

Construction and Validation of the Anxiety Assessment Scale for Adolescents

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Abstract

This study describes the construction and validation process of the Anxiety Scale for Adolescents (content and construct). The sample was composed of 1,054 students. The age range varied from 11 to 17 years old (mean age = 14.3; Standard Deviation = 1.70). The students were selected in 17 public and private schools located in the metropolitan region of Porto Alegre, and answered a self-report instrument. Factor analysis indicated the extraction of two factors, the first consisted of direct indicators of anxiety and the second grouped indicators regarding the ability to control anxiety. Analyses showed that the test presents adequate levels of internal consistency and evidence of validity. The scale has positive evidence of validity based in its internal structure, with the advantage of not keeping its focus only in vegetative symptoms, but also in the cognitive processes involved in anxiety. Data are discussed considering gender differences observed in the sample and the relevance of cognitive components in the clinical assessment of anxiety. Further studies are necessary for clinical validation.

Keywords: Anxiety, adolescence, self report.

Evidências de Validação da Escala de Avaliação da Ansiedade em Adolescentes

Resumo

A presente pesquisa descreve a construção e validação da Escala de Ansiedade para Adolescentes (conteúdo e construto). A amostra foi composta por 1054 alunos. A idade variou de 11 a 17 anos (idade média = 14,3 anos; Desvio Padrão=1,70). Os alunos foram selecionados em 17 escolas públicas e particulares da região metropolitana de Porto Alegre, e responderam a este instrumento de autorrelato. Análises fatoriais indicaram a extração de dois fatores, um deles com indicadores diretos de ansiedade e outro aferindo indicadores da capacidade de controlar a ansiedade. Análises mostraram que o teste tem índices adequados de consistência interna e evidências de validade baseadas na estrutura interna.

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A escala apresenta evidências positivas de validade baseadas na estrutura interna, com o diferencial de não manter seu foco apenas em sintomas vegetativos, mas também aos processos cognitivos envolvidos com a ansiedade. Os dados são discutidos considerando-se as diferenças de sexo observadas na amostra e a relevância dos componentes cognitivos na avaliação clínica da ansiedade. Sugere-se outros estudos de validação clínica do instrumento.

Palavras-chave: Ansiedade, adolescência, autorrelato.

Construcción y la Evidencia de la Validación de la Escala de Ansiedad de los Adolescentes

Resumen

Este estudio describe la construcción y validación de la Escala de Ansiedad de la Adolescencia (contenido y constructo). La muestra estuvo conformada por 1.054 estudiantes. La edad varió de 11 a 17 años (edad media = 14.3 años, desviación estándar = 1.70 media). Los estudiantes fueron seleccionados de 17 escuelas públicas y privadas de la región metropolitana de Porto Alegre, y respondieron a este instrumento de auto-reporte. Factor de análisis indicaron la extracción de dos factores, uno con indicadores directos de ansiedad y otros indicadores de medir la capacidad de controlar la ansiedad. Análisis mostraron que la prueba tiene pruebas de consistencia y validez interna adecuada basada en la estructura interna. La escala tiene una prueba positiva de la validez basada en la estructura interna, con la diferencia de no mantener su foco sólo en los síntomas vegetativos, sino también los procesos cognitivos implicados en la ansiedad. Los datos se analizan teniendo en cuenta las diferencias de género observadas en la muestra y la pertinencia de los componentes cognitivos en la evaluación clínica de la ansiedad. Se sugiere otros estudios de validación clínica del instrumento.

Palabras clave: Ansiedad, adolescente, autoinforme.

Anxiety has different types of indicators. The co-occurrence of clinical markers contributes to worsen the anxiety scenario not only due to the functional deficits that they may cause, but above all by the long-term loss in the social and academic environment. Indeed, the negative impact of anxiety on a range of psychosocial variables is consistently demonstrated by studies that link it, in a longitudinal way, to a greater risk of school absenteeism, difficulty in interpersonal relationships, victimization, and the recurring use of psychiatric services for associated complaints (Ameringen, Mancini, & Farvolden, 2003; Rueger, Malecki, & Demaray, 2010; Viana, Teixeira, Beraldi, Bassani, & Andrade, 2009).

