Identification of social networks of school adolescents with antisocial and criminal behavior

Identificación de redes sociales de adolescentes escolares con comportamiento antisocial y delictivo

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SUMMARY

Adolescence is considered a crucial stage for the identification of behavior problems since they can be carried on to later stages in the life cycle. There was a sample of 3 927 high school students to whom the Antisocial Criminal Behavior Questionnaire instruments were applied to identify Antisocial Behavior (AB) and Criminal Behavior (CB) in each student and the Interview for sociocognitive maps, to identify the social connections present in each student and school group. A prevalence of 341 women and 251 men were found in AB, while in CB there were 136 women and 30 men. The number of social connections that each student has in their social network has an average of 6.38 friends, while students identified as being at high risk of AB and CB have 5.84 friends in the case of women and 8.05 in the case of men (P= 0.007 <0.05). It was found that male adolescents at high-risk AB and DC have a larger social network than women at this risk level, which can lead to the maintenance of antisocial emissions in the next stages of development.

Keywords: *Adolescents, antisocial and criminal behavior, social networks.*

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RESUMEN

La adolescencia se considera una etapa crucial para la identificación de problemas de conducta dado que pueden mantenerse a etapas posteriores en el ciclo vital. Se contó con una muestra de 3 927 estudiantes de bachillerato a quienes se aplicaron los instrumentos Cuestionario de Conductas Antisociales. Delictivas para identificar la Conducta Antisocial (AB) y la conducta Delictiva (CB) en cada estudiante y la Entrevista para mapas sociocognitivos, para identificar las conexiones sociales presentes en cada alumno y grupo escolar. Se encontró una prevalencia de 341 mujeres y 251 hombres en AB, mientras que en CB se encontraron 136 mujeres y 30 hombres. La cantidad de conexiones sociales que tiene cada alumno en su red social tiene un promedio de 6,38 amigos, mientras que los alumnos identificados en alto riesgo de AB y CB tienen 5,84 amigos en el caso de las mujeres y 8,05 en el caso de los hombres (P= 0,007 <0,05). Se

encontró que los adolescentes hombres en alto riesgo AB y CB tienen una red social de mayor tamaño que las mujeres en este nivel de riesgo, lo que puede llevar al mantenimiento de las emisiones antisociales en próximas etapas del desarrollo.

Palabras clave*: Adolescentes, conducta antisocial y delictiva, redes sociales.*

INTRODUCTION

Considering a developmental perspective, the stage of adolescence is determined as the starting point of antisocial behavior (1), because it is one of the periods of greatest sensitivity for the acquisition of problem behaviors (2,3). It is important to mention that not all adolescents who have antisocial behavior at this stage maintain it throughout their development, however, it is considered a risk factor to increase their behavior and frame it in an Antisocial Personality Disorder (4). This stage is characterized as a period of multiple changes that include rebellion in most of the behaviors experienced, being a process in which the adolescent puts authority to the test and more resistance to limits is evidenced (5).

Antisocial behavior is characterized by the emission of behaviors that do not correspond to the socially established systems of coexistence (6-8), is commonly manifested in adolescence. These undesirable behaviors can be aggravated, turning into conduct disorders, some can even be classified as a crime and therefore be punished by law (9,10). Due to this way of characterizing antisocial behavior, its conceptualization can include a wide variety of behavioral morphologies that range from disobedience and lies, theft and destruction of private property, physical and verbal aggression, school bullying, marital violence, and the use of addictive substances, both legal and illegal (11-15).

Thus, criminal conduct is within a behavioral pattern of antisocial behaviors that includes only those acts legally defined as criminal, thus having violated the law of the nation in which they live (10). Juvenile delinquency brings with it consequences that affect society in general, leaving expenses in services to prevent and benefit repeat offenders, as well as their families and,

therefore, the population groups most at risk of delinquency (16).

It has been found that in adolescent populations the incidence of antisocial behavior is 16.6 % without finding significant differences by sex (7). It is known that 30 % of a population of adolescents in school have more antisocial behaviors related to the use of high-sounding words, non-compliance, or late arrival to class, eating food in places where it is prohibited, knocking on a door, and running, fighting with someone, cheating, and littering, (10). In a study published in 2017 (17), adolescents between the ages of 12 and 17 who use illicit drugs were counted, finding 2 882 000 men and 2 855 000 women had done so at least on some occasion in their lives, while 7 900 men and 7 800 women had done it in the last month. Thus, it is also known that adolescents who engage in antisocial or criminal acts are highly influenced by their social network or are within a network in which most of the members have this type of behavior (18,19).

