

Paroxysmal Emotionality in a Group of Adolescents with Behavioral Disorders

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Abstract

General Objective: Characterize the categorical and dimensional psychopathological spectrum of a group of adolescents. Specific objectives: Describe the sociodemographic composition of the sample, characterize the psychopathological alterations of these adolescents and identify the negative emotions with clinical significance that characterize the group.

Methods: A quantitative-qualitative methodology, a descriptive exploratory study and a non-experimental cross-sectional design were assumed. We worked with a non-probabilistic intentional sample, which included 20 adolescents who met the study inclusion criteria. A Modified Grau Experiential Self-Report, a Sentence Completion and an in-depth interview were applied to them. Descriptive statistics of the evaluated constructs were performed.

Results: The initial diagnostic impression reflected that (50%) (n=20) have a Conduct Disorder, (30%) (n=20) have an Anxiety Disorder, (15%) (n=20) suffers from a Depressive Episode, while through the Self-report it was identified that 95% (n=20) have poor emotional regulation, 80% (n=20) suffer from anxiety, have tense emotional health and trait anger, the 75% (n=20) have depression and suffer possible Alexithymia, (70%) (n=20) are affected by psychological trauma.

Conclusions: the group was characterized by having an average age of 15 years, with a predominance of the male sex, a high school education and the white race. The psychopathological alterations that characterized the group were conduct disorders, anxiety and depressive episode, and in terms of dimensions, it was characterized by high negativity and low positivity. The paroxysmal negative emotions that characterize the group are anxiety, irritability, anger, impulsiveness, apathy, demotivation, and unpleasant emotion that they cannot define.

Keywords: teenagers; negative affect; grau's modified experiential self-report; behavioral disorders

Introduction

Emotionality is dimensional and is considered as negative affect [1] but it also includes positive affectivity, among which joy, optimism and good humor have been studied in association with good health and a better quality of life [2; 3]. Including the study of emotionality in adolescents implies a strategy to improve the psychopathological diagnosis that leads to a personalization of the treatments. In the present study, emotionality is understood in its entirety, that is, considering the negativity in its interrelation with the positivity of the individual. This relationship is known as the additive principle of emotions [4]. Its authors define it as follows:

“...when the individual experiences multiple sources of emotional stimulation, the emotions add up. If the emotions are negative the result will be a sum that is more intense than an emotional response alone. And if the emotions are positive, the sum will be more intense than one. If one source of emotion is positive and the other is negative, however, the emotions elicited will subtract from each other, resulting in the stronger of the two being experienced in a more attenuated form. (p.287).

To this principle is added the undo effect that positivity is recognized on the impact of negativity on health [5]. Due to these foundations, it is not appropriate to determine the psychopathological state of patients without considering this interrelationship mentioned above, in addition, the contributions of Positive Psychology to the understanding of the continuous health-disease process are considered [6;7]. On the other hand, the psychopathological diagnosis should never remain at the level of classical Nosology only, since several individual elements can always be identified which, due to their clinical significance, become the basis for personalizing the treatment of patients. The Research Problem is: What emotional comorbidities and paroxysmal negative emotions characterize the group of adolescents under study? The General Objective was established: To characterize the categorical and dimensional psychopathological spectrum of the group of adolescents studied, while as specific objectives: to describe the sociodemographic composition of the sample studied, to characterize the psychopathological alterations of the adolescents studied and to identify the paroxysmal emotions that characterize the adolescent. cluster.

Material and methods:

Type of study: descriptive-exploratory and non-experimental cross-sectional design

Population: made up of 191 adolescents assisted in the Guillermo Barrientos De Llano Municipal Department of Mental Health in the period from January to August 2022

Sample: 20 patients (11 males and 9 females). Intentionally chosen based on meeting the inclusion criteria

Inclusion criteria:

- Age: the criteria given by the World Health Organization (WHO) that places adolescence in the second decade of life, from 10 to 19 years, are assumed.
- Attend the Psychology and Psychiatry service of the Mental Health Department of herdsmen.
- Voluntary participation in the research.