Throughout development, however, awareness and expression of anxiety have various features, owing to the progressive acquisition of emotional and cognitive capacities related to basic psychological processes, such as memory, perception, and thought. Thus, although exag-

gerated anxiety is usually perceived by adults and adolescents as something irrational, among children, severe anxiety is often reported as a logical, acritical (ego-syntonic) experience, which is manifested mainly by somatic symptoms (American Psychiatric Association [APA], 2002; Ollendick, King, & Muris, 2002). During childhood, in general, anxious behavior is linked to specific fears (fear of the dark, certain animals, natural phenomena, or separation from parents), moderated by the real need of the child for basic care and protection, and by the egocentric level of the child upon judging the logical aspect of his/her fears. Whereas in adolescence, the increase in the capacity for self-awareness and reflective abstraction, typical of this period, creates a greater incidence of anxiety related to social phobia, as it makes the adolescent more capable of judging its social performance and foreseeing the supposed behavior and other people's approval (Bohman et al., 2010). In this

sense, the somatic reactions are the most common symptoms of anxiety in children and are directly related to specific phobias (Manfro et al., 2003; Manfro, Isolan, Blaya, Santos, & Silva, 2002).

Anxiety disorders more prevalent in childhood include Generalized Anxiety Disorder, Disorder of Separation Anxiety, and specific phobias. In childhood, the anxiety is related to more specific fears, such as animals or parental separation. Children may not recognize or know how to express their fears exaggerated, linked to behavioral and somatic aspects. These characteristics are related to the reduced ability of understanding about their own thoughts and the constancy of objects. Despite there is a clinical picture for each anxiety disorder, about half of children with anxiety disorders may present another comorbid anxiety disorder (Gonçalves & Heldt, 2009). In adolescence, in turn, there is the increase of self-awareness and capacity for abstraction. Anxiety then goes on to be more related to social phobia, whereas the individual begins to anticipate the judgment of other people (Pereira, Barros, & Mendonça, 2012).

It appears to be unquestionable that anxiety is determined by multiple factors, besides neurobiological alterations. Essau, Conradt and Petermann (2002) showed that age, the occurrence of somatization, and prior experience of negative events are important factors for predicting the path of anxiety upheavals. However, it is also possible that these predictors may be associated with the cognitive processes involved by them. It is described in the literature that social support and parental responsiveness act as protective factors for the manifestation of juvenile anxiety. Other studies add that more important than support itself is the perception that the adolescent has concerning the support received (Kindt & Engelhard, 2005; Myers & Thompson, 2000; Rueger et al., 2010). In this sense, the thesis' results that showed the effect of metacognitive aspects on anxiety emphasize the relevance of considering these aspects in the clinical evaluation, especially for preparing treatment directives.

Typical differences in developmental aspects are also observed regarding the mean-

ing attributed to anxiety. In the case of panic, whereas children usually undergo the symptoms of a panic attack as something that is not catastrophic, the cognitive skills of an adolescent generally make him/her feel this experience in an extremely stressful way (Kearney, Albano, Eisen, Allan, & Barlow, 1997). These distinctions related to the phenomenology of anxious symptoms are of special interest to the scientific area because they allow a better understanding of the etiology of pathological anxiety. However, despite the growing effort by scientists to investigate these issues over the last 2 decades, studies still lack accuracy in defining specific features of this construct between children and adolescents (Beesdo, Pine, Lieb, & Wittchen, 2010; Essau et al., 2002; Norton, Asmundson, Cox, & Norton, 2009).

A great part of what is known has come from retrospective studies conducted with clinical samples composed by adults that had already experienced the first indications of anxiety in childhood. These studies are based in a questionable adultmorphic presupposition, also evident in researches that seek to describe the prevalence of anxiety in the juvenile population from instruments originally intended for adults. By requiring the use of metacognitive resources, these instruments prove to be unsuitable as their items are difficult for adolescents to understand and limit the possibility of identifying the standard normative of anxiety among adolescents (Beesdo et al., 2010; Essau et al., 2002; Valentin, Gutierrez, & Blacker, 2002).

Thus, observing that the majority of anxiety disorders tend to start in childhood and in early adolescence, presenting a chronic path (APA, 2002; Viana et al., 2009), it becomes indispensable, in the public health field, the availability of researches that consider in their methodology the adolescence particularities and which manage to establish criteria for determining clinical cut-off points related to dysfunctional anxiety. It is also essential apply a perform cognitive evaluation of the adolescent who exhibits symptoms of anxiety (Foley et al., 2005; Holmes, Grey, & Young, 2005; Kindt & Engelhard, 2005; Tuna, Teckan, & Topuoglu, 2005). Also, the construc-

tion of specific instruments for this purpose presents restricted number in the literature (Batista & Sisto, 2005; Jatobá & Bastos, 2007). One of the few studies in this area includes the development of Adolescent Anxiety Inventory (Batista & Cisto, 2005). However, the range contemplated in the present study is distinguished by its specificity and heterogeneity sample.

