Age and Gender Difference in Antisocial Behavior among Adolescents' School Students

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Abstract

This study aims to examine the association between age, gender and antisocial behavior among 395 adolescents aged between 13 and 18 years in Tehran city in Iran. In this quantitative study, Pearson's product–moment correlation coefficient was applied to determine the relationship between the antisocial behavior of adolescents and age and gender. In addition, an independent sample t-test was used to compare the adolescent's antisocial behavior between male and female respondents. Results of this study indicated that there was a positive significant correlation between age and gender of respondents and antisocial behavior. Pearson correlation analysis showed a positive significant correlation between age of respondents and antisocial behavior. The finding of this study shows that older adolescents associated with more frequent of adolescent's antisocial behavior than younger adolescents. Furthermore, there was a difference in adolescent's antisocial behavior between male and female. These results indicated that the male is more likely to show antisocial behavior than female. By implication, the study contributes to existing literature in understanding the psychological development stage and age and gender as an important factors for adolescent development.

Keywords: *Age, Male, Female, Antisocial Behavior, Adolescents*

1. Introduction

In the last few decades, exploring the reasons and risk factors which are related to children's and adolescents' delinquent behavior has been of great importance in the relevant research area, possibly for two main reasons: the serious effects of antisocial behavior over time and its consequences on social and economic cost (Frick and Loney, 2002). In previous studies, it was found that antisocial behavior is multi-determined, that is the dysfunctions in children's behavior causes by inter acting a number of risk factors and not just influencing a single factor. They result in increasing aggressive and antisocial behavior in a child in a micro perspective view and in his social environment in the broader scale (Loeber et al. 2009).

The requirement for mental health services have been enhanced as delinquent behavior results in increasing various types of problems in societies (Frick et al., 2005). As a matter of fact, antisocial behavior as severe distress in communities starts manifesting in early stages of adolescence (Wright et al., 2007). NCES (2007) reported that 75% of public schools in America encountered at least one violent or criminal action during 2007 − 2008 academic years. A report highlights that 60% of children in the United States has exposed to direct or indirect scenes of violence (the National Center for Education Statistics [NCES], 2010). Moreover, Furthermore, the main crime investigation survey revealed that eight out of 10 people reported antisocial behavior has increased in England and Wales within the past year (Allen, Edmonds, Patterson, & Smith 2006).

In addition, other studies indicated that especially, among African American adolescents, the risk of youth crimes such as high crime, unemployment, and vandalism has risen (Entner Wright & Younts, 2009; Donnell, Richards, Pearced, & Romero, 2012). Moreover, a majority of 80% of youth deviant happened when adolescents possessed four or more risk factors along with drinking alcohol in the past month and/or being engaged in antisocial behavior in the past year. These figures were diminished as the number of risk factors was decreased. For example, just more than 50% of adolescents who had two or three risk factors, and over 23% of those possessed one or no risk factors involved in antisocial behavior (Australian Research Alliance for Children and Youth, 2009). Similar to other parts of the world, in the context of this study, Iran, antisocial behavior has also been multiplied. For instance, 28,000 children and adolescents were in rehabilitation centers in Iran (Mohammadiasl, 2006). Therefore, it seems highly critical to explore causes and factors which can result in antisocial behavior among children and adolescents.

According to Fortin (2003), antisocial behavior describes as any violent behavior which breaches laws and people's right. Deviant behavior may be found in different forms such as vandalism (e.g., breaking trees, destroying bus

seats or cutting public phone wires and writing on walls, chairs or desks), crime, assaults or other sorts of behavior which goes against the norms of in a society. Another common antisocial behavior is cultural misconduct such as receiving warnings by school officials due to breaking the school rules or, in an Islamic country such as Iran, warning from the police or school officials because of violating the Islamic covering codes. This study investigates the antisocial behavior which refers to a set of behavior conducted against social rules and norms such as vandalism and cultural misconduct as expressed earlier.

Several factors such as age and gender are associated with adolescent's antisocial behavior. Burt and Neiderhiser (2009) point out that age is one of the main characteristics which can determine antisocial behavior among children and adolescents. Moreover, Letourneau et al. (2013) suggest that age might be used as a moderator variable on the relationship between (SES) and delinquency. In contrast, age impact leads to decreasing environmental factors on antisocial behavior as shown in behavioral genetics research. According to Geolge (2012), the findings obtained from different studies on possible influence of gender on social problems are not consistent. There are some evidence for the specific impact of gender on relationship between behavior problems and delinquency among adolescents. In some of these studies, the effect of juvenile delinquency anticipated in boys whereas adult crimes as a type of antisocial behavior contributed to both genders. It is proposed that the influence of delinquent behavior in adolescents might be occurred with a delay in girls (Topitzes et al. 2011).

