









**Affective profile:** Reflects the dispersion of negative emotions (from left to right) according to their clinical meaning (a combination of the intensity and frequency) and the value of the Positivity, both obtained by the individual through the Self-report.

**Positivity:** It is a concept that arises from positive psychology; which groups the set of attributes that make up the protective factors of health, quality of life, and psychological well-being. Its operational definition consists of a value from 0 to 12, the closer that value is to 12, the greater Positivity the individual possesses. Positivity can be considered a dimension from the Transdiagnosis paradigm. As operational definitions of this construct, there are the following levels (Good, Middle, and Bad).

**Negativity:** Negativity is a measure of the number of negative emotions that have clinical significance. The extent that the number of negative emotions is clinically significant, the greater the negativity of the individual. Negativity can be considered a dimension from the Transdiagnosis paradigm.

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

**Depression:** It is estimated from five specific items (sad, unmotivated, suffering, anguished and apathetic). As operational definitions of this construct, there are the following levels (Severe, Moderate, Slight, and None).

**Anxiety:** It is estimated from three specific items (restless, insecure, and anxious). As operational definitions of this construct, there are the following levels (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 diagnosis.

**Trait anger:** It is estimated from five specific items that are (irritable, impulsive, angry, Scorn (contemptuous) and resentful). As operational definitions of this construct, there are the following levels (Severe, Moderate, Slight, and Absent).

**Paroxysmal emotions:** are those reported by individuals as experienced by them with high frequency and intensity. When both qualities converge in an experience, it is then recognized that they have already become a trait forming part of the emotional predisposition to react in a dysfunctional way. If an individual presents sequels of

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 1**, it is significant that all of them have middle schooling levels, 13 of the cases (65%) present a Polyaddiction to substances, while the average drug use time of the group is 2 years.

**Table 1** Brief psychosocial characterization of the studied group N=20

Patient		Age	Sex	Race			Schooling		Kind of addiction	Time of consumption
				B	M	N	9th	12th		
1	GB	19	F	1			1		Polyaddiction	4
2	NH	17	F	1			1		Polyaddiction	2
3	YM	16	M	1			1		Polyaddiction	2
4	OR	18	M			1		1	Polyaddiction	1
5	DM	17	M	1				1	Polyaddiction	2
6	JF	17	M			1	1		Polyaddiction	3
7	EK	18	M	1			1		Polyaddiction	3
8	HG	17	M	1			1		Polyaddiction	3
9	YK	18	M	1			1		Polyaddiction	4
10	EW	18	M	1				1	Polyaddiction	1
11	LD	18	M	1				1	Polyaddiction	3
12	AG	18	M		1		1		Polyaddiction	5
13	OL	18	M	1				1	Polyaddiction	3
14	DY	15	F			1	1		Marihuana	2
15	JC	18	M	1				1	Marihuana	2
16	DZ	17	M	1			1		Marihuana	2
17	RN	16	M	1			1		Marihuana	1
18	ER	18	M	1				1	Marihuana	1
19	OC	16	M	1			1		Crack	1
20	YL	16	M			1	1		Crack	1
	Media	17		15	1	4	13	7		2

Source: authors archive

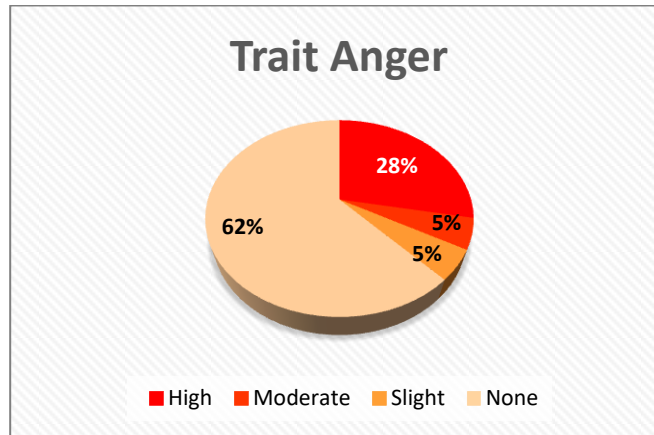
50% of the group is affected by the anxiety of clinical significance distributed equally as can be seen in **Table 2**, meanwhile, with depression, 20% of the cases are equally distributed between the Severe and Moderate levels as shown.