In Urie Bronfenbrenner's ecological model, the direct influence of context on adolescent behavior is highlighted; referring to the microsystem as that medium that is determined by the social interaction processes of adolescents with their parents, then the macrosystem where cultural aspects are developed and finally the exosystem that refers to the scenario where adolescents develop, with what is observed the great influence of the scenario on behavior in adolescents and, above all, the relevance of the various factors and contexts that are described as risk factors in this model since it includes the environments in which it operates (20).

Then, it is established that the social group in which the adolescent operates can influence the antisocial behavior that is emitted, even leading the young person to commit criminal acts due to consequences such as value and social security, group cohesion, self-worth, and self-esteem; Furthermore, it is known that the social groups of adolescents that commit antisocial or even criminal acts more frequently are those that vary between different groups or that meet only occasionally (16). According to a study carried out (10), it was found that adolescents maintain a social group of 6-7 members with whom they maintain an affective closeness, which in the case of antisocial behaviors emitted by an adolescent

could be modeled for 5 or 6 pairs at the same time.

For this research, the variables of antisocial and criminal behavior were considered, the first being defined as the emission of behaviors that do not correspond to the socially established systems of coexistence (6-8), and the second as legally defined acts as a criminal that break the law (10). Social networks are also considered a variable, defined as the set of nodes or ties that include a relationship between them in which resources are transferred to meet a mutual objective (21).

METHODS

Participants

There was a total population of 4 519 students, of which the sample was made up of 3 927 high school students, of which 2,186 were female (55.66 %) and 1741 were male (44.33 %), the mean age was 16.07 years with a standard deviation of 0.83 years.

Stage

The data was collected in the classrooms of the institution, each group in its respective classroom, also had the support of the teacher in turn for the roll call and the delivery and collection of the questionnaires was in charge of the team research.

Materials

Pencils, Rubber, Sharpener

Instruments

Antisocial-Criminal Behavior Questionnaire (22).

Interview for socio-cognitive maps, version adapted for the identification of bullying roles. Individual application interview that consists of 12 questions that allow obtaining information on social groups within the group, the preference for interaction between peers, and the emission of aggression between students in the school environment (23-25).

Process

The institution was contacted to request permission to apply the instruments in each of its campuses during class hours. A research team consisting of 4 psychology undergraduate students, 2 psychology research master's students, and 2 trained psychology teachers were in charge of applying the instruments in the classrooms, with the support of the teachers on duty. The confidentiality of the data was clarified in addition to reading the instructions aloud to the participants, who answered the instruments in an average time of 40 minutes.

RESULTS

As a first point, it is considered important to mention the data of the 592 students that were not considered in the sample, since 570 of them were not in their classroom at the time of application and 22 of them did not respond to the entire instrument. Therefore, these applications had to be canceled and not considered for the sample.

On the other hand, the Antisocial-Criminal Behavior Questionnaire allows identifying the risk in which individuals are and classifies them as Low, Medium, and High risk, so it was decided to identify those students who were at high risk, finding a total of 592 high-risk students, that is, 15.07 % of the sample, 2 047 students at medium risk (52.12 %) and 32.79 % (1 288 students) at low risk. Next, Figure 1 shows the comparative graph between sexes of the levels of risk of antisocial behavior detected in the sample.

Likewise, students who are at the High, Medium, and Low-Risk levels in criminal behavior were identified, finding a total of 3 627 students with the occurrence of criminal behavior among which there are 1 339 students at low risk (34 %), 2 122 at medium risk (54.03 %) and 166 students at high risk, which corresponds to 4.22 % of the sample, the distribution of the sexes can be seen in Figure 2.