Exclusion criteria:

- Present some type of disability that makes it impossible to participate in the study.
- That the adolescents and their parents or guardians are not willing to participate in the study.

The instruments used were the Modified Grau's Experiential Self-Report (MGESR) (Appendix No.1), a Completion of sentences focused on emotionality (Appendix No.2) and the in-depth interview, both to explore the presence of psychological trauma.

Ethical aspects: authorization was requested from the direction of the Municipal Department of Mental Health. Informed consent was used both with the patients and with the parents or guardians.

Characteristics and instrumental benefits of the Experiential Self-Report.

The test is the result of a modification to a previous version created by Doctor Jorge A. Grau in 1984, to which a construct and a concurrent validity were performed [8; 9]. It is based on the fact that normal emotionality is in itself a circumstantial, transitory phenomenon, but if it becomes very frequent and very intense, it is considered that it has been incorporated as a feature into the habitual way of reacting by the individual and being unpleasant (negative) emotions will then generate social dysfunction and represent a psychopathological disorder. Three positive components were added to the instrument that represent the universe of positivity, which are: good humor, optimism and joy. All three are often considered an individual's inner strengths and exert a favorable

influence as a counterpart to negativity. Accounting is based on the additive principle of emotions [4] and the undoing effect of emotional positivity on the impact of negativity on cardiovascular health [5] subtraction operation between the negativity and positivity values, a calculation that generates the spectrum of test constructs mentioned above.

According to the data obtained in this instrument, opinions of six constructs will be obtained, which are: Emotional health, Emotional self-regulation, Psychological trauma, depression, anxiety, Alexithymia and trait anger. Paroxysmal emotions will also be defined.

Definitions of terms:

Emotional health: it is defined on the one hand by the amount of negative emotions with clinical significance, that is, that generate discomfort for the individual, by the amount of positivity, as well as by the capacity for emotional self-regulation. As operational definitions of this construct, there are the following levels (Ideal, Normal, Light, Moderate, Tense).

Emotional self-regulation: it is defined by the individual's ability to regulate their negative emotions based on their emotional balance and psychological well-being. As operational definitions of this construct, there are the following levels (Good, Regular and Bad).

Positivity: it is a concept that arises in positive Psychology; groups the set of attributes that make up the protective factors for health, quality of life and psychological well-being. Its operational definition consists of a value from 0 to 12, the closer to 12 that value is, the greater Positivity the individual possesses. Positivity can be considered a dimension from the Transdiagnostic paradigm.

Negativity: is a measure of the amount of negative emotions that have clinical significance. The greater the number of negative emotions are clinically significant, the greater the individual's negativity. Negativity can be considered a dimension from the Transdiagnostic paradigm, together with positivity.

Affective profile: reflects the dispersion of negative emotions (from left to right) according to their clinical significance (a combination of intensity and frequency) as well as a positivity value where 12 is the maximum value; both obtained by the individual through the Self-report.

Psychological trauma: its underlying presence is estimated when several negative emotions come together at the same time with the same frequency and high intensity, as usually happens with traumas and in Post-traumatic Stress Disorder (PTSD). Up to three are valued as Possible the presence of trauma, five or more are valued as "Very possible" the presence of trauma; but an interview will be required to clarify it after obtaining an opinion of clinical significance in this regard.

Depression: estimated from five specific items (sad, unmotivated, long-suffering, anguished, and apathetic). The following levels are used as operational definitions of this construct (Severe, Moderate, Mild and None).

Anxiety: estimated from three specific items (restless, insecure and anxious). The following levels are used as operational definitions of this construct (Severe, Moderate, Regular and Absent).

Alexithymia: although the disorder is more complex, it is estimated from two items ("Unpleasant emotion that I cannot define" and "Confusion"); if required, a specialized instrument is subsequently applied to confirm the opinion.

Trait anger: it is estimated from five specific items that are (irritable, impulsive, wrathful, contempt and resentful). The following levels are used as operational definitions of this construct (Severe, Moderate, Regular and Absent).