It is worth noting, there are few instruments available for that particular age group. The only assessment for adolescents approved by SATEPSI (*Sistema de Avaliação de Testes Psicológicos*) is the Test Lipp - Stress Symptoms Inventory (Tricoli & Lipp, 2006) that, although not specific to anxiety, addresses a construct correlate. This test is based on the theoretical model that evaluates especially neurovegetative symptoms and does not assess cognitive processes. Some other instruments are used in adolescents, but are not suitable for this age group, such as the Beck Anxiety Scale (Beck, Brown, Epstein, & Steer, 1988) and Factorial Scale emotional regulation (EFN; Hutz & Nunes, 2001) that include inappropriate items for teenagers, such as driving.

This data would enable the organization of psychoprophylactic intervention contextualized to reality, as subclinical manifestation of anxiety also occurs among adolescents with typical development (Muris, Rapee, Meesters, Schouten, & Geers, 2003) and does not usually require therapeutic attendance. Within the scope of this panorama, the objective of the present research was to validate a scale for evaluating anxiety in adolescents from 11 to 17 years old. For this purpose, the data concerning the construction and validation of the instrument construct created will be described.

Method

Preparation of the Instrument

The instrument was organized in three parts: (a) instructions for filling out the test, (b) the list of items composing it, and (c) the answer sheet. The answer sheet contains the participant's demographic data and a Likert scale of five points. All the items refer to the adolescent's behavior,

feelings, or beliefs, and were prepared as declaratory sentences referring to the construct covered by the test. It included questions such as: "Often I think people will laugh at me", "To do a test makes me nervous", and "I worry too much about unimportant things".

To prepare the items, the diagnostic directives described in psychiatric manuals for evaluating anxiety upheavals were taken into account (APA, 2002; Kaplan, Sadock, & Grebb, 1997; Organization World Mental, 1993), and empirical studies about psychological health were conducted using Clinical Epidemiology approach or theoretical models based on functionalist principles. The content validity of the instrument was checked in studies of semantic validity, apparent validity, and validity of experts.

In order to ensure semantic validation, the items were prepared based on interviews with professionals specialized in juvenile clinic and in interviews with adolescents. The interviews with specialists aimed to collect auxiliary information about the most usual means whereby the constructs investigated are operationally narrated by the adolescents in the context of professional practice evaluation and/or intervention, even as to facilitate the adolescents' adhesion to the instrument afterwards and increase its apparent validity. The interviews were performed individually by eight professionals in their workplace: a specialist in adolescence, four psychologists, two psychiatrists, and a neurologist, selected because of their professional training and experience. The interview questions presented in a semi-structured form to professionals, were the following: "what are the verb phrases (sentences, slang, etc.) most commonly spoken by teenagers when they talk about anxiety?" Passed by the judges twice, once before the drafting of the items and then another for content validity. Major contributions were made by experts: the sentences content supposedly milder adolescents should be elected as the first items of the scales and to be avoided disparaging words that could elicit the response (e.g. I hate consuming and repetitive tasks).

The interviews with the adolescents also aimed to collect suggestions about the most

suitable and intelligible ways in which the juvenile population expresses, in the form of items, the behavior representing the constructs. In this stage, the interviews were performed with 24 participants, selected by the researcher from a school. Individually, four boys and four girls in each age range (12-13, 14-15, 16-17), whose parents signed the Informed Consent Form about their child's participation in the research, replied, initially, to the following question: "How can people perceive if an adolescent is anxious?"; after this stage of the interview, the researcher explained to the adolescent, in an accessible speech, some definitions about the investigated constructs and requested the participant to refer to or name the behavior, feelings and thoughts which exemplified the definitions.

The answers mentioned "spontaneously" by the adolescents to describe behaviors representing anxiety over somatic symptoms, cognitive symptoms, and emotional symptoms. An evaluation of the descriptions' content shows that the youngest adolescents (group between 12 and 13 years old) tended to describe with greater frequency vegetative reactions (e.g.: shaking, crying) and concrete situations of imminent danger (e.g.: fear of the dark, feeling of having disappointed someone). Whereas the adolescents in the 16-17 years group mentioned with greater frequency situations related to anticipatory anxiety or to cognitive difficulties (e.g.: becoming stressed about things that were no longer problems or that happened a long time ago, being afraid to do something and not succeeding, being afraid to say something wrong and being humiliated).