Furthermore, there were some visible results for adolescents' tendency for antisocial behavior. Various risk factors intervened delinquency and crimes happened by both genders. As such, adolescent boys were more eager to externalize antisocial behavior, school obligation, social-emotional skills, and school achievements. This could reveal the relationship between behavior problems and crime in adolescence period. On the contrary, parental factors, externalizing problems, cognitive process, and educational performance were more predicted in adolescent girls (Topitzes et al. 2011). Another research carried out by Foy et al. (2012) indicated that trauma, as consequences of delinquent behavior, has an effective role in increasing of antisocial behavior in girls than in boys. In fact, the effects of gender differences on the relationship between antisocial behavior and delinquency illustrated different mixed results.

Social control theory ascertains that the antisocial behavior in both genders would be rooted in learning processes taken place in their socializing environments such as their family, friends and schools. These models also explain the various rates of antisocial behavior in males and females which is considered as the gender gap in delinquency. Males actually possess more chances to learn and show antisocial behavior because of lower supervision by their families on them. This is the popular characteristics of conventional environments while highly conducting with unconventional groups. In addition, it is believed that social control theory (Hirschi, 1969) and the theory of crime (Gottfredson & Hirschi, 1990) can explain the reasons for lower rates of delinquency in females as they traditionally have more attachment to conventional contexts, in particular to their families. This, in turn, leads to more commitment to conventional norms on the part of women in traditional settings. In contrast, results obtained from research on both genders inclined to deduce that due to higher exposure to risk factors for antisocial behavior such as higher contact with delinquent peers, lower parental monitor, less connection to family and school, males are more apt to involve in antisocial behavior (Elliot, Huizinga, &Ageton, 1985; Storvoll & Wichstrom, 2002).

Other studies, however, emphasize that to comprehend the role of gender in deviant behavior, it is inadequate to take in the samples from females to investigate and prove whether females replicate what are ascribed by males. As a matter of fact, it is crucial to suggest other models to take the existence of differential socialization routes into consideration. This fact can explain the influence of both possibilities, that is, unequal exposure of males to risk/protection factors and what helps to construct personal identities. These factors play a great role in varieties of performance for potentially antisocial behavior. Steffensmeier and Allan (1996) suggest a theoretical model in which the important concept is organization of gender. In other words, a series of factors that can cause differences in the social life structures of males and females such as gender norms, identity, affiliative concerns, and moral development are taken into account. The model determines fewer numbers of crimes committing by females.

The reason might refer to the feminine gender who assumes to engage in affection, caring others, and sustaining interpersonal relations. These aspects and concepts are not well-matched with delinquent and deviant behavior. On the contrary, the organization of males' identity is associated with some characteristics including competitiveness for attaining social positions. As such, a male person's own wishes and concerns precede others' wills, and thus, males become more appropriate and have more inclination and tendency for antisocial behavior. There are scant number of studies on correlation between age and gender identity and deviant behavior.

Referring to above mentioned relationship; Pearson correlation analysis was applied to determine relationship between age and gender and adolescent's antisocial behavior and independent sample t-test was applied to compare the antisocial behavior in males and females. In the related literature, the impact of gender identity on those variables which

are relevant to adolescent deviation was investigated by using an independent t-test (López& Rodríguez-Arias, 2010). The findings revealed that there was a significant relationship between age and gender on antisocial behavior among adolescents. Hence, this study also makes attempts to compare the differences of adolescents' deviant behavior in both genders, that is, males and females.

2. Purpose of the Study

The purpose of this study is to compare the difference between age and gender groups in antisocial behavior among adolescents in Tehran, Iran. Thus, the researcher proposed the following research hypotheses:

Ho1: Male adolescents involved more frequently in antisocial behavior compared to female adolescents in Tehran, Iran.

Ho2: Older adolescents involved more frequently in antisocial behavior compared to younger adolescents in Tehran, Iran.

3. Method

3.1 Participants

A total of 395 male and female adolescents were recruited from daily secondary and high schools in Tehran, Iran. The research applies cluster sampling as a sampling design. The participants were at the age of 13 to 18. The mean age was 15 years with SD=1.44.

3.2 Measures

3.2.1 Age and Gender

The participants' background information was collected by asking the students to tick the appropriate options in relation to their age and gender distribution under the demographic section in the questionnaire.

