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Protective And Risk Factors Of Antisocial Behavior: An Explanatory Model In Adolescents From Trujillo Province

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Abstract

This study aims to analyze the Protective and Risk Factors of Antisocial Behavior: an Explanatory Model in Adolescents in Trujillo Province. He was part of quantitative studies with a non-experimental field design. The sample consisted of 2132 adolescents (1176 males and 956 women) from different secondary education centres in trujillo Province, whose ages range from 12 to 18 years (M x 14.39, DT 1.54). A total of 9 measuring instruments with short and one-dimensional scales were used. The data were tested T-Student to assess whether there are differences in adolescent antisocial behavior, according to gender. The multiple regression analysis was subsequently performed to determine the risk and protection factors that influence antisocial behavior. The main findings reveal that the factors that influence and act as protective factors, which best predict antisocial behavior in women, are psychological well-being, the search for experiences, and avoidance. For males, the factors that most influence their antisocial behavior are problematic internet use, psychological well-being, open emotional expression, search for experiences, disinhibition, age and type of school; factors mentioned act as protective factors for psychological well-being, the search for experiences and being in a private school.

Keywords: antisocial behavioral, regression, protective factor, risk factor.

Introduction

Adolescence is a stage in which the social group takes on a predominant role (Nickerson, 2005) cited in Yearwood, Vliegen, Luyten, Chau and Corveleyn, 2019, and its impact is usually inversely proportional to the links with the family system; social connection is amplified, it is at this stage that a wide range of risk behaviors affecting biopsychosocial health can be initiated (Corona & Peralta, 2011), a possibility that may vary depending on those factors that have developed in previous stages are protective or risk factors and therefore may be predictive of their behavior (Yearwood, Vliegen, Luyten, Chau, & Corveleyn, 2018), this research seeks to explain the influence of protective or risk factors for the development of antisocial behaviors in adolescents.

During the last few years, an increase in the participation of adolescents in the commission of crimes or misdemeanors has been perceived. The violence that affects adolescents - as victims or perpetrators - is configured as a public problem that demands an immediate and effective response from the State. (Salas, Martínez, Matos, Adama, & Zelada, 2017)

The Municipality of Lima (2018) revealed that so far this year 20 bands have been intervened to take away cell phones. Several of the members of these organizations were not even 18 years old. The infractions committed by adolescents in conflict with criminal law in our country (Salas et al., 2017) are aggravated robbery with 36%, followed by theft (variants) with 23.4%, rape with 12.3% and injuries (variants) with 6.6%.

The National Institute of Statistics and Information (INEI, 2016) revealed that in the juvenile diagnostic and rehabilitation centers the number of inmates was 1309, and that by 2016, 1905 adolescent offenders will be in prison. A municipality of Lima (2016) indicates that, in this district, the inhabitants of the area show figures that reach 57% in infractions committed on the public streets, and in the case of adolescents, the INEI (2016) records that 26 people committed incidents in this district. Likewise, according to the statistics of the Serenazgo of this municipality in 2015, it is evident that the incidences of violent acts and most recurrent misdemeanors are due to aggression with a figure of 614 participations of the serenazgo in the cases mentioned, followed by prevention with young people who are maladjusted, reaching a figure of 340; In addition, in 2014, 486 calls were received by the guards for gang problems, and it became evident that the most recurrent infractions are theft, robbery and illegal drug possession.

For a better understanding about adolescents and negative behaviors, it is important to define antisocial behavior as a clinical disorder, configured by a set of diverse behaviors that seriously affect the development and normal functioning of the subject, and that also have negative consequences for the person and contexts with which he or she interacts. (M. T. González, 2012)

Defining this disorder and identifying behaviors that are mostly observable does not seem to be a difficult task, however, it is not always conceptualized in the same way, nor does it cover the same contents. (M. T. González, 2012)

Angenent and De Mann (1996) cited in (Frías-Armenta, López-Escobar, & Díaz-Méndez, 2003) define antisocial behavior of a delinquent nature in youths as those activities that in terms of norms and customs are considered undesirable or even unacceptable. The most severe forms are called conduct disorders, and the authors conclude that juvenile delinquency is a behavior disorder punishable by law.

Developmental environments are important in determining adolescent behavior, which is why it can be said that school is an environment for the acquisition of knowledge and the development of social relations where adolescents are exposed to the various social norms, rules, and customs of their community (Angenent & Man, 1996) cited in (Frías-Armenta et al., 2003). The way in which the school influences students is through its policies, which are reflected in the establishment of rules and the ways in which they are enforced. There is a relationship between school environments and delinquency; a positive school environment allows for prosocial relationships for the educational community (Angenent & Man, 1996; Vazsonyi & Flannery, 1997). (Frias-Armenta et al., 2003)

In the home, economic shortages, large or extended families, difficulties in parental relationships, and inappropriate parenting styles (Farrington, 1995). They can initiate high-risk behaviors in adolescents' behavior and decision-making; as well as factors that prevent the above.

