

The Relationships between Environmental Factors and Violent Behaviors in Adolescent Students of Isfahan, Iran

Razieh Omid, Kamal Heidari¹, Hossein Davari², Morteza Espanani², Mojtaba Poursalehi³, Shokooh Eghtedari Naeini, Zeinabsadat Rastkerdar, Amir Azizi, Mohammadreza Zakizadeh

Provincial Health Center, Isfahan University of Medical Sciences, Isfahan, Iran, ¹Social Determinants of Health Research Center, Isfahan University of Medical Sciences, Isfahan, Iran, ²Isfahan Provincial Education and Training Organization, Isfahan, Iran, ³Expert of Social Affairs Office and the County Councils, Isfahan, Iran

Correspondence to:

Dr. Kamal Heidari,
Social Determinants of Health Research Center, Isfahan University of Medical Sciences, Isfahan, Iran.
E-mail: k_heidari110@yahoo.com

Date of Submission: May 17, 2014

Date of Acceptance: Nov 16, 2014

How to cite this article: : Omid R, Heidari K, Davari H, Espanani M, Poursalehi M, Eghtedari Naeini S, *et al.* The Relationships between Environmental Factors and Violent Behaviors in Adolescent Students of Isfahan, Iran. *Int J Prev Med* 2014;Special issue 2:97-101.

ABSTRACT

Background: Violence is a global issue that has received considerable attention during recent years. Available research has suggested various factors, mostly family and social factors, to possibly affect violence. As previous studies have not examined the relationship between these factors and violent behaviors in adolescents, this study aimed to assess the relationship between environmental factors and violence in adolescents.

Methods: This descriptive, correlational research used cluster sampling to select 5500 adolescent students from Isfahan Province (Iran). Data were collected through a 21-item researcher-made questionnaire. The questionnaire was modified according to the relevant experts' opinions and had Cronbach's alpha of 0.82. The collected data were analyzed by applying multiple regression analysis in SPSS (SPSS Inc., Chicago, IL, USA).

Results: Most participants (89.1%) lived in urban areas and about half (49.8%) of them were female. Linear regression test showed violent behaviors to have significant, inverse relationships with love and affection in the family ($\beta = -0.097$; $P < 0.001$) and watching drama and comedy movies ($\beta = -0.128$; $P < 0.001$ and $\beta = -0.032$; $P = 0.030$, respectively). There were significant, direct relationships between violent behaviors in adolescents and aggressive behaviors in the family ($\beta = 0.099$; $P < 0.001$) and watching crime, police, and action movies ($\beta = 0.129$; $P < 0.001$, detective movies $\beta = 0.043$; $P < 0.001$, and $\beta = 0.061$; $P < 0.001$, respectively). However, the incidence of violent behaviors was not significantly related with the effects of peers and presence of sports facilities.

Conclusions: Our findings confirmed love and affection and healthy pastime (e.g. watching comedy and drama movies) in the family to reduce violent behaviors in adolescents. In contrast, aggressive behaviors in the family, watching crime, police, and action movies were found to increase violent behaviors in adolescents.

Keywords: Adolescents, Iran, knowledge, violent behavior

INTRODUCTION

Violence is a critical social issue that can be seen in people from any religion, race, and educational, occupational, economic, or social level.^[1] It comprises a range of intentional physical, mental, emotional, and verbal violent behaviors, which negatively affect an individual's physical and mental health and self-concept. According to the public media and various studies, violence has recently become more serious in most countries of the world and has thus turned into a major social concern.^[2] Only in the US, 5764 10–24-year-old persons were killed in 2007. Current global issues such as widespread poverty, lack of attention to spirituality and humanity, tendency to have fun, deterioration of the family structure and educational values, and finally the expansion of machinism have led to pessimism, fear of the future, and aggressiveness, and violence.^[3]

A variety of definitions have been suggested for violence. Dehkhoda Dictionary describes violence as a mode of behavior through which an individual imposes his/her will on others using physical or nonphysical force. Merriam-Webster's Dictionary defines violent behavior as any behavior aiming at harming one or more phenomena. Meanwhile, such behavior can be either conscious or unconscious. In fact, a violent person uses physical force to put others in a situation against their wills.^[4] In the present research, violent behaviors included verbal/physical conflict, bullying, and damaging public places.