3.2.2 Antisocial behavior

Antisocial behavior was evaluated through a survey questionnaire regarding antisocial Behavior (Dekovic, 1999). Using 18 items, the scale focused on some minor acts entailing truancy, public transportation usage without paying, and some serious deviant acts, encompassing purposely beating someone or intentionally setting fires. These questionnaire was administrated to ask adolescents how often they commit these acts during the last 12 months: 0 for never, 1 representing once, 2 presenting two or three times, 3 stands for four to 10 times, and 4 representing more than 10 times. As the research was conducted in Iran, these three items were deleted, namely, using hard drugs such as heroin, using soft drugs such as cannabis, cocaine, speed and LSD; and being drunk. But replaced by seven additional items, namely, skipped school without giving a good excuse, steeling little things with lesser prices than five dollars, watched pornography, trespassed on people's property, wore clothes against school policy, arguing with the school principal or teacher, and fighting with classmates or other students in school. Addition of these seven items to questionnaire was based on prior studies and discipline principles effecting in Iran. Here, the total scale ranged from 0 to 88, thus, the higher scores represents a higher level of antisocial behavior. The questionnaire indicates an overall alpha of 0.94 for the total scale (Dekovic et al., 2004). The reliability value of the scale in the current study present an alpha coefficient of 0.79 indicating the scale is reliable.

3.3 Procedure

This study was authorized by Department of Education of Tehran. To select the participants, students with discipline problems were listed by assistance of the school counselor. The whole students listed here, participated in the survey.

3.4 Statistical Analysis

To describe the variables of the study, a descriptive statistical analysis including frequency, percentage, means, and

standard deviations was employed. Furthermore, Pearson's product–moment correlation coefficient was also applied to determine the direction and strength of the linear relationship between the antisocial behavior of adolescents on age and gender. Independent sample t-test is utilized when there are two different (independent) groups of people (males and females) and researcher interested in comparing their scores. In this study independent sample t-test was performed to examine the gender differences in adolescent's antisocial behavior.

3.4.1 Results

As shown in Table 1, the measures applied in this survey indicated acceptable to excellent reliabilities ranging from 0.79 to 0.93. The skewness and kurtosis values of the study variables were between –2 and +2; therefore, the assumption of normality has not been violated. Based on exploratory data analysis, for antisocial behavior the distribution of scores indicates a slight and positive skewness of 0.324, and for gender it shows a slight and positive skewness of 0.076, and for age the distribution of scores indicates a slight and positive of 0.181, the variables of which were within acceptable limits and imminent to normal distribution.

Table 1. Assessment of Normality for Study Variables

Instruments	Mean	5% trimmed mean	Skewness	Kurtosis
Antisocial Behavior	0.98	0.97	0.324	-0.145
Age	15	15	0.181	-.870

As shown in Table 2, the respondents of this study consisted of 205 (51.9 %) males and 190 (48.1 %) females. The respondent's age ranged from 13 to 18 years with the mean and median age equal 15 and the standard deviation is 1.44. The majority (44.3%) of respondents were between (15-16) years old. 32.2% of adolescents were between 13-14 years old. About 23.5 % of respondents were between (17-18) years old.

Table 2. Psychometric Properties of the Major Study Variables (n = 395)

Variables	F (%)	Mean	SD	Min.	Max.
Antisocial Behavior		**20.95**	**9.54**	**0**	**48**
Low ≤ 20.95	193 (48.9)				
High > 20.96	201 (51.1)				
Age		**15**	**1.44**	**13**	**18**
13 -14	127(32.2%)				
15-16	175(44.3%)				
17-18	93(23.5%)				
Gender					
Male	205 (51.9)				
Female	190 (48.1)				

Note: Min= Minimum, Max= Maximum, SD= Standard Deviation, F = Frequency, SD = Standard deviation

As depicted in Table 3, an independent sample t-test was conducted to compare the adolescent's antisocial behavior between male and female respondents. There was a significant difference in adolescents antisocial behavior between male (M=1.05, SD=0.39) and female (M=0.85, SD=0.40); t (df = 393) =4.84, P≤0.01. Therefore, Ho1 is supported. These results indicated that the male is more likely to show antisocial behavior than female. Similar to previous research (Crick, 1997; Spieker, Larson, Lewis, Keller, & Gilchrist, 1999; Bongers, Koot, van der Ende &Verhulst, 2003; Abdul Jalal, 2006; Aliverdinia, Sharehpoor&Varmzyar, 2008; Miner & Clarke-Stewart, 2008; Galloway, 2010) found that male adolescents have more frequent antisocial behavior compared to females.