Risk factors are any detectable characteristic or circumstance of a person or group of people that is known to be associated with an increased likelihood of suffering, developing, or being especially exposed to a morbid process. These risk factors (biological, environmental, behavioral, socio-cultural, economic) can counteract the possible effects of the risk factors, adding to each other, increasing the isolated effect of each one of them producing an interaction phenomenon.

As they refer (Fernandez, Alonso, & Montero, 2002) in terms of risk factors of broad spectrum is found: family with poor ties between its members, domestic violence, low self-esteem, belonging to a group with risk behaviors, school dropout, weak life project, low level of resilience. Among the specific risk factors are: carrying a knife, not using safety measures either in a car or on a motorcycle, having pregnant teenage friends or sisters, drinking alcohol until intoxication, etc.

Educational centers (private or public) can be the source of antisocial behavior of the students they educate. It is noted that a positive school environment allows for prosocial relationships between students and teachers and among students (Webster-Stratton & Taylor, 2001).

Non-attendance is another risk factor associated with the development of antisocial and criminal behavior. Nonattendance helps facilitate the transition to delinquency because it provides additional time and opportunities for inappropriate behavior, such as antisocial behavior (Farrington, 1995).

High rates of school delinquency and vandalism are also associated with the development of antisocial and delinquent behaviors, with school failure and vandalism and peer aggression being factors associated with antisocial and delinquent behaviors in youth (Rutter et al., 2000).

Poor parent-child interaction and marital conflict are considered family risk factors for antisocial and criminal behavior (Armenta, Díaz & Peña, 2001; McCord, 2001). With respect to internal or intrapersonal factors, in addition to age, gender, and normative life experiences, there are biological, cognitive, and affective aspects. Biological factors include heredity, especially in cases where there is an associated personality disorder. The effect of hormones -mainly the effects of testosterone-during the pre-natal and pubertal stages has also been studied, as well as the effects of low serotonin levels in the brain.

Henry and Moffitt (1992), using neuroimaging techniques, found neurological correlates of executive deficiencies in samples of early adolescent offenders. These included deficits in neuropsychological skills such as verbal comprehension, attention, concentration, concept formation, abstraction, anticipation, and planning. Similarly, a low intellectual level appears to contribute to the risk of committing crime.

With regard to affective factors, the relationship between psychopathology and crime has been studied in a special way.

The most evident association has to do with antisocial personality disorder and its precursors in childhood: attention deficit hyperactivity disorder, oppositionist disorder and conduct disorder (Lahey & Loeber, 1992). Likewise, some personality traits have been identified as frequent among offenders such as impulsivity, difficulty in postponing gratification, diminished self-concept, lack of social skills, low level of empathy and little capacity to feel guilt (Blackburn, 1995).

Individual and environmental characteristics are important predictors of juvenile delinquency. However, although there is consensus regarding simultaneous participation between external and internal variables, it is the latter that generate the most controversy. In this regard, Quay (1987) cited in (M. T. González, 2012) indicates that in almost all cases, violent crime and delinquency are more associated with internal factors and with greater psychological disturbance compared to crimes committed by adolescents that constitute minor offences against parental and non-parental authority.

In any case, a persistent pattern of crime episodes perpetrated before and during adolescence constitutes the best predictive criterion for classifying among groups of adolescents at risk of becoming future adult offenders, and adolescents who experience an intensification of some of their personality characteristics during this evolutionary period.

Protective factors:

We understand as protective factors "Those voluntary or involuntary actions, which can lead to protective consequences for health, are multiple and can be bio-psycho-social" (Corona & Peralta, 2011)

According to (Páramo, 2011) In the field of health, to speak of protective factors is to speak of detectable characteristics in an individual, family, group or community that favor human development, maintenance or recovery of health; and that can

counteract the possible effects of risk factors, of risk behaviors, and therefore reduce vulnerability. (p. 87) Donas Burak (2001) raises the distinction between "broad-spectrum" and "specific" risk and protective factors.

Thus, these factors make it possible to diminish the negative effect that certain personal or environmental situations have, favoring the mitigation of a risk behavior, being related to the term resilience, which can be defined as "the human capacity to face the adversities of life, overcome them and come out of it strengthened or even transformed" (Hein, 2014.).

Parental supervision and monitoring appears to be a very significant factor, especially in the case of adolescent males (Angenent & De Mann, 1996).

