

Articles

Educational Prevention of Antisocial and Delinquent Behavior in Brazilian Adolescents

Valentín Martínez-Otero¹ and Martha Leticia Gaeta²

¹ Universidad Complutense de Madrid.

² Universidad Popular Autónoma del Estado de Puebla.

ARTICLE INFO

Received: March 08, 2022

Accepted: June 01, 2022

Keywords:

Adolescents
Antisocial behavior
Delinquent behavior
Educational intervention

ABSTRACT

Background: Antisocial and criminal behaviors are frequently associated with illegal behaviors committed by adolescents between 12 and 19. This study aims to examine antisocial and criminal behavior in adolescence and establish guidelines that contribute to educational prevention. Specifically, we sought to evaluate self-reports of antisocial and criminal behaviors in adolescents, verifying differences in the variables sex and age. **Method:** A total of 396 adolescents participated in the study. They were aged 12 to 19 years old ($M = 15.8$, $SD = 1.6$), were of both sexes (63.9% girls or women and 36.1% boys or men) and were attending primary and secondary schools in Brazil. The Antisocial-Criminal Behaviors Questionnaire (A-D) was administered online. Descriptive and comparative analyses by sex and age were performed. **Results:** Boys presented more transgressive behaviors than girls, not overall, but in specific behaviors included in the two scales of the questionnaire used. In terms of age, self-reported antisocial and criminal behaviors increased with student age. **Conclusions:** From a systemic perspective, educational proposals are made to identify and neutralize risk factors and improve protective factors for adolescents.

Prevención Educativa de los Comportamientos Antisociales y Delictivos en Adolescentes Brasileños

RESUMEN

Antecedentes: Las conductas antisociales y delictivas se asocian frecuentemente a conductas ilegales y son cometidas por adolescentes de 12 a 19 años. Este trabajo tiene como objetivos profundizar en este tipo de conductas en la adolescencia y establecer pautas que contribuyan a su prevención educativa. Concretamente, se evalúan los autoinformes de conductas antisociales y delictivas en adolescentes, y se verifican diferencias respecto al sexo y la edad. **Método:** La muestra estuvo conformada por 396 adolescentes, de 12 a 19 años ($M = 15.8$, $DT = 1.6$), de ambos sexos (63.9% mujeres y 36.1% varones), estudiantes de primaria y secundaria de escuelas brasileñas. El Cuestionario de Conductas Antisociales-Delictivas (A-D) fue administrado en línea. Se realizaron análisis descriptivos y comparativos por sexo y edad. **Resultados:** En cuanto al sexo, los chicos presentaron comportamientos más transgresores que las chicas, pero no de modo global, sino en conductas específicas incluidas en las dos escalas del cuestionario utilizado. Respecto a la edad, se incrementan las conductas antisociales y delictivas autoinformadas a medida que aumenta la edad de los estudiantes. **Conclusiones:** Estos hallazgos permiten organizar propuestas educativas consistentes para identificar y neutralizar los factores de riesgo y mejorar los factores protectores para los adolescentes.

Palabras clave:

Adolescentes
Conductas antisociales
Conductas delictivas
Intervención educativa

Antisociality is of widespread concern and interest to many scientific fields, such as psychology, psychiatry, sociology, criminology and pedagogy. It is a heterogeneous construct that encompasses physical aggressions such as hitting, fighting, harassing; transgressive behaviors such as lying, stealing, vandalizing, arson, etc.; oppositional behaviors, including irritability, defiance, and stubbornness; as well as other serious behaviors associated with the absence/insufficiency of empathy and guilt (Ortiz et al., 2018; Piotrowska et al., 2015).

Deviation is particularly prevalent in adolescence compared to other stages of life (Murteira & Vale-Dias, 2016). The taxonomic theory of the development of antisocial behavior distinguishes two types of antisocial behavior: persistent, less frequent and with worse prognosis, and limited to adolescence, with higher population prevalence (Moffitt, 1993). This theory of the development of antisocial behavior, one of the most researched and influential (Eme, 2020), suggests that people who show persistent antisociality in the course of life, in addition to having been able to experience adverse environmental factors in childhood, are more vulnerable neuropsychologically (a smaller surface area and a thinner cortex in brain regions associated with executive function, motivation and affective regulation), which hinders the opportunity to acquire prosocial skills (Carlisi et al., 2020).

From the theory of persistent antisocial behavior (stable and generalized) in the course of life, compared to antisociality limited (temporal and situational) to adolescence, the constant process of reciprocal interaction between personal traits and environmental reactions (person-environment interaction) is emphasized. Therefore, throughout development, certain relatively subtle variations of childhood in aspects of neuropsychological health (hyperactivity, irritability, poor self-control and low cognitive ability), which are not determinant, in dysfunctional interaction with the socio-family environment (parenting style, involvement and parental reactivity), may cumulatively generate an antisocial style that completely permeates adolescent and adult behavior (Moffitt, 1993).

As Molinuevo (2014) reports, the antisociality that begins in childhood seems to be more related to family dysfunction and instability, with behavioral and temperament problems, with neuropsychological and cognitive deficits, and with some genetic vulnerability. On the other hand, the antisociality that begins in adolescence is related to more rebellion and greater rejection of conventional norms. It is not as associated with an adverse family environment or with temperamental or cognitive problems; the genetic risk is lower and is usually explained by negative social learning in the peer group.

Just as early aggressive behavioral problems increase the risk of exhibiting antisociality in later stages (Ettetal & Ladd, 2015), so also adverse childhood experiences predict deviant behaviors (Gomis-Pomares & Villanueva, 2020). Although there are multiple conceptual and empirical approaches to the study of antisocial behaviors, it is suggested that in behavioral deviation there may be different entry pathways (family dysfunction, socioeconomic hardship, traumatic events in childhood, neuropsychological deficits, negative impact of mass media, etc.), with complex interactions (Gaybulloyevna & Farkhodovna, 2021).

The etiology of antisocial behavior has also shown variations depending on gender. Different social aspects, such as parenting

styles (Cutrín et al., 2017) or early physical aggression (McEachem & Snyder, 2012), have a differential impact on the development of antisocial behavior between men and women. As for the manifestation of these behaviors, in adolescence it is common for boys to present more aggressive behaviors or transgress the law more than girls (Dias et al., 2014; Mobarake, 2015; Molero et al., 2016; Dos Santos et al., 2019). However, in recent years, criminal behavior in women has increased (Pusch & Holtfreter, 2018).