Paroxysmal emotions: are those reported by individuals as experienced by them with high frequency and intensity. When both qualities come together in an experience, it is then recognized that they have already become a trait, forming part of the emotional predispositions to react in a dysfunctional way. If an individual presents sequelae of a psychological trauma, it is easy to be detected by the confluence of more than four or five paroxysmal negative emotions forming a constellation.

Results

General characterization of the group according to clinical and sociodemographic variables

According to the data reflected in table No.1, it is significant that all have a Middle Schooling

Patient	Age	Sex	Race			Scholar			Diagnosis					
			W	M	B	S	HS	Tech	Behavioral disorders	Anxiety disorders	Depressive episode	Obsessive Compulsive Disorder		
1	DBT	15	M	1				1			1			
2	LMG	17	M	1				1			1			
3	YCG	13	M	1			1				1			
4	CCV	14	M		1		1				1			
5	MNP	16	M			1	1				1			
6	GMB	15	M			1	1				1			
7	FPD	13	F			1	1				1			
8	OCG	14	F			1	1				1			
9	MTL	15	F		1		1				1			
10	LBC	14	F	1			1				1			
11	YBM	11	F	1			1					1		
12	KDV	13	F	1			1					1		
13	DIP	15	F		1		1					1		
14	NGA	16	F	1					1			1		
15	MFS	15	F	1				1				1		
16	RTN	13	M	1			1					1		
17	MAR	13	M	1			1						1	
18	DCD	14	M	1			1						1	
19	EBS	17	M	1				1					1	
20	SVQ	18	M	1					1					1
T	Av.	14		13	3	4	14	4	2	10	6	3	1	

Source: authors file

Table 1: Brief psychosocial characterization of the studied group

Anxiety	Severe	Moderate	Slight	None
Frequency	3	7	6	4
Average	15%	35%	30%	20%

Source: authors file

Anxiety: 80% of the group is affected by clinically significant anxiety distributed equally as can be seen in table No.2

Table 2: Anxiety levels in the group

Trait anger: 80% of the cases present a tendency to anger, either high or moderate, as observed in figure No. 1.



Figure No.1: Trait anger in the group

Depression: 75% of the cases suffer from depression, distributed between the Severe, Moderate and Slight levels, as shown in figure No.2.

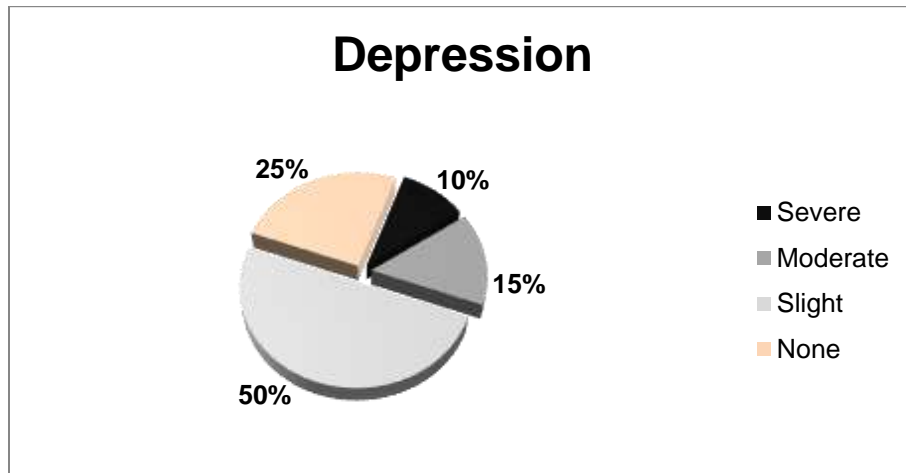


Figure No.2 Proportion of depression among assisted adolescents

Alexithymia: 75% of adolescents are affected by possible Alexithymia at some level of clinical significance as shown in Table No.3

Alexithymia	Severe	Moderate	Slight	None
Frequency	7	4	4	5
Average	35%	20%	20%	25%

Source: data from the authors

Table 3: Results of Alexithymia levels at the group level.