Among the broad-spectrum protective factors, Donas Burak (2001) states that they include: a supportive family, good interpersonal communication, high self-esteem, an elaborate life plan, remaining in the formal educational system, and a high level of resilience.

Specific factors include: the use of safety measures in vehicles, not having sexual relations or having them with protection, not smoking, etc.

Methodology

Participants

The sample was made up of 2132 adolescents (1176 boys and 956 girls) from different secondary schools in Trujillo Province, whose ages ranged from 12 to 18 years ($M = 14.39$, $SD = 1.54$).

Instruments

A total of 9 measuring instruments were used, most of which were short, one-dimensional scales.

Questionnaire on Antisocial Behavior in Childhood and Adolescence: Created by González, (2012) in a school-aged population, which is composed of 20 items in a Likert type scale with 3 frequency anchors that results in a one-dimensional factor; it showed adequate validity based on the criterion with the A scale of the Questionnaire on Antisocial and Criminal Behavior ($r=.64$), and a reliability coefficient of $\alpha=.81$.

Family and Friends Social Support Scale: The first version was created by González and Lanedero (2014) which contained 15 items of the 5-anchor Likert scale and measured social support from the family and friends perspective having two dimensions. The revised version contains 14 items, suffering item 9 by means of a factorial analysis. The total scale has shown a reliability of .92.

Jong Gierveld's Scale of Loneliness: It was constructed to measure loneliness in youth and adults, originally created by de Jong-Gierveld & Kamphuls, (1985) and later adapted to Peru by Ventura-León & Caycho, (2017). The scale has 11 items with a dichotomous rating and with inverted items (1, 4, 8 and 11) which add up to a single dimension that evidences a good level of reliability ($\omega=.82$)

Questionnaire of psychological well-being in young people: The version developed by Casullo & Solano, (2000) was applied, which has 13 items of Likert qualification

divided into four dimensions (control, bonds, projects and acceptance). The total scale reached an alpha coefficient of .74, while the dimensions range from .50 to .56. **Problematic Use of the Internet Scale:** The scale was created by Boubeta, Salgado, Folgar, Gallego, & Mallou, (2015) with the intention of functioning as a screening tool for problematic use of the Internet. It contains 14 items of the 5-anchor Likert scale, of which 3 were eliminated (3, 9 and 10) because they did not comply with a high factorial load; it is a single-factor model with 11 items and an internal consistency of .82.

Scale of Perceived Self-Efficacy of Academic Situations: The version adapted by Dominguez-Lara, (2014) was applied to university students from 15 to 48 years old; which through a modeling of structural equations determined a one-dimensional structure with 9 items of Likert scale of 4 frequency options. The internal consistency revealed the presence of an alpha coefficient of .88.

Stress Coping Questionnaire: Sandín & Chorot, (2003) developed the questionnaire with a total of 7 coping strategies with 6 items in each one of them, making a total of 42 items of Likert scale of 5 anchors. The questionnaire showed strong evidence of internal consistency in the strategies, ranging from .92 to .64.

Brief Scale of Sensation Seeking: Merino-Soto & Salas-Blas, (2018) adapted an 8-item questionnaire to measure sensation seeking in schooled adolescents in Metropolitan Lima. A 4-dimensional factorial structure was determined: Search for experiences, search for adventure, disinhibition and susceptibility to boredom. The items were postulated in response to a 5-anchor Likert scale. Internal consistency showed an alpha of .74.

Procedure

The research was approved by the institution to which the researchers belong, and permission was requested from the directors of the adolescents' educational institutions. The data collection was carried out in the adolescents' classrooms, during regular hours; the administration of the instrument was supervised by two examiners in each group evaluated and the instructions highlighted the honest, anonymous, and content-focused response of the items, applying it to the adolescents who agreed to participate and solve the instrument.

Data analysis

After exploratory analysis and review of the assumptions for the model, the data collected were subjected to T-Student Analysis to assess whether there are differences in antisocial behavior of adolescents, according to gender.

Subsequently, the multiple regression analysis was carried out to determine the risk and protective factors that influence antisocial behavior.

Results

After debugging the database and eliminating subjects with incomplete or inconsistent information, scores were obtained for antisocial behavior of adolescents, as well as scores for protective factors and risk factors.

The T-Student test was carried out to evaluate differences in antisocial behavior according to the gender of the adolescents. It was found that there are significant differences ($t=-4.14$, $p<0.05$) in antisocial behavior, between males and females, as can be verified in table 1.