Certain personality traits could be related to antisocial and criminal behavior (Tharshini et al., 2021). We are approaching, therefore, antisocial personality disorder, which is characterized by a pattern of socially irresponsible, exploitative, and transgressive behavior. It usually begins in early childhood, continues into adulthood, and is associated with addictive and mental health disorders (Black, 2015). People with antisocial personality disorder are distinguished by dysfunctional cognition, by contempt and violation of the rights of others, by breaking the law, by the inability to maintain constant employment, by manipulation and the inability to form stable relationships (Fisher & Hany, 2022). In fact, they risk being imprisoned due to the violent and deceptive nature of their behavior (Martin et al., 2019).

The antecedent in childhood of antisocial personality disorder, although it can also occur in adolescence, is the dissocial disorder (*conduct disorder*), which was in the defunct category *Disorders of onset in childhood, childhood or adolescence* (American Psychiatric Association, 2000). In the DSM-5 (American Psychiatric Association, 2013) it is called Conduct Disorder and is located in Destructive, Impulse Control and Behavior Disorders. In a way, in the same DSM-5 manual, antisociality is also linked to substance-related disorders and addictive disorders, due to their high correlation with drug/alcohol use, and to personality disorders.

It is appropriate to distinguish between psychopathy and antisocial personality disorder, although they overlap in some respects. Garrido (2008) states that most habitual offenders may have antisocial personality disorder, but only some could be classified as psychopaths. Indeed, although antisocial personality disorder and psychopathy share many characteristics, such as pathological impulsivity, irresponsibility, aggression and antisocial behavior, they differ significantly, as psychopathy is distinguished by insensitive and emotionless traits and low levels of anxiety, depression and general psychopathology, while subjects with antisocial personality disorder have higher rates of comorbidity. psychopathological, such as depression, anxiety, self-injurious behaviors (Anton et al., 2012) and substance abuse, more frequent in men (Fernández-Artamendi et al., 2021). In addition, it should be noted that there is high comorbidity between antisocial personality disorder and psychopathy, although this relationship seems to be asymmetrical and suggests that psychopathy is possibly a more severe and violent form of antisocial personality disorder (Werner et al., 2015).

It is also necessary to differentiate, according to González-Martínez (2012), between antisocial behavior and criminal behavior, although they may be presented together. The first is a clinical concept and the second is a legal one. For the same reason, a teenager may transgress social norms without necessarily being a criminal and a person who from the legal point of view commits a crime does not have to be diagnosed as antisocial. Seisdedos (2000), whose questionnaire (A-D) has been used in this study,

does differentiate between both types of behaviors to which it allocates two scales (A, D), but the truth is that throughout the history of the different scientific disciplines that have been interested in antisociality, numerous terms have been used to refer to transgressive behaviors, such as delinquency, criminality, deviant behaviors, problematic behaviors, disorders or behavioral problems, aggressiveness, violence, destructive behaviors, etc. (Peña & Graña, 2006).

The often-confusing diversity of conceptualizations has guided the development of evaluation and intervention tools. With this review, a general description of different notions of antisociality is shown from which different pedagogical implications are derived, since family, school and social educational intervention may carry out very positive work to prevent antisociality from childhood. Indeed, antisocial behavior poses a major challenge, since, for example, aggressive behaviors are known to show high stability throughout life (Krahé, 2020). The findings recommend intervention in both aggressive childhood behaviors and criminal behaviors in adolescence in order to prevent a variety of imbalances in adult life (Moffitt et al., 2002; Pérez-Gramaje et al., 2020).

In the reduction of criminal behavior, intervention through programs adhering to the risk-need-responsiveness (RNR) model has broad empirical support, which, in summary, describes: a) who should receive services (cases of moderate and high risk), b) establishment of appropriate objectives for rehabilitation services (criminogenic needs), and c) adoption of strategies to reduce criminal behavior (social-cognitive learning) (Andrews & Bonta, 2010).

Despite their variability, programs aimed at preventing and reducing antisocial behavior during childhood and adolescence, whether universal (e.g. targeting all pupils), selective (targeting groups considered at risk) or indicated (specifically targeting children and adolescents who exhibit antisocial or criminal behavior), are often based on the promotion of social competence and prosociality, and have, in general, moderate positive effects (Beelmann & Lösel, 2021; Lösel, 2012; Sandler et al., 2014). The challenges are increased when considering which preventive and intervention programs may be most effective according to the characteristics of the recipients, including through selective actions adapted to adolescents (Otto et al., 2021). In general, four aspects should be common to the different programs, although it is more frequent to dispense with the first in prevention rather than in remedial intervention: the consideration of each student according to their personality and specific situation; the promotion of coexistence in school environments through cognitive, affective, social and ethical means; the involvement of parents, families, friends and colleagues, and work with the community in order to involve the social environment as much as possible in a phenomenon that is not limited to school (Gámiz-Ruiz et al., 2014).

In Brazil, where this study was carried out, the main normative instrument on the rights of children and adolescents is the Estatuto da Criança e do Adolescente (ECA) Law nº 8.069, of July 13, 1990 (Câmara dos Deputados, 2010), in which education assumes a transcendental role (CEDECA, 2020).

In the light of the literature, the main objectives of this work are, on one hand, to comprehensively deepen antisocial and

criminal behaviors in adolescence and, on the other, to establish guidelines that contribute to their educational prevention. Specifically, it is intended to analyze the information provided by adolescent schoolchildren about their antisocial and criminal behaviors, and to determine if there are differences regarding sex and age. The main hypotheses are:

- 1) There are significant differences in antisocial and criminal behaviors according to the sex of adolescents.
- 2) Antisocial and criminal behaviors increase significantly as the age of adolescents increases.

Method

Participants

The sample consisted of 396 schoolchildren of both genders—253 women (63.9%) and 143 men (36.1%), aged between 12 and 19 years ($M = 15.8$, $SD = 1.6$). By age, participants were distributed as follows: from 12 to 13 years (7.8%); from 14 to 15 years (36.1%); from 16 to 17 (42.9%); from 18 to 19 years (13.1%). 6.3% of the students studied in private schools and 93.7% in public schools. Regarding the Brazilian State in which the schools are located, the percentages are: Rio Grande do Norte (60.8%); Acre (25.7%); Maranhão (10.5%); Piauí (3%).