Several factors may contribute to the incidence of violent behaviors. Sugimoto-Matsuda *et al.* reported the role of limited social relations and poor academic performance in increasing violent behaviors among students.^[5] A research in Germany introduced individual psychological factors such as anxiety, depression and low self-esteem as the cause of violent behaviors in adolescents and youth.^[6] A research on children and adolescents in the juvenile detention center of Tehran (Iran) found domestic violence as a major cause of violent behaviors in adolescents.^[7] A study on the causes of violence and aggression among female junior high school students in Islamshahr (Tehran, Iran) showed a significant positive relationship between violent behaviors and inclination to commit violence. It also highlighted the effects of family, economic, educational, and

social factors on the tendency toward violence.^[8] Samadi Rad stated that owing to factors such as living in deprived areas, lack of recreational and sports facilities, being alone in and unfamiliar with a city like Tehran, unemployment, and low income and socioeconomic status, the youth may experience feelings of lost identity and frustration. As a result, they try to associate themselves with famous teams and athletes, admire them as legends, and demonstrate violent behaviors in case of any damage to these legends.^[9]

Among the many factors with possible impacts on violent behaviors, crucial environmental factors such as the presence or absence of sports facilities, types of movies watched by the adolescents, importance of peers, and family relationships can be modified by socio-psychological interventions. However, we failed to find a study on the effects of all these factors together. Hence, the current research aimed to investigate the relationships between these environmental factors and violent behaviors in adolescents. We hope that our findings can be helpful in identifying the causes of social deviance and prepare the ground for further empirical studies.

METHODS

This cross-sectional study was conducted in 2009. Its statistical population included all junior high and high school students in Isfahan Province (Iran). A total of 5500 students (49.8% girls and 50.2% boys) were selected through cluster sampling and a 21-item researcher-made questionnaire was employed to collect data. The questionnaire was extracted from a more comprehensive questionnaire that had previously been used in a large research. In order to evaluate the face and content validity of the questionnaire, it was distributed among relevant experts and their comments were applied. The reliability of the instrument was confirmed by calculating Cronbach's alpha ($\alpha = 0.82$).

The collected data were analyzed in SPSS for Windows (SPSS Inc., Chicago, IL, USA). Considering normal distribution of the variables, multiple regression analysis was used to determine the correlations between violent behaviors and environmental factors (presence or absence of sports facilities, types of movies watched by adolescents, importance of peers, and family relationships).

RESULTS

Among the 5500 randomly selected students, 89.1% were urban, and 10.9% were rural. Junior high and high school students constituted 45.3% and 53.7% of the participants, respectively. We applied multiple regression analysis to examine the relationships between environmental factors (predictors or independent variables) and adolescents' violent behaviors (dependent variable or criterion). The environmental factors included the presence or absence of sports facilities, type of movies watched by adolescents (drama, suspense, detective, action, and comedy movies), the importance of the subjects put on their peers, and family relationships (level of love and affection among family members and aggressive behaviors between parents) [Table 1].

As observed in Table 1, the incidence of violent behaviors had significant, inverse relationships with love and affection in the family and watching drama and comedy movies. Meanwhile, it was significantly and directly related to aggressive behaviors in the family (especially between parents) and watching crime, police, and action movies. However, the incidence of violent behaviors was not significantly related to the effects of peers and presence or absence of sports facilities in the neighborhood.

The relationships between the mentioned environmental factors and violent behaviors are stratified by sex and place of residence (urban and rural) in Tables 2 and 3.

According to Table 2, violent behaviors in girls had a significant direct relationship with watching suspense movies and significant, inverse relationships with love and affection in the family and aggressive behaviors in the family (especially between parents) suspense movies other independent variables had no significant effect on violent behaviors in adolescent girls.

Violent behaviors in boys were significantly and inversely related to love and affection in the family

and watching comedy movies. On the other hand, it had significant, direct relationships with aggressive behaviors in the family (especially between parents) and watching suspense movies. No other significant relations were detected between violent behaviors in boys and detective movies the rest of independent variables [Table 2].

As Table 3 shows, among the urban students, the incidence of violent behaviors was significantly and inversely related to love and affection in the family and watching comedy movies. In contrast, significant, direct relationships existed between violent behaviors as the dependent variable and aggressive behaviors in the family (especially between parents) and watching crime, police, and action movies as independent families. Other relationships between dependent and independent variables were not significant in urban adolescents.