As can be seen in table No.4, 80% of adolescents have tense emotional health. 95% of their Self-regulation is bad, while 75% may be affected by at least one psychological trauma, with a greater possibility of 45%.

	Emotional Health			Emotional Self-Regulation		Psychological Trauma		
	Normal	Moderate	Tense	Good	Bad	No	Possible	Very Possible
Frequency	1	3	16	1	19	6	5	9
Average	5%	15%	80%	5%	95%	30%	25%	45%

Source: data from the authors

Table No.4: Emotional Health, Emotional Self-Regulation and Psychological Trauma

Regarding the affective dimension (which contemplates negativity versus positivity), the affective profile of the Self-report was taken as a reference. 65% have problematic negativity, which means that they have a high number of negative emotions with some level of clinical significance and established as a trait, that is, paroxysmal. It can be seen that in the first two columns on the left side, 13 negative experiences without clinical

significance at the group level are concentrated, on the other hand, with the highest clinical significance, an average of 5.2 emotions was obtained, which reflects the presence of psychological trauma in a part of adolescents, while the positivity reflected in the extreme right column is 5.7 on average compared to 12, which would be the ideal number.

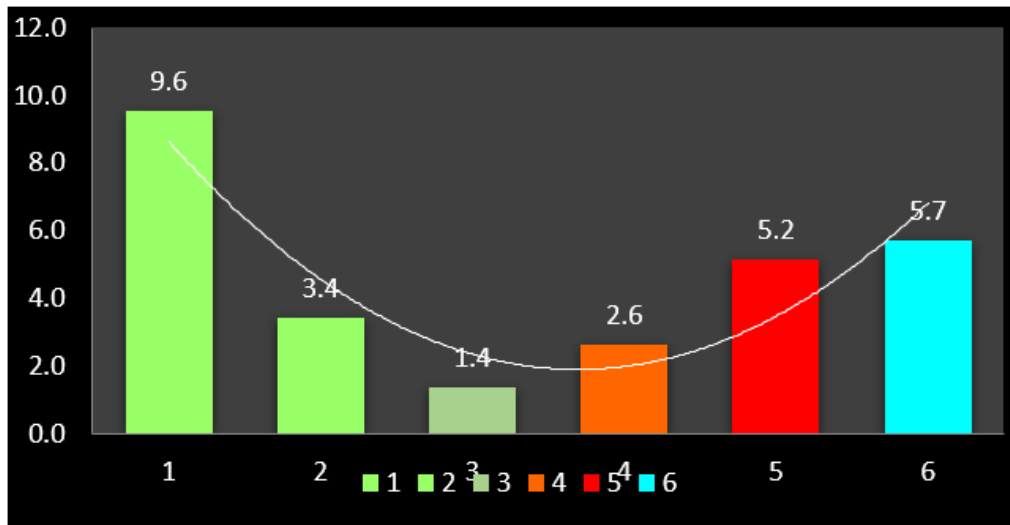


Figure 3: Proportion of Negativity versus Positivity values at the group level (affective dimensionality)

As for the paroxysmal experiences, in table No.5 it can be seen that anxiety and irritability were the highest experiences followed by anger, impulsiveness, apathy among others that are decreasing in frequency. It must be taken into account that at the critical level the highest intensity of the experience converges with the highest frequency in which it is felt. The high frequency defines the character of this experience as a trait, that is, a component of the emotional predispositions of these adolescents, while the intensity highlights the clinical significance as a symptom and

also very possibly the repercussion of this symptom in their interpersonal relationships. It should be remembered that there are related experiences, for example, "Unpleasant emotion that I can't define" and "Confusion" are two crucial attributes of Alexithymia, and in patients who declared these symptoms as a quick alternative to detect the possible presence of this disorder, the which requires to be confirmed with the specific test, which was not performed in this study.