Instrument

We used the Antisocial-Criminal Behaviors Questionnaire (A-D; Seisdedos, 2000), a psychometric tool of 40 items of a two-dimensional nature, 20 items for each dimension, which has been used in several countries as a very consistent behavioral measure (Formiga et al., 2015) of both antisocial (A) and criminal (D) deviation in childhood and adolescence. It was translated into Portuguese and minimal adaptations were made using the committee approach (Harkness & Schoua-Glusberg, 1998). The translation and adaptor commission, created ad hoc, was made up of bilingual experts in different areas of specialization (psychology and pedagogy), and was responsible for preparing and discussing translation to ensure an appropriate treatment of psychological, linguistic, and cross-cultural aspects (Hernández et al., 2020; Van de Vijver & Tanzer, 2004).

To complete the application of the questionnaire, the subject must read the sentences and inform if he has performed the behaviors that describe the sentences. It uses a “yes” or “no” answer format. Antisocial behavior (A) refers to actions of rudeness or incivility that sometimes border on what is permitted by law, for example, littering, even when there is a trash can nearby, ringing a doorbell and running away. Criminal behavior (D) is often outlawed, being a violation of the law or conduct that is unacceptable, harmful to someone or to society, for example, stealing objects from cars; get money by threatening weaker people, etc.

Regarding the psychometric properties of the original instrument, the reliability coefficients were satisfactory on both subscales ($\alpha = .86$). The criterial validity of the questionnaire was based on significantly higher scores obtained by 95 adolescents with behavioral problems (experimental group) in contrast to 99 adolescents without behavioral problems (control group). The

results of the analysis of variance showed statistically significant differences ($p < .01$) in the scores of the antisocial behaviors subscale between the experimental group ($M = 13.28$; $DT = 5.79$) and the control group ($M = 11.41$; $SD = 4.70$), and in the scores of the subscale of criminal behaviors among the experimental group ($M = 11.20$; $DT = 6.70$) and the control group ($M = 1.52$; $DT = 2.90$), which was taken as an index of the discriminative capacity of the instrument (Seisdedos, 2000). In this study, the reliability coefficients for the scales of antisocial behavior ($\alpha = .85$) and criminal behavior ($\alpha = .90$) are considered satisfactory.

Procedure

A convenience sample selection criterion was used, although there was more difficulty in accessing students from private schools. The A-D questionnaire was administered collectively online, through the Google Forms app, in the months of July and August 2021, with a variable duration between 10 and 15 minutes approximately, to obtain a significant sample of the students belonging to these schools. To this end, different educational agents collaborated thanks to its academic link with school institutions. Variables of a sociodemographic nature were also collected (gender, age, if it is a public or private school, the state in which the school is located: Acre, Maranhão, Piauí, Rio Grande do Norte). The participation of the students was voluntary, and their data were protected at all times, in the strictest confidentiality, following the Helsinki Declaration of Research with human beings and the interuniversity ethical protocol created and approved expressly for this study.

Data analysis

Exploratory and inferential analysis of the data was performed. First, the existence of missing data or outliers was verified, as well as the internal consistency of the A-D Questionnaire. Subsequently, the association between the variables collected in each dimension and the sociodemographic variables was calculated from tables of frequencies and percentages, applying the *Chi-square* hypothesis contrast. Given the non-normality of the data, the overall scores are analyzed with the non-parametric *Mann-Whitney and Kruskal-Wallis U* tests. Direct scores were also transformed into percentiles. The analyses were performed using the SPSS statistical package for Windows (version 27).

Results

The results of the sample ($N = 396$) reveal, as a whole, when transforming the direct scores into percentiles, low global self-reports in the case of antisocial behaviors (A) and medium in terms of criminal behaviors (D) of the participating adolescents of both sexes.

Table 1 presents the comparisons according to sex. Based on the non-parametric *Mann-Whitney U* test, no statistically significant differences have been found in the mean values of the total questionnaire (A-D) or in its scales (A, D) according to the sex of the students ($p > .05$).

On the other hand, there are statistically significant differences in specific actions assigned to both the antisocial scale (four

behaviors) and the criminal scale (three behaviors), with a higher percentage of actions performed by men (Table 2). Regarding antisocial behaviors, more men than women indicated being late ($p = .006$), rioting ($p = .041$), entering a forbidden place ($p = .020$) or playing sick pranks ($p = .006$). In terms of criminal behavior, a higher percentage of males admitted to gambling ($p = .006$), theft/stealing ($p = .025$) or running from a police officer ($p = .046$).

Table 3 shows the descriptive statistics corresponding to the sample of adolescents according to age.

Table 1.

Comparisons According to Sex in Total Questionnaire (A-D), Antisocial Behavior (A), and Criminal Behavior (D).

	Men (N = 143)		Women (N = 253)		U de Mann-Whitney	p
	Median	SD	Median	SD		
Antisocial Behavior (A)	2.13	3.17	1.55	2.22		.115
Criminal Behavior (D)	.68	1.92	0.42	1.44		.112
Total Questionnaire (A-D)	2.83	4.78	1.98	3.29		.105

Table 2.

Statistically Significant Differences in the Percentages by Sex in Determined Antisocial and Criminal Behavior.

Antisocial (A) or Criminal (D) Behavior	Percentages by Sex		p
	Male	Female	
(A) Cause a scene or whistle in a meeting, public place or work.	7.4	2.7	.041
(A) Enter a forbidden place (private yard, vacant house).	8.2	3	.020
(A) Play sick pranks on people, like pushing them into a puddle or pull their chair out from under them as they sit down.	7.5	1.9	.006
(A) Arrive late on purpose (home, to work, to another obligation).	13.2	5.3	.006
(D) Struggle or fight to get away from a police officer.	2	0	.046
(D) Steal things from a public place (work/school).	3.4	.4	.025
(D) Frequently gamble more money than one can afford.	9.5	3	.006

Table 3.

Descriptors by Age on Total Questionnaire (A-D), Antisocial Behavior (A), and Criminal Behavior (D).