Table 1. T-student test of antisocial behavior differences by gender

	Levene equal variance test		Test t for equality of means		
	F	Sig.	t	gl	Sig.
Equal variances are assumed	12.76	0.000	-3.623	2130	0.00
Equal variances are not assumed			-3.645	2083.94	0.00

Source. Authors

For the multiple regression analysis, protection factors and risk factors were considered as independent variables, as well as general data on age, type of school (public, private), cohabitation (single parent, both parents or other relatives). In this analysis, we proceeded to verify the regression assumptions, then performing multiple linear regressions by successive steps, to identify the predictive variables of antisocial behavior for each group.

In table 2, the results reveal that the predictive models that explain a greater percentage of variance in women are the eighth model, with 31%, and with respect to the predictive model of antisocial behavior in men, the seventh model found, explains 31.4% of the variance.

Table 2. Multiple step linear regression for antisocial behavior

Gender	Model	R	R ²	R ² adjusted	Durbin-Watson
F	10	,563 ^a	,317	,310	1,570
M	7	,564 ^b	,318	,314	1,638

- Predictors for women: Predictors: Predictors: (Constant), EUPI, BIEEPS, Open Emotional Expression, Search for Experience, Desinhibition, AGE, COLE, Avoidance, Search for Social Support, Search for Adventure and Emotion
- Predictors for men: Predictors: (Constant), BIEEPS, Open Emotional Expression, EUPI, Experience Search, Disinhibition, COLE

Source. Authors

Likewise, it can be seen in table 2 that the value of the Durbin Watson in both models is close to 2, because the waste is not self-correlated and the models can be continued. It was additionally verified with a ($F(10,945) = 43,872, p = 0.000$) for the women's model and a ($F(7,1168) = 77,977, p = 0.000$), that both prediction models are adequate for making a forecast.

In table 3, it is observed that the factors that influence antisocial behavior in adolescent women are problematic use of the Internet (EUPI), psychological well-being (BIEEPS), open emotional expression, experience seeking, disinhibition, age, type of school, avoidance, seeking social support, adventure seeking, and emotion.

Table 3. Coefficients of the variables predicting antisocial behavior in regression analysis

		Non-standardized coefficients			Collinearity statistics		
		B	Standard error	t	Sig.	Tolerance	VIF
Women	(Constant)	5.123	2.449	2.092	0.037		
	EUPI	0.186	0.024	7.707	0.000	0.778	1.286
	BIEEPS	-0.343	0.040	-8.543	0.000	0.784	1.276
	Open emotional expression	0.357	0.049	7.233	0.000	0.676	1.479
	Searching for experiences	-0.548	0.102	-5.353	0.000	0.608	1.646
	Disinhibition.	0.384	0.098	3.909	0.000	0.659	1.517
	Age	0.354	0.114	3.098	0.002	0.971	1.029
	Type of school	-1.281	0.628	-2.041	0.041	0.971	1.030
	Avoidance	-0.113	0.042	-2.680	0.007	0.677	1.476
	Search for social support	0.074	0.035	2.138	0.033	0.748	1.338
	Search for adventure and excitement	0.210	0.099	2.117	0.035	0.618	1.619
	Men	(Constant)	13.592	2.033	6.685	0.000	
EUPI		0.111	0.022	4.987	0.000	0.802	1.248
BIEEPS		-0.466	0.032	-14.423	0.000	0.923	1.083
Open emotional expression		0.399	0.039	10.293	0.000	0.827	1.209
Searching for experiences		-0.476	0.086	-5.517	0.000	0.736	1.359

Disinhibition.	0.454	0.088	5.179	0.000	0.713	1.403
Age	0.234	0.103	2.281	0.023	0.991	1.009
Type of school	-1.257	0.498	-2.524	0.012	0.982	1.018

Source. Authors

Of the factors that influence act as protective factors, which best predict antisocial behavior in women, is the psychological welfare, the search for experiences, and avoidance, In addition, if the type of school where the adolescent is private, helps to reduce or counteract antisocial behavior and factors that increase antisocial behavior in female adolescents are the problematic use of the Internet, open emotional expression, disinhibition, age, seeking social support and seeking adventure and excitement.

In the case of males, the factors that most influence their antisocial behavior are problematic internet use, psychological well-being, open emotional expression, the search for experiences, disinhibition, age and type of school; of the factors mentioned, psychological well-being, the search for experiences and being in a private school act as protective factors.

In the analysis, coexistence was also considered (single-parent family, both parents or other relatives); however, this variable was not found to be significant, because as mentioned by the adolescents, they can live with both parents, however, they do not feel the presence or concern for them, since they are busy with their chores.

As he states (Angenent & De Mann, 1996), parental supervision is very important at this stage.

Conflict of Interest

No economic, labor or research conflict of interest has arisen in connection with the disclosure of this document.

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