The total number of participants from the second semester was 927 students, from the fourth semester 1 434 students and a total of 966 students from the sixth semester, of which an analysis was carried out between the 3 risk
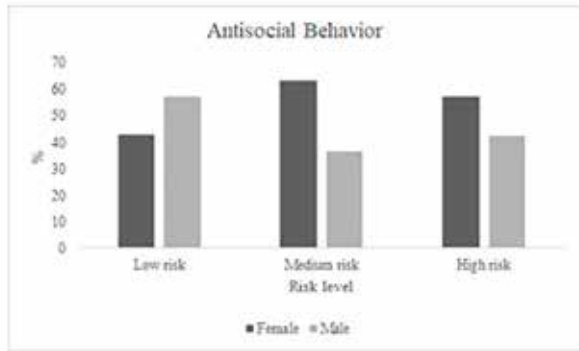
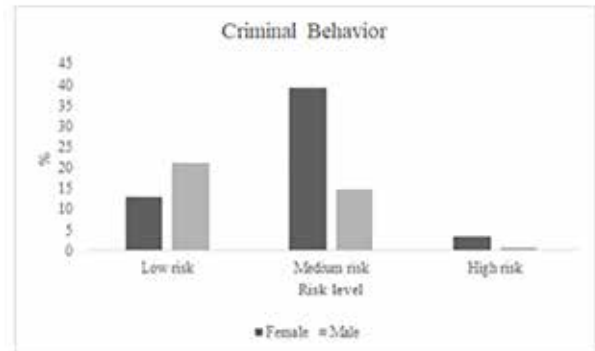Figure 1. Levels of risk of antisocial behavior by sex identified in the sample of students.

Figure 2. Levels of risk of criminal behavior by sex identified in the sample of students.

levels (Low, Medium, and High Risk) of AB and CB, Figure 3 shows the number of participants per semester identified in each combination of the risk levels found in both behaviors.

Regarding the sex of the students identified in the combinations of the risk levels, it was found that the female sex has a greater presence in the High-Risk DC, as shown in Figure 4.

To identify students who may be candidates for immediate psychological interventions, an analysis was carried out to detect the percentage

of students who are at each risk level in both behaviors by sex, the results are observed in Figure 5.

On the other hand, a multivariate analysis was performed with the independent variables sex, age, and grade, and the variables antisocial behavior and criminal behavior as a dependent: in the variables of age $P = 0.742$ and grade $P = 0.938$, no differences were found, while statistically significant differences were found in the sex variable $P < 0.05$.
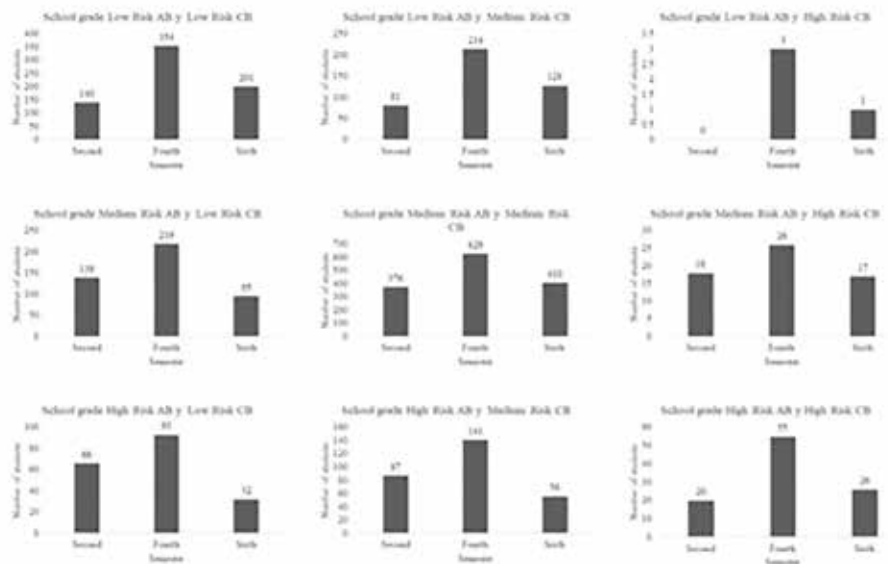