	Age	N	Median	S.D.
Antisocial and Criminal Behavior Questionnaire (A-D)	12-13	31	.90	1.68
	14-15	143	1.39	1.94
	16-17	170	2.38	3.16
	18-19	52	2.96	3.95
	Total	396	1.98	2.87
Antisocial Behavior (A)	12-13	31	.68	1.35
	14-15	143	1.16	1.63
	16-17	170	1.95	2.45
	18-19	52	2.33	3.04
	Total	396	1.62	2.26
Criminal Behavior (D)	12-13	31	.23	.62
	14-15	143	.21	.74
	16-17	170	.41	.91
	18-19	52	.62	1.07
	Total	396	.35	.86

To compare the four age groups, the *non-parametric Kruskal-Wallis* test was used (Table 4). The mean values in the total questionnaire (A-D), in antisocial behavior (A) and in criminal behavior (D) are significantly higher the older the adolescents in the sample are (respective significance value: $p < .001$, $p < .001$ and $p = .001$). By contrasting homogeneous subsets, it was found that the statistically significant differences in the total questionnaire (A-D) ($p < .001$), in antisocial behavior (A) ($p < .001$) and in criminal behavior (D) ($p = .001$) are seen between two age ranges: 12 to 15 and 16 to 19.

Table 5 presents the statistically significant differences in specific actions corresponding to both the antisocial scale (five behaviors) and the criminal scale (three behaviors). Regarding antisocial behaviors, more students between the ages of 16 and 19 reported saying bad words ($p = .002$), cheating ($p = .001$), leaving without permission ($p = .042$), being late ($p = .022$) or playing sick pranks ($p = .010$). As for criminal behavior, more students in this age group (16-19 years) admitted to eating when prohibited ($p = .001$), taking someone's car or motorcycle for a joyride ($p = .005$) or doing drugs ($p = .005$).

Table 4.
Comparatives According to Age on Total Questionnaire (A-D), Antisocial Behavior (A), and Criminal Behavior (D).

	Comparative by Age Group	<i>Kruskal-Wallis p</i>
Antisocial and Criminal Behavior Questionnaire (A-D)	12-13 y 14-15	.105
	16-17 y 18-19	.525
	12-15 y 16-19	<.000
Antisocial Behavior (A)	12-13 y 14-15	.055
	16-17 y 18-19	.857
	12-15 y 16-19	<.000
Criminal Behavior (D)	12-13 y 14-15	.963
	16-17 y 18-19	.055
	12-15 y 16-19	.001

Table 5.
Statistically Significant Differences in Percentages by Age in Certain Antisocial and Criminal Behaviors.

Antisocial (A) or Criminal (D) Behavior	Percentages by Age				<i>p</i>
	12-13	14-15	16-17	18-19	
(A) Go out without permission (from work, home, or school).	.0	2.8	9.0	9.6	.042
(A) Swear or use abusive language.	9.7	22.7	35.8	39.2	.002
(A) Cheat (on the exam, an important competition, information about results).	3.2	3.5	8.9	21.2	.001
(A) Play sick pranks, such as pushing them into the mud or pulling their seat out from under them as they sit down.	.0	.7	3.6	9.6	.010
(A) Arrive late on purpose (home, to work, etc.).	3.2	6.5	5.4	17.3	.022
(D) Eat when it is forbidden, such as at work, in the classroom, in the movie theater, etc.	12.9	18.7	36.4	23.1	.001
(D) Take someone's car or motorcycle for a joyride.	9.7	4.3	12.5	21.2	.005
(D) Take drugs.	.0	1.4	3.6	11.5	.005

Discussion

Unlike other studies (Dias et al., 2014; Dos Santos et al., 2019; Mobarake, 2015; Molero et al., 2016), in which it is indicated that during adolescence boys tend to exhibit a more transgressive behavior than girls, in our research these results have not been confirmed when considered globally, but when we take into account different behaviors contemplated in the two scales of the questionnaire used: rioting, entering a forbidden place, playing sick pranks, being late, struggling or fighting to escape a policeman, gambling, and stealing. Based on the results obtained, the first hypothesis was partially accepted. There are significant differences in antisocial and criminal behaviors according to the sex of adolescents.

In this regard, more attention may need to be paid to gender-based socialization. In the case of males, for example, traditional patterns of socialization, still in place at present, include the restriction of emotional expression, harshness, dominance, etc., characteristics that may favor antisociality and violence in adolescence and adulthood. Biglan et al. (2019) indicate that such an anachronistic socialization, although it may have been adaptive in our evolutionary history, especially in adverse and stressful times and environments, may no longer be valuable in many modern social contexts and is dysfunctional, as it may raise the risk of males experiencing certain developmental difficulties, doing drugs and drinking alcohol, as well as demonstrating antisocial and criminal behavior.

We must generate socialization proposals that, regardless of gender, minimize the risks of mismatch and enhance adaptation. Socialization is conditioned by cultural, social, economic, and historical factors and occurs thanks to family, school, social styles, models etc., complex in broad structural contexts. The more or less systemic (interrelation of actors and scenarios) and systematic (grounded, orderly) commitment of pedagogy with coexistence gives us an excellent opportunity to promote attitudinal change (Pineda-Alfonso, 2017) and cultivate prosociality throughout the educational process according to the different stages. Prosocial behavior, at the antipodes of antisociality, admits many concretions, but, in general, encompasses any behavior that benefits others or has positive social consequences, for example, help, collaboration and altruism. It is pedagogically recommended because it contributes to the establishment of alliances and to the creation of safe, empathetic, moral, welcoming, and inclusive environments. The human being harbors the potential for prosociality and for antisociality (Gilbert & Basran, 2019). Therefore, one of the most relevant contributions of pedagogy to the cause of coexistence and to the prevention of antisociality may be the establishment of consistent guidelines and strategies that stimulate prosociality in all kinds of areas.

Adolescents of both sexes who engage in antisocial and criminal behaviors are less attached to conventional socialization contexts, such as family and school, which decreases behavioral supervision by adults, and relates more to people, for example, peers, who engage in deviant, violent or abusive behaviors (Moreira & Mirón, 2013). These behavioral imbalances may also occur when adolescents live in or are attached to risk contexts, such as a dangerous or conflictive neighborhood, or when parents lack information about their children's activities (Trentacosta et al., 2009).

Family and friends may not only influence the antisocial behavior of adolescents directly, but also indirectly through their effect on certain personality traits such as impulsivity and lack of empathy, which increase the likelihood of antisocial behaviors (Álvarez-García et al., 2019). These same authors affirm, on one hand, that parental affection, behavioral control and communication with children have a protective, albeit moderate, effect on the antisociality of adolescents, and, on the other hand, that antisocial friendships are a risk factor for antisocial behavior in adolescence.