Table 3. Independent sample T-test for adolescents antisocial behaviour by gender

	Female (n= 190)		Male (n= 205)		
Variable	Mean	SD	Mean	SD	t-value
Antisocial Behavior	.85	0.40	1.05	0.39	4.84**

Note: ** $p \leq 0.01$

The gender differences in the way antisocial behavior is expressed may be related to the differing rate of maturity between girls and boys (Dishion, French, and Patterson, 1995). According to the finding of this study, the boys antisocial behaviors are extremely pervasive than the girls in the southern parts of Tehran, Iran. It might be a reflection of the influence of the Iranians families on their children bringing up. Boys have more freedom in going and coming without being inspected by their families. Therefore, they have more chances to join with deviant peers and enjoy themselves with antisocial behaviors. These results are consistent with other research findings by some researchers such as Bongers, Koot, van der Ende, and Verhulst (2003) Miner and Clarke-Stewart (2008) who examine gender differences in adolescents and suggested that boys are more likely to exhibit problems, such as physically aggressive and conflicted interpersonal interactions than girls. Dishion *et al. (*1995) suggest that boys' behavioral problems are less stable than girls. Furthermore, research examining gender differences in adolescent antisocial behaviors has similarly found that adolescent boys are more physically aggressive, consumed more alcohol, and committed more property offenses than girls (Windle, 1990). Similarly, this finding also corresponds with other studies (Sobotkova *et al.,* 2012) which confirmed that boys tend to behave more aggressively than girls and that antisocial behaviors gradually increase during adolescence.

Table 4. Relationship between adolescents' Age and antisocial behavior

Variables	Antisocial behavior (*r*)
Age	0.144**

Note: **p ≤ 0.01

As shown in Table 4. Pearson correlation analysis showed a positive significant correlation between age of respondents and antisocial behavior (r=0.144, p≤ 0.01). Therefore, Ho2 is supported. The finding of this study shows that older adolescents associated with more frequent of adolescent's antisocial behavior. These findings are consistent with previous research (Moffitt *et al*., 1996; Sohrabi *et al*., 2007) that found as age increase the probability of antisocial behavior increases. According to Piquero (2007) antisocial behavior and criminality activity increase during adolescence and peaks around age 17 and declines as individuals enter adulthood. There is a considerable literature on factors that contribute to the increase in antisocial behavior that takes place during adolescence (e.g., increases in vulnerability to peer pressure, decreases in parental monitoring). Patterson (1982) suggests that poor family functioning leads to impaired development of normal social skills and increased opportunity for involvement with deviant peers. Laird, Pettit, Dodge, & Bates, (2003) explained that adolescence is characterized by an increased involvement with peers which also could shape what goes on in the family. Researchers (Montemayor, 1983; Stoolmiller, 1994) explained that regarding to pattern of change in relationship quality between parents and adolescents, they spend increasingly less time together as the child ages, there may be significantly lower levels of openness/ warmth and conflict/coercion in older youth compared to younger adolescents.

4. Discussion and Conclusion

This study investigated adolescents' age and gender and the adolescents' antisocial behavior in Tehran, Iran. The study found a significant association between older and male adolescents and antisocial behavior. This means, older adolescents more likely exhibit antisocial behavior than younger, and boys antisocial behaviors are extremely pervasive than the girls. Present study supported previous findings that male and older adolescents showed more frequent of antisocial behavior and delinquent act than younger and female adolescents. Society should take action to identify this violence earlier and protect them to delinquency and crime later. In terms of prevention of antisocial behavior among adolescents, it is important to be aware of male and older adolescents commit more offences against persons, whereas female adolescents offenders more commit aggressive and report of violence that are not include of any antisocial behavior. Given the association between age, gender and antisocial behavior for both girls and boys, younger or older,

intervention could pay attention to potential effects of age and gender and to the assessment of violence and delinquent act in juvenile.

By implication therefore, the findings of this study fill the existing gap regarding this social issue in Iran and contribute to existing literature in terms of understanding psychological developmental stage and family context as important factors in adolescent development. Findings of this study will help the school and educational counselors who are more concerned about the adolescents' needs and protecting them against the effects of unhealthy families. Moreover, the information derived from the present research can significantly enable the educators to enhance their understandings of the crucial factors that involve in the development of antisocial behavior among adolescents. The results of this research also show the unique role of parents in the adolescents' antisocial behavior. Thus, the results benefit parents the most, so they can be aware of the factors contributing to their children's antisocial behavior. There are several limitations on this study. The first is the sample. The respondents in this study were adolescents in Tehran, Iran. Therefore, the results are not generalizable. The second one is that the study is cross-sectional. Thus, the long-term effect of family income on the behavior problems of adolescents cannot be examined.

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