The primary instrument had 50 items. However, this number has undergone a significant increase as information sources suggested new forms of expression attribute (new behavioral semantic representations and mostly new formulations). No initial item of the scale needed to be deleted, just enhanced. For final analysis of the items, at least two judges must agree on the semantics of the construction item. The Scale, in its final version, included 64 items.

Procedure for Data Collection

Students from 17 schools in the region of Porto Alegre and its outskirts participated in data collection. The latter was executed in the classroom, in groups composed by no more than 40 students. The administration of the instruments included a brief explanation about the purposes of the study, the reading of the instructions jointly, possible additional explanations requested and, then, the filling out of the scale by the participant himself/herself. Beforehand, the Informed Consent Form signed by the adolescent's legally responsible person was requested. The adolescents were informed, before the start of the testing, that their participation was voluntary, their answers would remain anonymous, and that they could interrupt their participation anytime during data collection.

In order to increase the adhesion of the schools to the research proposal, a free course about juvenile development and educational practices was offered by the University to the teachers and employees who allowed their students to participate in the research. Moreover, a later discussion of the research results was arranged with the schools. This study was approved by the Research Ethics Committee of *Hospital de Clínicas de Porto Alegre* (protocol number 05-052).

Sample of the Validity Study Based on the Internal Structure

The sample was composed of 1,054 students, of which 50% belonged to female gender. The age range varied from 11 to 17 years old (mean age = 14.3; $SD = 1.70$). They were all collected in 17 public and private schools located in the metropolitan region of Porto Alegre, municipality located in southern Brazil, in age-compatible grades, increasing the heterogeneity of information collected. The number of participants was defined considering the number of items that composed the original instrument. The estimative of the sample size followed the criterion of "ratio items/participants," usually used when factorial analyses are required

Table 1
Demographic Features of the Composed Sample for Construct Validation (n=1034)

		Sample	
		<i>n</i>	%
Sex	Male	527	50
	Female	527	50
Age	11	41	3.9
	12	144	13.8
	13	184	17.6
	14	173	16.6
	15	204	19.5
	16	175	16.7
	17	121	11.6
Grade	5th Elementary	129	12.2
	6th Elementary	171	16.2
	7th Elementary	250	23.6
	8th Elementary	246	23.3
	1st High School	118	11.1
	2nd High School	103	9.7
	3rd High School	38	3.6

(Pasquali, 1999). This criterion requires that, for each item, at least 10 individuals should participate. In our case, this would represent at least 850 participants (Table 1).

Data Analysis

Data were analyzed using exploratory factor analysis with varimax rotation. The accuracy was verified by Cronbach's alpha. The analysis was performed using the Statistical Package for the Social Sciences – SPSS.

Results

The scale was submitted to an exploratory factor analysis. This analysis identified two fac-

tors. The theoretical analyses corroborated the hypothesis formulated from the screen plot that the extraction of two factors was the best solution in this case. The items grouped in the first factor can be considered direct anxiety indicators and those grouped in the second factor, items referring to indicators of capacity of anxiety control. Table 2 shows the psychometric features for each factor (Eigenvalue, Explained variance and Cronbach's alpha).

Table 3 demonstrates that 64 items remained in the final version of the scale, explaining 19.89% of the total variance (As can be seen in Table 2). Fifty-one items were grouped in the first factor, which obtained an eigenvalue equal to 10.19 and explained 15.92% of the total variance

Table 2
Factorial Solutions of the Scale

Factor	Eigenvalue	Explained Variance (%)	Cronbach's Alpha
I: indicator of anxiety	10.19	15.92	.92
II: control of anxiety	2.53	3.96	.72

Table 3
Descriptive Results of the Anxiety Scale

	Number of Items	Mean	Standard Deviation	Cronbach's Alpha	Inter-Item Mean Correlation
Factor 1	51	134.8	32.40	.92	.17
Factor 2	13	41.9	7.88	.62	.10