Decades of psychosocial and criminological research suggest that schoolchildren involved in antisocial behaviors, including bullying and cyberbullying, are at risk of engaging in other actions of the same type throughout their lives (Nasaescu et al., 2020). Therefore, from an ecosystem and transactional perspective, in the preventive program of antisociality, together with the family, the neighborhood and friendships, we must keep in mind the school, essential in the construction of coexistence (Soriano, 2009). The UNESCO International Institute for Capacity Building in Africa (2017), for example, states that safe schools, with positive climates, contribute to the physical, social, emotional, and cognitive development of students, as well as to the health and well-being of teachers and staff.

Regarding age, an increase in self-reported antisocial and criminal behaviors was seen the older the students in the sample are. There are statistically significant differences between the group of students aged 12 to 15 and the group of 16 to 19. From these results, the second hypothesis was confirmed. Antisocial and criminal behaviors increase significantly as the age of adolescents increases.

Our research confirms the results of other studies (Gaeta & Galvanovskis, 2011; Garaigordobil & Maganto, 2016; Otto et al., 2021), which reveal that antisocial behavior increases with age, perhaps because adolescence is more influenceable than childhood, both positively (prosociality) and negatively (antisociality) (Ahmed et al., 2020). On the other hand, although there is some continuity in behaviors, with age the search for sensations and personal experience expands and, during adolescence, there may be more exposure to risky actions related to sex, drugs, crime, etc. As children become adolescents, even the same behavior may move from an acceptable indicator of deviation to actions that break the law and lead to serious consequences (Duarte et al., 2020).

Based on our findings, the need for anti-social prevention and intervention programs that take into account the age and uniqueness of schoolchildren is underlined. Students who exhibit transgressive behaviors have a wide range of resources, skills, and potential that are often not recognized (Ortega-Campos et al., 2020; Sandoval & López, 2017). It is also important to differentiate, as Silveira et al. (2015) discuss, whether these are transient or persistent antisocial behaviors. These interventions should begin in childhood, particularly in high-risk children, as it is known that they may develop a chronic and severe pattern of antisocial behavior (Okado & Bierman, 2015), and, in addition, they must be carried out in different contexts and with different professionals, without ignoring the participation of parents and teachers (Shaw & Gilliam, 2017). In the entire positive educational and disciplinary process, with preventive virtuality of antisociality and crime, the involvement of parents and society as a whole plays a transcendental role (Joseph, 2013), although unfortunately some schools remain isolated.

In general, progress must be made in the construction of humanized schools, built on rationality, the social dimension, equity, affectivity and ethics, in which the participation of families and the community must play a fundamental role (Martínez-Otero, 2021).

From a psychosocial evolutionary perspective that favors “positive development” (Senna & Dessen, 2012), along with early interventions, there must be others specifically aimed at adolescence, especially of a preventive nature, but also adapted to the specific needs of students, already heterogeneous, who show antisocial behaviors. Both at the individual level (social skills, approach to impulsivity, empathy ...) and social (relationships with peers / friends, hobbies ...) and institutional (family-school-neighborhood communication, guidance, inclusion ...) it is about identifying and neutralizing risk factors and enhancing protection factors (Villanueva et al., 2019), since schools may not waive the personalized prevention of antisociality in any of its modalities or the clear pedagogical commitment to coexistence.

Regarding the limitations of the study, it should be noted, first of all, that the sample size makes it difficult to generalize the results to the entire population of Brazilian adolescents. Therefore, further studies are needed from larger, more representative samples. Another limitation refers to obtaining data through self-report, which implies possible biases in the responses associated with social desirability (Valle & Zamora, 2022). In any case, the analysis of the results has contributed to clarifying the behavioral panorama of Brazilian adolescents, specifically about antisocial and criminal actions, with a view to their educational prevention.

Acknowledgements

We thank Dr. Marlúcia Menezes de Paiva (UFRN) for having facilitated access to the samples of students and Dr. Pedro L. Cuesta Álvaro (UCM) for his help in the statistical treatment of the data.

References

- Ahmed, S., Foulkes, L., Leung, J. T., Griffin, C., Sakhardande, A., Bennett, M., Dunning, D. L., Griffiths, K., Parker, J., Kuyken, W., Williams, J. M. G., Dalgleish, T., & Blakemore, S. J. (2020). Susceptibility to Prosocial and Antisocial Influence in Adolescence. *Journal of Adolescence, 84*, 56-68. <https://doi.org/10.1016/j.adolescence.2020.07.012>
- Álvarez-García, D., González-Castro, P., Núñez, J. C., Rodríguez, C., & Cerezo, R. (2019). Impact of Family and Friends on Antisocial Adolescent Behavior: The Mediating Role of Impulsivity and Empathy. *Frontiers in Psychology, 10*, Article 2071. <https://doi.org/10.3389/fpsyg.2019.02071>
- American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorders* (4th Ed.). <https://doi.org/10.1176/appi.books.9780890423349>
- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th Ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- Andrews, D. A., & Bonta, J. (2010). *The Psychology of Criminal Conduct* (5th Ed.). LexisNexis.
- Anton, M. E., Baskin-Sommers, A. R., Vitale, J. E., Curtin, J. J., & Newman, J. P. (2012). Differential Effects of Psychopathy and Antisocial Personality Disorder Symptoms on Cognitive and Fear Processing in

