personality study, the unruly/delinquent group displayed significantly more impulsive, socially unconformed, disrespectful, forceful, and uncooperative,

socially untolerant characteristics. However there were no difference in Confident, Self-concept, Personal esteem, Attendance consistency and Peer security subscales.

These results were somewhat contrary to the known delinquent characteristics of poor peer relation-ship and low self esteem(Farrington 1995 ; Magnusson and Bergman 1990). However we took into account that our comparison subjects were not normal control but highly emotionally distrubed adolescent inpatients. Therefore, we considered the findings of significantlly different personality structure in this study more specific to delinquent characterisics.

4. Emotion, suicide

Suicidal ideation and suicide attempts are frequent in the unruly/delinquents. A number of studies have found aggression, anger, and other antisocial behaviours common in suicidal adolescents(Trautman et al. 1991). Although conduct disorders often co-occurs with depressive illness, many suicidal attempters may have only conduct problems without depressive disorders(Pfeffer er al. 1983).

In our study, while the No Police Contact group consistently showed the highest depression, anxiety, suicidal ideation and suicidal behaviour score, the Police Contact Only group constantly showed the lowest score among three groups. In subscore comparison, Despondency-worry subscale score of RAD and Worry-oversensitivity subscale score of RCMAS, namely, worry component were significantly lower in Police Contact Only group than other two groups. One may surmise that this group of adolescents may be protected from the anxiety of penal consequencies.

In comparison to the highlly emotionally distrubed non-delinquent group(No Plice Contact), the Police Contact Only group may act out more rather than internalizing their emotional conflict. However, it is of note that the Adjudicated group exhibited highly internalizing emotional problemes unlike the Police Contact Only group.

The Child Assessment Schedule(CAS) results were similar to those of RAD and RCMAS. In comparison of 12 subscale scores of CAS the unruly/delinquent (Police Contact Only and Adjudicated group) group showed significantly higher scores in Physiological, Worry, and Fear subscales than the control group. But the other 4 subscale ; Acting out, Oppositional symptom, School life, Conduct symptom, scores were higher in the unruly/delinquent group. It was of note that Attention deficit symptom did not distinguish the two groups.

While there was a difference in the frequency of an anxiety disorder and disruptive behavioral disorders there was no significant diagnostic frequency difference in depressive disorders between the two groups. In both groups, the most frequent two diagnosis were major depression and dysthymia. Namely, about 50% of both group had comorbid depressive disorders. In adolescence, depression can be frequently associated with irritability, rage, episodic destructive behavior or sporadic episodes of conduct problems. Our study findings are consistent with many studies that have illustrated comorbidity of depression and conduct disorder in adolescents(Harrington et al. 1991 ; Marriage et al. 1986).

5. Family, life event

It has long been recognized that parental attitudes and behaviors influence children's maladaptive behavior. However causal relationship is rather vague.

Family criminality including parents and siblings, family poverty including low income and large family size, and poor parental child-rearing behavior including harsh discipline, ppor supervision, parental conflict, ad separation from parents, are well known risk factors of delinquency(Farrington 1995).

Among the 10 FES subscores, the only Activity-recreation orientation subscore, which reflects the extent of family unit participation in social and recreational activities, was significantly low in the unruly/delinquent group and only the Moral-religious emphasis subscore, which reflects the degree of emphasis on ethical and religious issues and values, was significantly low in adjudicated group($p<.05$).

These results were somewhat different from previous family studies of delinquency that showed lower on Cohesion and Independence, and higher on Conflict and Control subscale scores(Haddad 1985 ; Mallin 1981). Because all inpatient subjects then to have high degree of family conflicts, our findings of few group

differences may be due to a selection bias. However, it is also probable that low familial unit activity-recreation and low moral-religious emphasis in the family may be more specific characteristic factor of delinquency.

Situational and opportunity factors play an important part in the genesis of delinquency or in the recording of delinquent acts process(Clarke 1985；Farrington 1995).

Life events may be closely associated with such situational and opportunity factors. The unruly/deliquet subjects experienced a significantly higher frequency of adverse life events than the No Police Contact group over the last 12 months. But there was no difference in good events.

In summary, adolescent psychiatric inpatients with a unruly/delinquent history presented with a certain clinical, family, psychometric characteristic that warrant specific clinical intervention strategies for their cognitive deficits, and impulsive personality style, family dysfunction with adverse life experiences and disruptive behavioral disorders, different from the rest of adolescent psychiatric inpatients.

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요 약 — *Korean J Child & Adol Psychiatr 8 : 70~82, 1997*

청소년 병동에 입원한 비행 청소년의 특성에 관한 연구

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본 연구는 비행청소년의 사회심리적 특성을 파악하고 비행을 직접적으로 유발시키는 요소를 알아보고자 실시되었다. 청소년 병동에 입원한 환자 중 정신증 진단을 제외한 210명을 비행의 정도에 따라 경찰체포후 훈방된군(60명), 재판 판결을 받은군(35명), 이러한 사실이 없는 정서적으로 혼란된 비교군(105명)으로 나누어 인지 - 학습, 감정상태, 자살사고, 성격특성, 가족구조, 생활사건 영역에 관한 표준화된 검사를 실시하고 그 결과를 비교분석하였다. 공유진단을 파악하고자 이중 무작위로 60명은 구조화된 면담을 실시하였다. 연구결과 비행청소년은 비교군에 비해 1) 입양, 성생활의 문란, 가출, 정신과 입원력이 높았으며, 2)언어성 지능지수 및 학습능력이 떨어지고, 3) 성격구조상 충동적이고 사회순응도가 낮으며, 강압적이며, 4)가족단위의 여가활동이 적고, 낮은 종교 도덕관을 가진 가족의 특성을 보였으며, 5) 부정적 생활 경험이 많았고, 6) 품행자애, 반항장애, 주의력 결핍 과잉행동장애 진단율이 높았다. 우울, 불안, 자살사고는 3군중 훈방된군에서 가장 낮게 나왔다. 따라서 비행청소년을 다룰 때 비행에 관여하는 인지학습측면, 충동적인 성격구조, 가족구조, 부정적 생활경험, 파탄적 행동장애 측면에 관한 보다 집중적인 대처방안이 강구되어져야 하겠다.

중심 단어 : 청소년 · 비행 · 입원환자 · 특성.