Violent behaviors in rural students had significant, inverse relationships with having sports facilities, effects of peers, and watching drama movies. There was also a significant, direct relationship between aggressive behaviors in the family (especially between parents) and the incidence of violent behaviors in rural adolescents. The rest of the independent variables had no significant relationships with violent behaviors in rural students [Table 3].

DISCUSSION

Our findings highlighted significant, inverse relationships between violent behaviors among all students and love and affection in the family and watching drama and comedy movies. Significant, direct relationships were also detected between adolescents' violent behaviors and aggressive behaviors especially between parents and watching crime, police, and action movies. We could not establish any significant relations between violent behaviors of adolescents and the effects of peers or the presence of sports facilities. A review

Table 1: Regression coefficients for all the participants

	Presence of sports facilities	Comedy movies	Action movies	Suspense movies	Detective movies	Drama movies	Effects of peers	Aggression in the family	Love and affection in the family
Standardized coefficients	0.018	-0.032	0.061	0.043	0.129	-0.128	-0.014	0.099	-0.10
<i>P</i>	0.205	0.036	<0.001	0.009	<0.001	<0.001	0.324	<0.001	<0.001

Table 2: Regression coefficients for boys and girls

Variables	Statistical parameters			
	Girls		Boys	
	β	<i>P</i>	β	<i>P</i>
Love and affection in the family	-0.113	<0.001	-0.106	<0.001
Aggression in the family	0.157	<0.001	0.118	<0.001
Effects of peers	-0.004	0.825	0.018	0.356
Drama movies	-0.049	0.095	-0.034	0.100
Suspense movies	0.082	<0.001	0.157	<0.001
Detective movies	0.002	0.951	0.002	0.930
Action movies	0.016	0.425	-0.018	0.370
Comedy movies	-0.253	0.927	-0.052	0.014
Presence of sports facilities	-0.013	0.180	-0.006	0.756

Table 3: Regression coefficients for urban and rural students

Variables	Statistical parameters			
	Urban students		Rural students	
	β	<i>P</i>	β	<i>P</i>
Love and affection in the family	-0.103	<0.001	-0.057	0.181
Aggression in the family	0.095	<0.001	0.123	0.003
Effects of peers	0.000	0.982	-0.119	0.004
Drama movies	-0.131	<0.001	-0.165	0.015
Suspense movies	0.124	<0.001	0.115	0.032
Detective movies	0.054	0.002	0.089	0.196
Action movies	-0.069	<0.001	0.048	0.257
Comedy movies	-0.027	0.091	-0.131	0.021
Presence of sports facilities	0.006	0.662	-0.108	-0.008

article on thousands of studies in the US during 1950–1993 reported that all studies, except 18, confirmed the relationship between violence in movies and the incidence of violent behaviors. Moreover, they all agreed that media violence leads to violent behaviors, indifference to violence, heartlessness, having nightmares, and worrying about getting injured.^[10] Apparently, although the destructive effects of violent movies have been well determined, little attention has been paid to the positive effects of drama and comedy movies that can be good sources of information and entertainment. Considering these two genres can be extremely beneficial in interventions aiming to prevent the aggressive behaviors of adolescents. Research has suggested a clear relationship between family life and delinquency. In fact, level of father-

son discipline, the way the mother monitors his son's behavior, love and affection expressed by the parents to their children, and cohesion of the family have been proposed as predictors of delinquency.^[11]

A study on the relationships between parenting styles and aggressive behaviors in adolescents of Shabestar (a city in Iran) found democratic parenting as the best method to decrease aggression and its components.^[12] Similarly, our findings indicated love and affection in the family and aggressive behaviors in the family, especially between parents, to substantially affect the incidence of violent behaviors in adolescents.

