

Aysun Baransel Isir,¹ M.D.; Mehmet Tokdemir,² M.D.; Hüdaverdi Küçükler,² M.D.; and Hikmet Ergin Dulger,¹ M.D.

Role of Family Factors in Adolescent Delinquency in an Elazığ/Turkey Reformatory

ABSTRACT: Family is one of the most important factors in the social and psychological progress of an adolescent. Social behavior disorders in childhood have been reported to be caused by many factors that may lead children to commit a crime. Our study included a total of 106 convicted adolescents from Eastern Turkey in a reformatory and 126 unconvicted adolescents with a similar socio-economic status. A survey form was completed during a face-to-face interview and a review of official records was undertaken. The role of family disruption, education levels of parents, the rate of imprisonment among first- and second-degree relatives, migration as a family from their place of birth, and the number of delinquent children in the family were evaluated. There was a significant difference between the conditions in the families of convicted and unconvicted adolescents. Family factors play an important role in the development of adolescent delinquency. To prevent or decrease this rate of childhood or adolescent delinquency, there needs to be an improvement in the socio-cultural conditions of families.

KEYWORDS: forensic science, delinquency, adolescent, family, disruption, imprisonment, parent education

The importance that the earlier years of life may have on development has been emphasized since Freud. Parents are the most important adults who can affect these years and the development of children. The behavior of a child is shaped by his parents through imitation of their behavior and moral attitudes. Gobo has reported that 83% of male adolescents and 52% of females accept their fathers and mothers, respectively, as the most important person affecting their lives (1). Le Croy (2) has reported that the friendly and supporting attitudes of parents confer a positive attitude on the adolescents. The presence of convicted persons in the family (3,4), harsh and threatening training (5), family disruption (6–8), low education level of parents (9), migration of the family from their hometown (10,11), and the number of children in a family (12) have all been reported to lead an adolescent to commit a crime. In the present study, the role of family factors influencing adolescent delinquency was determined in an adolescent population committed to a reformatory in eastern Turkey.

Materials and Methods

In this study, 106 adolescents between 12 and 18 years of age, committed for different periods to an Elazığ reformatory, and 126 age- and sex-matched controls with similar education levels, hometowns, and history of abuse were interviewed. The control group was recruited from a vocational school ($n = 91$), theology school ($n = 24$), and health sciences high school ($n = 11$).

All adolescents came from towns in eastern and southern cities of Turkey. The committed adolescents were convicted for murder ($n = 48$), sexual offence ($n = 20$), larceny ($n = 18$), robbery ($n = 16$), assault and battery ($n = 3$), and narcotic distribution

($n = 1$). The mean age at the time of the offense was 15.0 ± 1.2 years (range 12–17).

A detailed explanation of the questionnaire and its assessment were provided to all adolescents and they were informed that their names would not appear on the survey forms. A researcher conducted the interviews and the official records were also reviewed. The two groups were compared according to family disruption, the education level of parents, the number of imprisoned first- and second-degree relatives, migration as a family from hometown, and the number of siblings.

Statistical analysis was performed using SPSS 11.0 (Statistical Package for Social Sciences, SPSS Inc., 2001, Chicago, IL) for Windows.

Results

The rate of family disruption resulting from parental mortality, divorce, or other reasons was 26% for the convicted adolescents before, and the family disruption rate was 11% in the controls (Table 1).

None of the parents of the subjects had higher education. Seventy-five percent of fathers in the control group had graduated from secondary and/or high school. The rate of illiteracy among the parents of convicted adolescents was 63% ($n = 67$) for mothers and 24% ($n = 25$) for fathers. In the control group, 41% ($n = 52$) of the mothers and 8% ($n = 10$) of the fathers were illiterate. The education levels of fathers and mothers are summarized in Fig. 1. The correlation was the highest among fathers ($R = 0.435$, $p < 0.0001$) and the education of mothers was found to be in the 3rd correlation priority ($R = 0.298$, $p < 0.0001$).

The imprisonment rate among first- and second-degree relatives of the convicted group was 58% ($n = 62$). All of the convicted adolescents had met their convicted relatives or lived together. In contrast, this rate was reduced to 17% (22 cases) in the control group (Table 2). The difference between the two groups was significant (continuity correction $\chi^2 = 40.2$, $df = 1$, $p < 0.0001$). The correlation of close relatives' imprisonment rate was also found

¹Department of Forensic Medicine, Faculty of Medicine, School of Medicine, University of Gaziantep, 27100 Gaziantep, Turkey.

²Department of Forensic Medicine, Faculty of Medicine, University of Firat, 23100, Elazığ, Turkey.

Received 14 Sept. 2005; and in revised form 13 Jan. 2006, 4 April 2006, 26 July 2006; accepted 4 Sept. 2006; published 8 Dec. 2006.

TABLE 1—Family disruption rate.

	Disrupted Family		Intact Family		Total N
	N	%*	N	%*	
Convicted	28	26	78	74	106
Control group	14	11	112	89	126
Total	42	18	190	82	232

Continuity correction $\chi^2 = 8.1$, $df = 1$, $p = 0.004$.