- Female Offenders. *Cognitive, Affective & Behavioral Neuroscience*, 12(4), 761-776. <https://doi.org/10.3758/s13415-012-0114-x>
- Beelmann, A., & Lösel, F. A. (2021). Comprehensive Meta-Analysis of Randomized Evaluations of the Effect of Child Social Skills Training on Antisocial Development. *Journal of Developmental and Life-Course Criminology*, 7, 41-65. <https://doi.org/10.1007/s40865-020-00142-8>
- Biglan, A., Van Ryzin, M. J., Moore, K. J., Mauricci, M., & Mannan, I. (2019). The Socialization of Boys and Men in the Modern Era: An Evolutionary Mismatch. *Development and Psychopathology*, 31(5), 1789-1799. <https://doi.org/10.1017/S0954579419001366>
- Black, D. W. (2015). The Natural History of Antisocial Personality Disorder. *Canadian Journal of Psychiatry*, 60(7), 309-314. <https://doi.org/10.1177/070674371506000703>
- Câmara dos Deputados (2010). Estatuto da Criança e do Adolescente. Lei no 8.069, de 13 de Julho de 1990, e Legislação Correlata [Child and Adolescent Statute. Law No. 8069, of July 13, 1990, and Related Legislation]. <https://crianca.mppr.mp.br>
- Carlisi, C. O., Moffitt, T. E., Knodt, A. R., Harrington, H., Ireland, D., Melzer, T.R., Poulton, R., Ramrakha, S., Caspi, A., Hariri, A. R., & Viding, E. (2020). Associations Between Life-Course-Persistent Antisocial Behaviour and Brain Structure in a Population-Representative Longitudinal Birth Cohort. *The Lancet Psychiatry*, 7(3), 245-253. <https://doi.org/10.1017/S0954579421000377>
- CEDECA (2020). Estatuto da Criança e do Adolescente. Versão Atualizada 2020 [Child and Adolescent Statute. Updated Version 2020]. <https://www.gov.br>
- Cutrin, O., Gómez-Fraguela, J. A., & Sobral, J. (2017). Gender Differences in the Influence of Parenting on Youth Antisocial Behavior Through Deviant Peers. *The Spanish Journal of Psychology* 20, Article e58. <https://doi.org/10.1017/sjp.2017.53>
- Dias, C., Ramacciotti, N., & Aznar-Farias, M. (2014). Comportamentos Antissociais e Delitivos em Adolescentes [Antisocial and Delinquent Behaviors in Adolescents]. *Aletheia*, 45, 101-113. https://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1413-03942014000200008&lng=pt&tlng=pt
- Dos Santos, W., Holanda, L., Meneses, G., Luengo, M. A., & Gómez-Fraguela, J. A. (2019). Antisocial Behaviour: A Unidimensional or Multidimensional Construct? *Avances en Psicología Latinoamericana*, 37(1), 13-27. <https://doi.org/10.12804/revistas.urosario.edu.co/apl/a.5105>
- Duarte, C. S., Klotz, J., Elkington, K., Shrout, P. E., Canino, G., Eisenberg, R., Ortin, A., Henriquez-Castillo, M., Corbeil, T., & Bird, H. (2020). Severity and Frequency of Antisocial Behaviors: Late Adolescence/Young Adulthood Antisocial Behavior Index. *Journal of Child and Family Studies*, 29(4), 1200-1211. <https://doi.org/10.1007/s10826-019-01661-9>
- Eme, R. (2020). Life Course Persistent Antisocial Behavior Silver Anniversary. *Aggression and Violent Behavior*, 50, 101344. <https://doi.org/10.1016/j.avb.2019.101344>
- Ettekal, I., & Ladd, G. W. (2015). Developmental Pathways From Childhood Aggression-Disruptiveness, Chronic Peer Rejection, and Deviant Friendships to Early-Adolescent Rule Breaking. *Child Development*, 86(2), 614-631. <https://doi.org/10.1111/cdev.12321>
- Fernández-Artamendi, S., Martínez-Loredo, V., & López-Núñez, C. (2021). Sex Differences in Comorbidity Between Substance Use and Mental Health in Adolescents: Two Sides of the Same Coin. *Psicothema*, 33(1), 36-43. <https://doi.org/10.7334/psicothema2020.297>
- Fisher, K.A., & Hany, M. (2022). *Antisocial Personality Disorder*. StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK546673/>
- Formiga, N., Duarte, V., Neves, S., Machado, M., & Machado, F. (2015). Scale of Antisocial and Criminal Conducts: Factorial Structure of the Portuguese Version [Measurement instrument]. *Psicologia: Reflexão e Crítica*, 28, 668-681. <https://doi.org/10.1590/1678-7153.201528409>
- Gaeta, M. L., & Galvanovskis, A. (2011). Propensión a Conductas Antisociales y Delictivas en Adolescentes Mexicanos [Proneness to Antisocial and Delinquent Behavior in Mexican Adolescents]. *Psicología Iberoamericana*, 19(2), 47-54.
- Gámiz-Ruiz, J., Ibáñez-Ortiz, G., Rodríguez-Aznar, P., & Espigares-Escudero, M. J. (2014). La Prevención de la Conducta Antisocial del Adolescente en su Contexto: Programa de Intervención Socieducativa con Menores Infractores de 12 a 14 Años [Prevention of Anti-Social Behavior of Adolescent in its Context: Social-Educative Intervention Program with Juvenile Offenders From 12 to 14 Years]. *Cuadernos de Psiquiatría y Psicoterapia del Niño y del Adolescente*, 57, 95-99.
- Garaigordobil, M., & Maganto, C. (2016). Conducta Antisocial en Adolescentes y Jóvenes: Prevalencia en el País Vasco y Diferencias en Función de Variables Sociodemográficas [Anti-Social Behavior in Adolescents and Young Adults: Prevalence in the Basque Country and Differences as a Function of Socio-Demographic Variables]. *Acción Psicológica*, 13(2), 57-68. <https://doi.org/10.5944/ap.13.2.17826>
- Garrido, V. (2008). Psicopatía, Otros Trastornos de Personalidad, Abuso de Sustancias y Violencia [Psychopathy, Personality Disorders, Substance Abuse and Violence]. *Archivos de Criminología, Criminalística y Seguridad Privada*, 1, 1-13.
- Gaybulloyevna, S. M., & Farkhodovna, K. M. (2021). Causes, Forms and Corrective Actions of Deviant Behavior among School Children. *International Journal of Culture and Modernity*, 11, 43-46.
- Gilbert, P., & Basran, J. (2019). The Evolution of Prosocial and Antisocial Competitive Behavior and the Emergence of Prosocial and Antisocial Leadership Styles. *Frontiers in Psychology*, 10, Article 610. <https://doi.org/10.3389/fpsyg.2019.00610>
- Gomis-Pomares, A., & Villanueva, L. (2020). The Effect of Adverse Childhood Experiences on Deviant and Altruistic Behavior During Emerging Adulthood. *Psicothema*, 32(1), 33-39. <https://doi.org/10.7334/psicothema2019.142>
- González-Martínez, M. T. (2012). *Antisocial Behaviors in Childhood and Adolescence Questionnaire* [Measurement instrument]. <https://www.psicoeu.org/casia-cuestionario/?v=55f82ff37b55>
- Harkness, J., & Schoua-Glusberg, A. (1998). Questionnaires in Translation. In J. Harkness (Ed.), *Cross-cultural Survey Equivalence* (pp. 87-126). ZUMA. <https://d-nb.info/1190994178/34>
- Hernández, A., Hidalgo, M. D., Hambleton, R. K., & Gómez-Benito, J. (2020). International Test Commission Guidelines for Test Adaptation: A criterion Checklist. *Psicothema*, 32(3), 390-398. <https://doi.org/10.7334/psicothema2019.306>
- Instituto Internacional de la UNESCO para el Fortalecimiento de Capacidades en África (2017). *School Safety Manual: Tools for Teachers*. UNESCO-IICBA. <https://unesdoc.unesco.org>
- Joseph, P. (2013). The Role of Parents in the Dynamics of School Discipline. *International Journal of Independent Research and Studies*, 2(1), 45-50.
- Krahé, B. (2020). The Development of Aggressive Behavior in Childhood and Adolescence: A Social Interactionist Perspective. In J. P. Forgas, W. D. Crano, & K. Fiedler (Eds.), *Applications of Social Psychology: How Social Psychology Can Contribute to the Solution of Real-World*