No.	Negative emotions	Without Clinical significance		With Clinical significance		% With Clinical significance
		0	Slight level	Half level	Critical level	
1	Anxiety	2	3	5	10	75%
2	Irritability	3	2	3	12	75%
3	Anger	7	2	4	7	55%
4	Impulsivity	5	5	0	10	50%
5	Apathetic	8	2	5	5	50%
6	Unmotivated	5	6	6	3	45%
7	Displeasing emotion that I	5	6	3	3	45%
8	Guilty	9	3	4	4	40%
9	Ashamed	8	4	0	8	40%
10	Confusion	7	5	5	3	40%
11	Long-Suffering	7	7	1	5	30%
12	Insecurity	9	5	3	3	30%
13	Distrust	9	5	1	5	30%
14	Sadness	6	9	3	2	25%

15	Resentment	13	2	3	2	25%
16	Anguish	11	4	2	3	25%
17	Fear	14	2	1	3	20%
18	Shy	13	3	2	2	20%
19	Restlessness'	9	7	1	3	20%
20	Jealousy	11	6	0	3	15%
21	Scorn	15	3	1	1	10%
22	Envy	18	2	0	0	0%

Source: data from the authors

Table No. 5: Distribution of paroxysmal negative emotions collected in Grau's Experiential Self-report N=20

Discussion

80% of the group presents trait anger, 50% impulsiveness and 75% depression, data that corresponds to studies carried out in adolescents with conduct disorders whose behaviors can be registered as a manifestation of depressive mood, others as an expression of defensive mechanisms. in the face of frustrations and psychosocial conflicts, and others with overtones of coldness and cruelty [10] and not infrequently conduct disorders are associated with difficulties in interpersonal relationships with parents [11].

It is interesting that 55% report having a positivity between good and regular, however, when analyzing these results individually and contrasting them with their negative emotions (sadness, lack of motivation, suffering, anguish and apathy), it is observed that of the 75% who suffer from depression, there are 60% of them who also alternate this disorder with high positivity. This contradiction can also be explained by triangulating the three applied techniques and reflecting a real deficient positivity, lower than that declared by them. It is quite possible that displaying inauthentic positivity hides depression and other associated disorders and goes too long undetected and untreated in health care because these disorders are of the internalizing type [12]

Poor positivity implies a lack of adaptive resources from the affective dimension to successfully face anguish, which further exacerbates the psychopathological clinical picture. Positivity deficit is considered to explain deficits in emotional self-regulation [13,14].

About the pattern of paroxysmal emotionality made up mainly of anxiety, irritability, anger and impulsivity, there are authors who explain that these disorders are associated with Neurodevelopment and as a consequence, there is a tendency in adolescents to show reckless behavior and not appreciate in their full magnitude the dangers to which they are exposed [15]. Thirteen adolescents (65%) present a mostly regular and bad negativity, but those who were diagnosed with psychological trauma the negativity is much higher, in fact, the most obvious indicator to detect it is when several paroxysmal negative emotions come together in the column that distinguishes the experiences of greater clinical significance; this situation makes them more vulnerable to becoming addicted to drugs [16].

A tendency of these adolescents not to declare all the negative experiences of personal clinical significance was observed, which could be detected in the methodological triangulation when analyzing what was declared in the Completion of sentences and in the interview. This is partly explained by the possible alexithymia expressed in the disability to identify their negative emotions. As an example of the above, grudges, insecurities and fears that they suffer were not recognized initially but were later recognized through the other techniques used.

It was very pertinent to focus the clinical study on the emotional composition of the categorical disorders they suffer from, especially trait emotionality and its association with early traumatic experiences, since

this allows personalizing psychotherapeutic treatment and contributing to its effectiveness, as well as to improve depression prevention.

Conclusions:

1. The group was characterized by having an average age of 14 years, with a predominance of the male sex, an average level of education, and the white race.
2. The psychopathological alterations that characterized the group were disorders behavior, anxiety and depressive episode, and in terms of dimensions, it was characterized by high negativity and low positivity.
3. The paroxysmal negative emotions (with clinical significance) that characterize the group are anxiety, irritability, anger, impulsiveness, apathy, demotivation, and unpleasant emotion that they cannot define, among other minor ones.