*Percents of lines.

to be the second important correlation priority ($R = 0.425$, $p < 0.001$).

The rate of migration as a family from the hometown for the convicted adolescents was 35% (37 cases) and 18% (23 cases) for the control group (continuity correction $\chi^2 = 8.3$, $df = 1$, $p = 0.004$). However, the correlation of the rate of migration was not found to be as high as the others ($R = 0.200$, $p = 0.002$) (Table 3).

The numbers of siblings in the family are shown in Table 4. The number of families with one or two children was low in both groups, with 9% for the convicted and 8% for the control group. The rate of having three or more siblings was 85% for the convicted adolescents and 73% for the control group ($\chi^2 = 9.2$, $df = 2$, $p = 0.01$).

Discussion

Various factors influence adolescents to commit a crime; nevertheless, the role of domestic problems is one of the major factors. A comprehensive study was performed in U.S.A. for adolescents between the ages of 10 and 17. It was found that male children of unmarried mothers are 2.1 times and female children of unmarried mothers are 2.8 times more prone to having chronic delinquency than the children who have both parents (6). Similarly, in a study performed with males born in Finland, male children of unmarried mothers had 2.5 times more risk of committing a crime than the male children of married mothers (13). Angel and Worobey (14) have pointed out that if children cannot find a suitable environment where they can learn the appropriate social behavior in a family with a single parent, their social and psychological developments are reported to be impaired. In our study, the rate of family disruption for the convicted adolescent was greater than the control group, and this certainly supports these findings. Family disruption was found to be two times higher than the control group (26% and 11%, respectively, $p < 0.004$; Table 1).

The education level of parents in social life has a vital importance when raising children. When the family follows the legal

TABLE 2—Guilty close relatives in the families.

	Convicted Close Relatives		Imprisoned Close Relatives		Total	
	N	%*	N	%*	N	%*
Convicted	62	58.5	44	41.5	106	45.7
Control group	22	17.5	104	82.5	126	54.3
Total	84	36.2	148	63.8	232	100

$\chi^2 = 41.9$, $df = 1$, $p = 0.0001$.

$R = 0.425$, $p < 0.001$.

*Percents of lines.

rules of society, there will be a minimal risk for a child to commit a crime. In this study, a critical finding was that 63% of the mothers and 24% of the fathers of the convicted adolescents were illiterate. However, 41% of the mothers and 8% of the fathers were illiterate in the control group. Although the educational statuses of the parents were below the averages for Turkey, the educational statuses of parents of convicted adolescents were found to be even lower than Turkey's average education level (15). The number of mothers and fathers graduating from secondary school was 44% and 75%, respectively, in the control group, giving a meaningful correlation ($p < 0.0001$; Fig. 1). It was previously reported that the rate of adolescent delinquency is increased as the level of education of the parents decreases (9). In reviewing the education levels of the mothers (see Fig. 1), the following comments can be made:

- mothers are more effective in a child's life during their growing-up period because they spend more time with the children.
- The education of mothers was found to be an important factor affecting the crime commitment in this study, as the third order of importance in correlation comparison.
- When the cultural and education level of the mother improves, there is a direct result in the behavior of the children.

The presence of convicted adults around a child increases the risk of committing a crime (4). In our cases, the correlation of close relatives' imprisonment rate is a reasonably high correlation priority ($p < 0.001$), suggesting that the adolescent is influenced by his close relatives also and may adopt this negative attitude throughout his life.

It is commonly accepted that the cultural changes resulting from family from their hometown lead to conflict with surroundings. These can be classified as direct or indirect factors affecting the delinquency (10,11,16). The impact of migration from their hometown was significant for the convicted adolescents (Table 3).

Another factor influencing the delinquency was the number of persons or siblings within the family. When the family has a high number of children, the control and attention of the family to the child is reported to be diminished. Thus, the parents' discipline over the child is decreased and the education of the child may be nega-

TABLE 3—Migration from hometown status of adolescent.

	Migrated Adolescent		Non-Migrated from Hometown Adolescent		Total	
	N	%*	N	%*	N	%*
Convicted	37	35	69	65	106	45.7
Control group	23	18	103	82	126	54.3
Total	60	26	172	74	232	100

$\chi^2 = 8.3$, $df = 1$, $p = 0.003$.

$R = 0.200$, $p = 0.002$.

*Percents of lines.

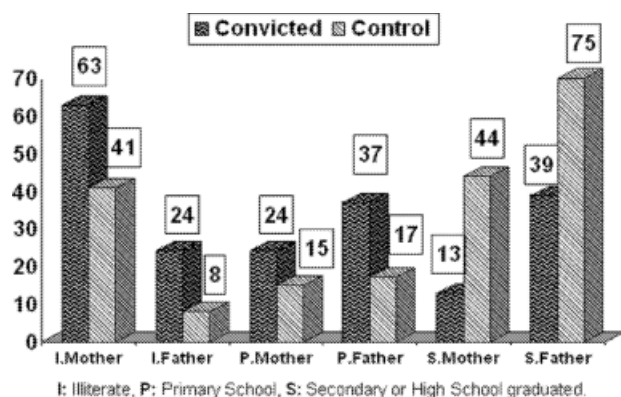


FIG. 1—Educational status of parents (%).