We could also detect differences in factors influencing violent behaviors in girls and boys. For instance, although watching comedy movies significantly reduced violence in boys, it had no such an effect among girls. Besides, while watching suspense movies increased the incidence of violent behaviors in both sexes, it was a stronger predictor in boys. On the other hand, family relationships were stronger predictors in girls. Likewise, a previous study reported ineffective and troubled families to have more considerable impacts on delinquency among girls than among boys.^[13]

The results of the current research underscored various differences between urban and rural students. In fact, violent behaviors of urban students had significant, inverse relationships with love and affection in the family and watching comedy movies. Meanwhile, significant, direct relationships existed between the incidence of violent behaviors among urban adolescents on the one hand and aggressive behaviors in the family, especially between parents, and watching crime, police, and action movies on the other. In contrast, the influence of peers, the presence or absence of sports facilities, and watching comedy movies had no significant relationship with violent behaviors of urban participants. However, evaluating rural students revealed significant, inverse relationships between violence and having sports facilities, effects of peers, and watching drama movies. There was also a significant, direct relationship between aggressive behaviors in the family, especially between parents, and the incidence of violent behaviors in rural adolescents. Then again, watching crime, police, action, and comedy movies and love and affection in the family had no significant effects on violent behaviors among our rural subjects. We

failed to find any studies specifically on aggressive behaviors adolescents. Only in one study in Kermanshah (Iran), the researchers concluded that people from deprived areas may consider their own socioeconomic conditions considerably different with those of other members of the society. As the feeling of dissatisfaction increases among them, they may seek ways, including violence in marginal areas of the city, to compensate for such unfairness.^[14] Similarly, the differences between effective factors in urban and rural areas in the current study can reflect the fact that rural individuals with life conditions closer to those of urban people tend to behave less violently.

CONCLUSIONS

The results of this study showed that family factors such as expressing love and affection in the family and the absence of conflicts and violent behaviors in the family are stronger predictors of better performance in terms of violent behaviors. Therefore, educating family on life skills such as anger control, conflict resolution, and effective communication can be effective in preventing violent behaviors among adolescents. On the other hand, although sports facilities and good relationships with peers are needed by adolescents, these factors are not considered as predictors of their violent behaviors.

REFERENCES

1. Miao TA, Umemoto K, Gonda D, Hishinuma ES. Essential elements for community engagement in evidence-based youth violence prevention. *Am J Community Psychol* 2011;48:120-32.
2. Meyer AL, Cohen R, Edmonds T, Masho S. Developing a comprehensive approach to youth violence prevention in a small city. *Am J Prev Med* 2008;34 3 Suppl: S13-20.
3. Sugimoto-Matsuda JJ, Braun KL. The role of collaboration in facilitating policy change in youth violence prevention: A review of the literature. *Prev Sci* 2014;15:194-204.
4. Pack T. Merriam-Webster Dictionary goes digital. *Inf Today* 2002;19:45.
5. Sugimoto-Matsuda J, Hishinuma E, Chang J. Prevalence of youth violence in the U.S 1999-2009: Ethnic comparisons and disaggregating Asian Americans and Pacific Islanders. *Matern Child Health J* 2013;17:1802-16.
6. Schlack R, Petermann F. Prevalence and gender patterns of mental health problems in German youth with experience of violence: The KiGGS study. *BMC Public Health* 2013;13:628.
7. Esfahan ZJ. Effects of Domestic Violence on Juvenile Delinquency. Tehran: Tehran University; 2008.
8. Gholami Z. Investigating the causes of violence and aggression in female junior high school students in Eslamshahr. Iran: Tehran University; 2009.
9. Samadyrad A. "Pathology of adolescents' violent behavior" *Socialsciences.ir*; 2013. Available from: http://www.socialsciences.ir/index.php?option=com_content&view=article&id=82:1390-10-01-16-05-08&catid=68:1390-10-18-10-00-05&Itemid=60. [Last cited on 2013 Aug 09].
10. Strasburger VC. Children, adolescents, and the media: Five crucial issues. *Adolesc Med* 1993;4:479-494.
11. Wells LE, Rankin JH. Self-concept as a mediating factor in delinquency. *Soc Psychol Q* 1983;46:11-22.
12. Ahangareanzabi A, Sharifidramadi P, Farajzadeh R. The Relationship between parenting style and adolescents aggression in Shabestar City. *J Cogn Behav Sci* 2011;1:1-8.
13. Khosravi Z. A qualitative survey on the role of family functioning in high-risks behaviors of adolescents, Alzahra University. *Psychol Stud* 2006;3:17.
14. Lahsaezadeh A. The role of relative deprivation in increasing urban violence in slum areas. *Urban Stud* 2012;3:40.

Source of Support: Nil, **Conflict of Interest:** None declared.