Table 4
Means and Standard Deviations in the Factors of the Anxiety Scale by Sex

	Male Mean	Female Mean	Male <i>SD</i>	Female <i>SD</i>
Factor 1	129.3	136.8	31.89	30.68
Factor 2	35.0	36.7	7.93	7.94

of the scale. Factor 2 grouped 13 items, had an eigenvalue equal to 2.53, and explained 3.96% of the variance. After the items of the final version of the scale were defined, the theoretical relevance of the factors was again submitted to the content validity of five experts on Psychology, Psychiatry, and Neuropediatrics, which have experience in clinical evaluation. Mean comparison tests were conducted to check possible differences of anxiety between the demographic variables of the sample. The analyses showed that there were significant differences in both factors only when related to participants' gender (Factor 1: $t=3.21$, $df=713$, $p<.01$; Factor 2: $t=3.11$, $df=896$, $p<.05$). The analyzes of variance performed showed no significant interactions between sex and age, type of school and grade (Factor 1: $F_{14,691}=1.41$, $p<.14$; Fator 2: $F_{15,896}=1.31$, $p<.16$). The items that describe typical somatic symptoms of anxiety and specific phobias associated with

separation difficulties are those with the largest differences between the sexes (higher score for women; see Table 4).

Dispersion analyses showed that the scale had a normal distribution (Liliefords $p<.01$). Factor 1 presented asymmetry of .25 and kurtosis of -.19. In Factor 2 these indexes were, respectively, equal to .02 and -.22. In Table 5 we observe the factor matrices, composed of the items that constituted each factor in the final version of the instrument for assessing anxiety. Items appear arranged in descending order.

Items that had a factorial load greater than .35 remained in the final version of the scale. The permanence of the items with a factorial load between .30 and .34 was contingent on the theoretical coherence of the sentence with the factor, the clinical relevance and the fact that its contents have not been covered by other items that factor.

Table 5
Factorial Matrices of Anxiety Scale

Item	Factor	Factorial load: Factor 1	Factorial load: Factor 2
77		.57	
68		.53	
79		.53	
69		.53	
51		.52	
61		.51	
80		.51	
54		.51	
73		.51	
85		.51	
11		.49	
50		.48	
48		.48	
60		.48	
40		.48	
15		.47	
71	Factor 1: Anxiety Indicator	.47	
29		.47	
49		.47	
67		.46	
66		.46	
78		.46	
34		.45	
72		.45	
36		.45	
13		.44	
26		.44	
53		.43	
63		.42	
31		.42	
42		.41	
07		.41	
12		.40	
28		.40	
14		.40	
16		.39	
09		.39	
81		.38	
70		.37	

82		.36
44		.36
58		.36
74		.34
33		.34
62		.33
76		.33
38		.33
47		.33
84		.31
23		.30
35		.30
37		.47
43		.44
52		.41
59		.39
21		.38
41	Factor 2: Anxiety Control	.37
55		.37
08		.35
32		.35
39		.35
01		.32
46		.32
27		.30

Discussion

The content analysis of the sentences grouped by the factorial matrices reveals that Factor 1 items refer to direct descriptions of anxiety symptoms and Factor 2 items, to markers of anxiety control capacity. In these two factors, there are items that are diffuse indicators of anxiety and also items that are indicators of specific states, such as panic and phobias.

Factor 1 items are associated, mainly, with thought and mood alterations, and typical autonomic reactions of anxiety upheavals. They involve anticipatory concern, supposedly overestimated risk evaluation, sensation of non-fulfillment (all of them, alterations of thought indicators). They also cover a state of tension,

feelings of self-condemnation, need to defer to people whom the adolescent deems to be more competent, low self-esteem, fear of losing self-control (mood indicators) and somatic alterations (shivering fit, crying, lack of air, tremor, gastric problems, muscular pains, palpitations and dizziness). Already Factor 2 is related to markers of ability to control anxiety and subjective well-being, encompassing the conscious evaluation that the individual thinks about his life, issues related to self-esteem and personal pride, satisfaction with current life and with the social group, optimism and joy. With a two-factor solution, 64 items remained in the final version of the scale explain 19.89% of the total variance. The alpha values for the two factors were found being satisfactory, providing reli-

ability and consistency of the scale. This data points validity of the scale based on their internal structure. The common element among the items retained in the scale is the fact that they describe, in general, cognitive processes, which involve evaluation of supposed threats or perception of corporal alterations arising from the danger sensation. This theoretical understanding is based on the definition presented by Muris et al. (2003) about the dimensionality of anxiety. According to them, anxiety involves behavior related to the awareness of corporal alterations (motor and visceral) and metacognitive components related to apprehending and anticipating danger. As it can be seen, all the items of the scale can fit in this definition, though Factor 1 refers more specifically to diagnostic markers of different states of anxiety and Factor 2, to markers that indicate anxiety control.