TABLE 4—*Sibling status of adolescent.*

	Single and One Sibling		Two Siblings		Three Siblings and More		Total	
	<i>N</i>	%*	<i>N</i>	%*	<i>N</i>	%*	<i>N</i>	%*
Convicted	10	9.4	6	5.7	90	84.9	106	45.7
Control group	10	7.9	24	19.1	92	73.0	126	54.3
Total	20	8.6	30	12.9	182	78.5	232	100

$$\chi^2 = 9.1, df = 2, p = 0.01.$$

*Percents of lines.

tively affected (16). Studies have pointed out that the decrease of control and attention of parents also increases the rate of adolescent delinquency (6,8,12,16). We also found a significant difference in the impact of the number of siblings between the groups (Table 4).

Family is the most important institution to the core of the society. There are many domestic factors that can influence a child to commit a crime. Studies have revealed that treatment of the delinquent is insufficient to remedy the situation and it is also important to work with the families to prevent delinquency (9,17). Adolescents who are in an unstable family structure should be taken from their families either transiently or permanently after social evaluations. This attitude is compatible with Turkish family law and in extreme cases and repetitive commitments of children, legal protection under social institution guidance should be suggested. Besides, the employment scopes should be expanded to remedy social problems of families.

We have to acknowledge some of the limitations of our study. First, we only analyzed the effect of family factors on convicted adolescents. Thus, we were unable to collect data such as race, substance abuse, IQ, and neuropsychiatric impairment to make intraclass comparisons of the convicted adolescents.

Although it would have been valuable to assess mental disorders, like conduct disorder and depression, most of the questionnaires were not answered appropriately by the adolescents; thus, we did not address this in our paper.

In our study, the most important factor to prevent delinquency seems to be the socio-cultural conditions of families. In case of failure to improve the conditions of the family, children and/or adolescents may be taken under legal protection or guardianship to decrease the rate of delinquency.

References

- Gobo JJ. Adolescent perceptions of significant adults: a review of literature. *Adolescence* 1984;14(76):952–70.
- Le Croy CW. Parent adolescent intimacy: impact on adolescent functioning. *Adolescence* 1988;23(89):137–47.
- Farrington DP. The twelfth Jack Tizard memorial lecture. The development of offending and antisocial behavior from childhood: key findings from the Cambridge study in delinquent development. *J Child Psychol Psychiatry* 1995;36(6):929–64.
- Hancı İH. Necessary arrangements suitable to the convention on the rights of the child on internal regulations connected to juvenile delinquency. *J Forensic Med* 1995;11:93–103.
- Sampson RJ, Laub JH. Urban poverty and the family context of delinquency: a new look at structure and process in classic study. *Child Dev* 1994;65(2):523–40.
- Conseur A, Rivara FB, Barnoski R, Emanuel A. Maternal and parental risk factors for later delinquency. *Pediatrics* 1997;99(6):785–90.
- Scol-Katz J, Dunhan R, Zimmerman R. Family structure versus parental attachment in controlling adolescent deviant behavior: a social control model. *Adolescence* 1997;32(125):199–215.
- Yücel MT. *Kriminoloji, Suç ve Ceza. Adalet Teşkilatını Güçlendirme Vakfı yayını. Ankara: Emekli Ofset, 1986.*
- Dulger HE, Tokdemir M, Tezcan E. Distribution characteristic of juvenile delinquency in East and Southeast Anatolia. *Düşünen Adam* 1996;9(3):43–57.
- Dönmezer S. *Kriminoloji. İstanbul: Filiz Kitapevi, 1984.*
- Özek Ç. Şehirleşmenin doğurduğu ceza adaleti sorunları sempozyumu. İstanbul: Fakülteler Matbaası, 1974.
- Yavuzer H. *Çocuk ve Suç. 5th rev. ed. İstanbul: Remzi Kitapevi, 1990.*
- Rantakallio P, Laara E, Isohanni M, Moilanen A. Maternal smoking during pregnancy and delinquency of the offspring: an association without causation? *Int J Epidemiol* 1992;21:1106–13.
- Angel R, Worobey JL. Single motherhood and children's health. *J Health Soc Behav* 1988;69:705–21.
- Turkey's Statistical Yearbook, 2005; 105–19, see <http://www.dic.gov.tr/ENGLISH/yillik.pdf>.
- Hancı İH. Squatters shack and juvenile delinquency. *J Forensic Med* 1995;11:55–62.
- Borduin CM, Mann BJ, Cone LT. Multisystemic treatment of serious juvenile offenders: long-term prevention of criminality and violence. *J Consult Clin Psychol* 1995;63(4):569–78.

Additional information and reprint requests:

Aysun Baransel Isir, M.D.

Department of Forensic Medicine

Faculty of Medicine

School of Medicine

University of Gaziantep

27100 Gaziantep

Turkey

E-mail: aybaransel@yahoo.com