Figure 3. The number of participants per semester found in Low, Medium, and High-Risk combinations in AB and CB behaviors.
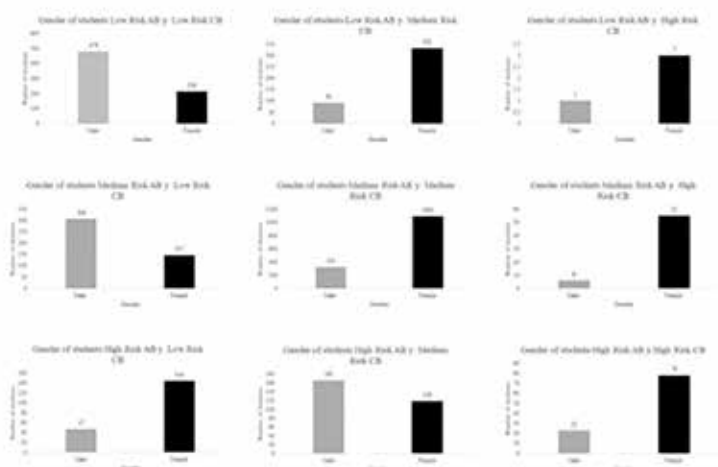
Figure 4. Distribution of the participants by sex found in the combinations Low, Medium, and High Risk in AB and CB behaviors.

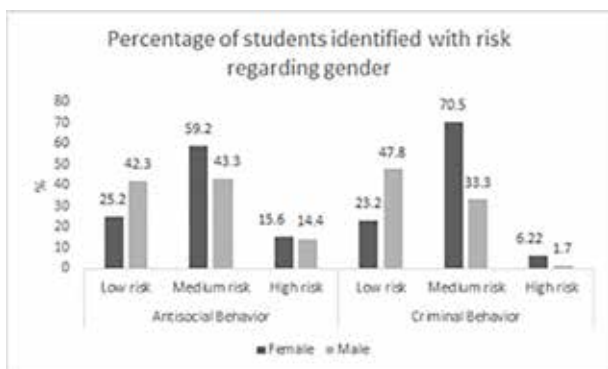Figure 5. Percentage by sex of students identified in AB and CB.

Table 1

Average of social connections per student

	Sample	High Risk Group AB and CB
Total average	6.38	6.51
Female average	6.26	5.84
Male average	6.51	8.05

analysis of the t-test by sex was carried out, finding statistically significant differences in the social connections that students have P= 0.007 < 0.05.

DISCUSSION AND CONCLUSION

The analyzes carried out in relation to social interaction were at first to identify the number of elements in each social network in the entire sample and later to analyze the number of members that each social network has of students identified as high risk in the combination of AB and CB, the following table shows the averages, both total and by sex of the sample and the students found to be at high risk.

Once obtained the averages found in the number of social connections that students identified as having high risk in CA and CB, the

The objective of this study was, on the one hand, to evaluate antisocial behavior and criminal behavior in high school students and, on the other hand, to identify the number of social connections that each student has in their social network within the academic group, so it should be provided special attention to the conditions of the participants for their possible generalization. The presence of students who are between the risk levels of antisocial behavior and criminal behavior depends on social situations with peers, although the bulk of the population

is between the low and medium risk levels, the students identified as high-risk demand actions intervention both group and individual.

Unlike the study (14) in which its results did not show differences related to gender, in the present study differences were found based on gender as predictors of antisocial and criminal behaviors in both areas the female sex surpassed the sex numerically male, which also contrasts with the results found in another investigation (10) in which it was found that crime was lower in females than in males at any adolescent age, while in the present study, the degree to which They belong as well as their age did not show statistically significant differences, see Figure 5.

As described by (8) and (26) in the case of the social exchanges that adolescents have with their peer group, it constitutes a risk factor for engaging in antisocial behaviors, in case of this research it is possible to identify that Male students who have a higher risk of AB and CB have a greater amount of social connections than women who are at this risk level, likewise, the results found in this research coincide with those found by another researcher (10) in the Since the number of close friends that an adolescent has varied between 6 and 7, in Table 1, it is possible to observe the averages found for the sample 6.38 so that the identification of the social network of the participants located in the risk levels alto sheds light on the way to clarify the social dynamics in the emission of antisocial and criminal behaviors in adolescence.

One of the areas of opportunity in this study is to identify not only the number of social connections that high-risk adolescents have on social networks but also to identify each member of the network and carry out a detailed analysis on the members according to sex and level of risk found in AB and CB.

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