The evaluation of the adolescent's cognitive aspects during clinical assessment is an important consideration in the evolutionary study of anxiety, as metacognition seems to be an incidence and course mediator of anxiety states, especially from adolescence onwards (Foley et al., 2005; Holmes et al., 2005; Kindt & Engelhard, 2005; Rueger et al., 2010; Tuna et al., 2005). The cognitive processes described in the collected items are strictly related to self-awareness and reflective abstraction capacity; mental skills that are expected to develop in adolescence. In this sense, it is interesting to consider that somatic reactions are the most frequent symptoms of anxiety observed in child clinical evaluation (APA, 2002; Tuna et al., 2005) and they are directly related to states that tend to have a stable path, as specific phobias (Manfro et al., 2003; Manfro et al., 2002). However, the states that require greater use of metacognition, as Generalized Anxiety upheaval and Social Phobia, tend to follow a less specific path, which is more incapacitating and that presents a greater comorbidity risk along its development (Bohman et al., 2010; Heim & Nemeroff, 2001; Matthews & Wells, 2000). It happens because as the adolescent has more resources to predict possible aversive consequences of his/her behavior, (s)he

becomes more critical and self-controlled as regards his/her social conduct, and consequently, more vulnerable to social judgment.

Another fact to be discussed is the sexual difference observed in the comparison of the average of the scores. The female adolescents had higher scores in 'anxiety indicators' and 'control of anxiety' factors than the males. This fact is in line with the literature and is probably related to the social transmission of the female sexual role. Socially, the girls tend to be more encouraged to describe private behavior (feelings, thoughts, and sensations), identify the contingencies that determine them (e.g., alterations in social interactions, exposure to aversive situations, corporal alterations, etc.), and expose these perceptions with their partners. Thus, they tend to acquire a standard answer that is more sensitive to social evaluation, develop empathy with a greater frequency, and display more anxiety indicators. Similarly, the study of Myers and Thompson (2000) noted that, faced with stressful events, girls tend to adopt coping strategies focused on emotion with a greater frequency (e.g. distraction, avoiding, expression of sympathy, social retreat, and search for emotional support), in detriment of strategies focused on active problem solving (seeking information, cognitive solution of problems, cognitive restructuring, etc).

Whereas anxiety as a trait, some studies also indicate higher scores for women than men in personality dimensions such as anxiety (Apóstolo, Figueiredo, Mendes, & Rodrigues, 2011; Carlotto, 2011) and mood (Andrade, Viana, & Silveira, 2006), corroborating what was mentioned earlier in this study. However, a more detailed analysis of the data reveals that the items of the scale that have the greatest differences between the genders (higher score for females) are those that describe typical anxiety somatic alterations and symptoms of specific phobias associated to separation difficulties. Both anxiety of separation and specific phobias are disorders that occur more often in childhood, have a low remission index, and are mainly associated with somatic reactions. Thus, one can hypothesize that early incidence of anxiety indicators is re-

lated to descriptive patterns of anxiety symptoms, which enhance the perception of somatic alterations. Lam, Marra and Salzinger (2005) indicated that the description of psychopathological symptoms is an operative behavior and thus depends on patterns of social reinforcement that can favor somatic symptoms in some cultures and psychological symptoms in others.

Conclusion

We conclude that the Anxiety Scale for Adolescents presents positive evidence of validity based on internal structure. The scale items were constructed especially for adolescents and were validated by clinical experts. The scale has as a differential the fact of not keeping your focus only in vegetative symptoms related to constructs assessed, but also to the cognitive processes involved in situations involving anxiety symptoms.

Finally, it should be emphasized that anxiety has an adaptive potential and that poor results on this scale may indicate a risk. Thus, the scores should be interpreted from a functional analysis of the behavior described in the sentences. In the clinical context, it is advisable to consider the frequency and duration of episodes of anxiety and also the losses implied by them for adolescent's social adaptation. That being so, this study considers there is a necessity in the literature to create and validate scales that enable clinicians to monitor in adolescent patients, the effect of therapeutic interventions.

Limitations of this study may include the choice of a convenience sample, despite the breadth site achieved. It is noteworthy that, although the scale is intended to quantitatively assess the level of anxiety of adolescents, a qualitative interpretation of the items with the highest scores can help in understanding the dynamics of clinical cases and treatment guidelines. It is suggested that future studies be investigating the relationship of the results including the correlation of this scale with other socio-demographic, clinical and cognitive datas about adolescents, to indicate evidence for criterion validity and consequential validity of the proposed instrument.

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