Recommendations

1. Expand the study sample to adolescents with specific disorders such as substance use disorders, phobias, suicide attempts, among others.
2. Extend the study to a much larger sample of adolescents with behavioral disorders to define trends typical of Descriptive Statistics.
3. Consider exploring other transdiagnostic dimensions in future studies with adolescents.

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Appendix No. 1 **Proportion of negative emotions through the Grau's Modified Emotional Self report (N=20)**

Name _____ Age _____ Schooling _____

Instructions: To the left column there are a series of emotions that you could feel. To the right of each one there is a horizontal line whose left end indicates the weakest grade in that you feel these emotions, while the right end corresponds to the biggest intensity in that you may has felt them.

1.- You should check only one box per row where you think best reflects the intensity with which you have been feeling each emotion during the last few months. Please make sure to match the chosen intensity with the frequency in which it occurs.

0= seldom 1= sometimes 2= very often

Intensity of the emotion		Scarcely			Moderate			Intensively			-	+
		0	1	2	0	1	2	0	1	2		
1	Restless	3	4	2	0	7	0	0	1	3	20	
2	Distrustful	3	2	0	1	4	1	3	1	0	20	
3	Good mood	1	1	2	0	5	1	0	4	6		20
4	Sad	1	2	0	2	8	1	1	3	2	20	
5	Unmotivated	4	1	0	0	3	3	0	6	3	20	
6	Envy	13	2	2	1	1	1	0	0	0	20	
7	Fear	8	3	3	0	2	0	0	1	3	20	
8	Insecure	4	2	3	0	1	4	0	3	3	20	
9	Irritable	1	0	0	0	2	0	1	4	12	20	
10	Shy	10	0	2	0	2	1	0	2	3	20	
11	Optimistic	4	2	2	1	3	3	0	2	3		20
12	Impulsive	3	0	0	1	5	0	1	0	10	20	
13	Long Suffering	5	1	0	1	5	2	0	1	5	20	
14	Jealousy	6	3	0	2	2	4	0	0	3	20	
15	Anger	4	0	0	3	2	0	0	4	7	20	
16	Scorn	13	1	0	1	3	0	0	1	1	20	
17	Resentment	8	3	0	1	3	0	0	2	3	20	
18	Guilty	7	0	1	1	1	2	0	4	4	20	
19	Anguished	6	1	1	1	3	1	2	2	3	20	
20	Ashamed	6	0	0	1	2	2	1	0	8	20	
21	Apathetic	6	0	2	0	1	1	0	5	5	20	
22	Anxious	1	0	0	0	2	1	1	5	10	20	

23	Confused	6	0	0	0	4	1	1	5	3	20	
24	Glad	2	1	1	0	4	3	0	2	7		20
25	Displeasing emotion that I can't define	3	1	0	0	5	2	0	3	6	20	
	Total	121	26	16	16	68	27	11	53	102	440	
	Average	27.5%	6.9%	3.6%	3.6%	15%	6%	2.5%	12%	23%		
	Value per columns	0	0	0	0	1	2	0	3	4		

With clinical significance

Appendix No.2

Completion of phrases / Most frequent emotions associated with personal experiences. (To identify past personal experiences associated to specific emotions)

Please complete the following sentences. Your sincerity will be your contribution to treatment.

Name: _____ Age: ____ Reason for consultation: _____

1. My biggest concern is _____
2. My biggest fear is _____
3. What makes me angry the most is _____
4. What saddens me the most is _____
5. What I do not forgive is _____
6. What I don't want is _____
7. What causes me the most anxiety is _____
8. What brings me the most joy is _____
9. What I do not like is _____
10. What makes me jealous is _____
11. What makes me distrust the most is _____
12. What makes me frustrated is _____
13. What hurts me the most is _____
14. What confuses me the most is _____
15. What I can't forget is _____



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