- Problems* (pp. 124–141). Routledge/Taylor & Francis Group.
<https://doi.org/10.4324/9780367816407-7>
- Lösel, F. (2012). Entwicklungsbezogene Prävention von Gewalt und Kriminalität: Ansätze und Wirkungen [Developmental Prevention of Violence and Crime: Approaches and Effects]. *Forensische Psychiatrie, Psychologie und Kriminologie*, 6, 71-84.
<https://doi.org/10.1007/s11757-012-0159-2>
- Martin, S., Zabala, C., Del-Monte, J., Graziani, P., Aizpurua, E., Barry, T. J., & Ricarte, J. (2019). Examining the Relationships Between Impulsivity, Aggression, and Recidivism for Prisoners with Antisocial Personality Disorder. *Aggression and Violent Behavior*, 49, Article 101314.
<https://doi.org/10.1016/j.avb.2019.07.009>
- Martínez-Otero, V. (2021). Coexistence in School: A Proposal for Preventing Violence. In J. Martín Ramírez & B. Bauzá-Abril (Eds.), *Security in the Global Commons and Beyond, Advanced Sciences and Technologies for Security Applications* (pp. 207-220). Springer.
https://doi.org/10.1007/978-3-030-67973-6_15
- McEachern, A. D., & Snyder, J. (2012). Gender Differences in Predicting Antisocial Behaviors: Developmental Consequences of Physical and Relational Aggression. *Journal of Abnormal Child Psychology*, 40(4), 501-512. <https://doi.org/10.1007/s10802-011-9589-0>
- Mobarake, R. K. (2015). Age and Gender Difference in Antisocial Behavior Among Adolescents' School Students. *Mediterranean Journal of Social Sciences*, 6(4), 194. <https://doi.org/10.5901/mjss.2015.v6n4s2p194>
- Moffitt, T. E., Caspi, A., Harrington, H., & Milne, B. J. (2002). Males on the Life-Course-Persistent and Adolescence-Limited Antisocial Pathways: Follow-Up at Age 26 Years. *Development and Psychopathology*, 14(1), 179-207. <https://doi.org/10.1017/S0954579402001104>
- Moffitt, T. E. (1993). Adolescence-Limited and Life-Course-Persistent Antisocial Behavior: A Developmental Taxonomy. *Psychological Review*, 100(4), 674-701. <https://doi.org/10.1037/0033-295X.100.4.674>
- Molero, M. M., Pérez-Fuentes, M. C., & Gázquez, J. J. (2016). Conductas Agresivas, Antisociales y Delictivas en Función del Género y el Rendimiento Académico [Aggressive, Antisocial and Delinquent Behaviors as a Function of Gender and School Performance]. *Revista de Psicología y Educación*, 11(2), 25-42.
<https://www.revistadepsicologiayeducacion.es/pdf/138.pdf>
- Molinuevo, B. (2014). Trastorno Disocial y DSM-5: Cambios y Nuevos Retos [Conduct Disorder and DSM-5: Changes and New Challenges]. Cuadernos de Medicina Psicosomática y Psiquiatría de Enlace. *Revista Iberoamericana de Psicología*, 110, 53-57.
- Moreira, V., & Mirón, L. (2013). The Role of Gender Identity in Adolescents' Antisocial Behavior. *Psicothema*, 25(4), 507-513.
<https://doi.org/10.7334/psicothema2013.8>
- Murteira, A., & Vale-Dias, M. L. (2016). Antisocial Behaviour in Adolescence: Understanding Risk Factors and Mediators Through a Structural Equations Model. *International Journal of Developmental and Educational Psychology*. INFAD Revista de Psicología, 2, 381-392.
<https://dx.doi.org/10.17060/ijodaep.2016.n2.v1.245>
- Nasaescu, E., Zych, I., Ortega-Ruiz, R., Farrington, D. P., & Llorent, V. J. (2020). Longitudinal Patterns of Antisocial Behaviors in Early Adolescence: A Latent Class and Latent Transition Analysis. *The European Journal of Psychology Applied to Legal Context*, 12(2), 85-92. <https://doi.org/10.5093/ejpalc2020a10>
- Okado, Y., & Bierman, K.L. (2015). Differential Risk for Late Adolescent Conduct Problems and Mood Dysregulation Among Children with Early Externalizing Behavior Problems. *Journal of Abnormal Child Psychology*, 43, 735-747.
<https://doi.org/10.1007/s10802-014-9931-4>
- Ortega-Campos, E., García-García, J., De la Fuente-Sánchez, L., & Saldívar-Basurto, F. (2020). Predicting Risk of Recidivism in Spanish Young offenders: Comparative Analysis of the SAVRY and YLS/CMI. *Psicothema*, 32(2), 221-228.
<https://dx.doi.org/10.7334/psicothema2019.275>
- Ortiz, M. J., Etxebarria, I., Apodaca, P., Conejero, S., & Pascual, A. (2018). Moral Emotions Associated with Prosocial and Antisocial Behavior in School-Aged Children. *Psicothema*, 30(1), 82-88.
<https://www.psicothema.com/pdf/4454.pdf>
- Otto, C., Kaman, A., Erhart, M., Barkmann, C., Klasen, F., Schlack, R., & Ravens-Sieberer, U. (2021). Risk and Resource Factors of Antisocial Behaviour in Children and Adolescents: Results of the Longitudinal BELLA Study. *Child and Adolescent Psychiatry and Mental Health*, 15, Article 61. <https://doi.org/10.1186/s13034-021-00412-3>
- Peña, M. E., & Graña, J. L. (2006). Agresión y Conducta Antisocial en la Adolescencia: Una Integración Conceptual [Aggression and Antisocial Behavior in Adolescence: A Conceptual Integration]. *Psicopatología Clínica, Legal y Forense*, 6, 9-23.
<https://masterforense.com/pdf/2006/2006art1.pdf>
- Pérez-Gramaje, A. F., García, O. F., Reyes, M., Serra, E., & García, F. (2020). Parenting Styles and Aggressive Adolescents: Relationships with Self-Esteem and Personal Maladjustment. *The European Journal of Psychology Applied to Legal Context*, 12(1), 1-10.
<https://doi.org/10.5093/ejpalc2020a1>
- Pineda-Alfonso, J. A. (2017). La Competencia Social y el Cambio Actitudinal en el Aula de Secundaria [Social Competence and Attitudinal Change in the Secondary Classroom]. *Profesorado, Revista de Currículum y Formación del Profesorado*, 21(2), 355-375.
<https://doi.org/10.30827/profesorado.v21i2.10339>
- Piotrowska, P., Stride, C., Croft, S., & Rowe, R. (2015). Socioeconomic Status and Antisocial Behaviour Among Children and Adolescents: A Systematic Review and Meta-Analysis. *Clinical Psychology Review*, 35, 47-55. <https://doi.org/10.1016/j.cpr.2014.11.003>
- Pusch, N., & Holtfreter, K. (2018). Gender and Risk Assessment in Juvenile Offenders: A Meta-Analysis. *Criminal Justice and Behavior*, 45(1), 56-81. <https://doi.org/10.1177/0093854817721720>
- Sandler, I., Wolchik, S. A., Cruden, G., Mahrer, N. E., Ahn, S., Brincks, A., & Brown, C. H. (2014). Overview of Meta-Analyses of the Prevention of Mental Health, Substance Use, and Conduct Problems. *Annual Review of Clinical Psychology*, 10, 243-273.
<https://doi.org/10.1146/annurev-clinpsy-050212-185524>
- Sandoval Obando, E., & López de Maturana, S. (2017). Desafíos Educativos En Torno a las Experiencias de Aprendizaje Mediado con Adolescentes Infractores de Ley [Educational Challenges Around Mediated Learning experiences with Law Offender Adolescents]. *Profesorado, Revista de Currículum y Formación del Profesorado*, 21(2), 377-391.
<https://doi.org/10.30827/profesorado.v21i2.10340>
- Seisdedos, N. (2000). *Cuestionario de Conductas Antisociales-Delictivas (A-D)* [Instrumento de Medición] [Antisocial and Criminal Behavior Questionnaire (A-D) Measurement Instrument]. TEA Ediciones.
- Senna, S. R. C. M., & Dessen, M. A. (2012). Contribuições das Teorias do Desenvolvimento Humano Para a Concepção Contemporânea da Adolescência [Contributions of Human Development Theories to the Contemporary Conception of Adolescence]. *Psicologia: Teoria & Pesquisa*, 28(1), 101-108.
<https://doi.org/10.1590/S0102-37722012000100013>
- Silveira, K. S., da S., Zappe, J. G., & Dias, A. C. G. (2015). Correlatos dos Comportamentos Antissociais Limitados a Adolescência e dos Comportamentos Antissociais Persistentes [Correlates of Antisocial

- Behaviors Limited to Adolescence and Persistent Antisocial Behaviors]. *Psicología em Estudo*, 20(3), 425-436. <https://doi.org/10.4025/psicoestud.v20i3.28100>
- Shaw, D. S., & Gilliam, M. (2017). Early Childhood Predictors of Low-Income Boys' Pathways to Antisocial Behavior in Childhood, Adolescence, and Early Adulthood. *Infant Mental Health Journal*, 38(1), 68-82. <https://doi.org/10.1002/imhj.21614>
- Soriano, A. (2009). Violencia y Conflicto. La Escuela Como Espacio de Paz [Violence and Conflict. The School Like Space of Peace]. *Profesorado, Revista de Currículum y Formación del Profesorado*, 13(1), 321-334. <https://hdl.handle.net/10481/14976>
- Tharshini, N. K., Ibrahim, F., Kamaluddin, M. R., Rathakrishnan, B., & Che Mohd Nasir, N. (2021). The Link Between Individual Personality Traits and Criminality: A Systematic Review. *International Journal of Environmental Research and Public Health*, 18(16), Article 8663. <https://doi.org/10.3390/ijerph18168663>
- Trentacosta, C. J., Hyde, L. W., Shaw, D. S., & Cheong, J. (2009). Adolescent Dispositions for Antisocial Behavior in Context: The Roles of Neighborhood Dangerousness and Parental Knowledge. *Journal of Abnormal Psychology*, 118(3), 564-575. <https://doi.org/10.1037/a0016394>
- Valle, M. V., & Zamora, E. V. (2022). El Uso de las Medidas de Auto-Informe: Ventajas y Limitaciones en la Investigación en Psicología [The Use of Self-Report Measures: Advantages and Limitations in Research in Psychology]. *Alternativas en Psicología*, 47, 22-35.
- Van de Vijver, F., & Tanzer, N. (2004). Bias and Equivalence in Cross-Cultural Assessment: An Overview. *European Review of Applied Psychology*, 54(2), 119-135. <https://doi.org/10.1016/j.erap.2003.12.004>
- Villanueva, L., Valero-Moreno, S., Cuervo, K., & Prado-Gascó, V. J. (2019). Sociodemographic Variables, Risk Factors, and Protective Factors Contributing to Youth Recidivism. *Psicothema*, 31(2), 128-133. <https://doi.org/10.7334/psicothema2018.257>
- Werner, K. B., Few, L. R., & Bucholz, K. K. (2015). Epidemiology, Comorbidity, and Behavioral Genetics of Antisocial Personality Disorder and Psychopathy. *Psychiatric Annals*, 45(4), 195-199. <https://doi.org/10.3928/00485713-20150401-08>