**Table 2** Anxiety and depression levels in the group

	Anxiety				N=20
Levels	Severe	Moderate	Slight	None	
Frequency	5	5	6	4	

Average	25%	25%	30%	20%
		<b>Depression</b>		
Frequency	2	2	5	11
Average	10%	10%	25%	55%
Source: authors archive				

The third part of the cases is affected by a tendency to anger, either high or moderate, as shown in **Figure 1**. N=20



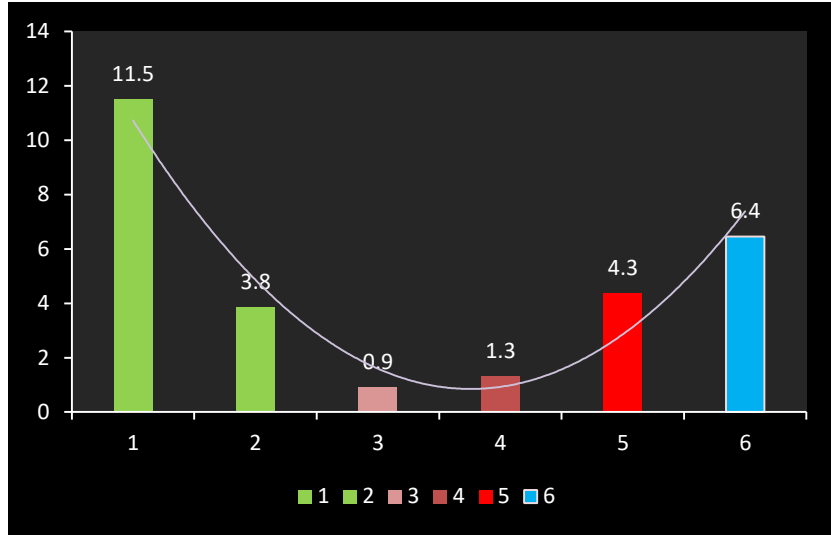
**Figure 1 Trait Anger in the group**

As can be seen in **Table 3**, half of the adolescents have tense emotional health, 65% have poor self-regulation, 30% are very likely to be affected by at least one psychological trauma and the other 35% may also have trauma sequelae.

**Table 3 Emotional health, Emotional self-regulation, and Psychological trauma N=20**

	Emotional Health			Emotional Self-regulation		Psychological Trauma		
	Normal	Moderate	Tense	Good	Bad	No	Possible	Very possible
Frequency	7	3	10	7	13	7	7	6
Average	35%	15%	50%	35%	65%	35%	35%	30%
Source: authors archive								

About Negativity, it can be seen through the group's affective profile of the Self-report that there is an average of 4.3 negative emotions with the highest clinical significance meanwhile Positivity got a 6.4 average before the ideal and expected 12 (**Figure 2**).



**Figure 2 Negativity vs Positivity represented through the group's affective profile**

35% of adolescents seem to be affected Alexithymia at some level of clinical significance.

Regarding the paroxysmal experiences, in **Table 4** it can be seen that anxiety was the highest experience followed by distrust, impulsiveness, and restlessness, among others that decrease 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, as 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 the context of relationships of this people.

It should be remembered that there are related experiences, for example, "Unpleasant emotion that I cannot define" and "Confusion" are two crucial attributes of Alexithymia, and in patients who reported these symptoms.

**Table 4 Distribution of paroxysmal negative emotions collected in Grau's Experiential Self-Report N=20**

No.	Negative experiences	Without clinical significance			With clinical significance	% with clinical significance
		0	Slight Level	Middle Level	Critical Level	
1	Anxiety	6	2	6	6	60%
2	Distrustful	8	1	2	9	55%
3	Impulsivity	6	3	4	7	55%
4	Restless	4	7	2	7	45%
5	Suffering	9	2	1	8	45%
6	Insecurity	8	4	3	5	40%
7	Guilty	6	6	5	3	40%
8	Unmotivated	10	3	3	4	35%
9	Unpleasant emotion that I am not able to define	10	4	3	3	30%
10	Jealous	10	4	2	4	30%
11	Embarrassed	9	5	2	4	30%
12	Irritability	12	3	2	3	25%



13	Sadness	12	4	1	3	20%
14	Fear	13	3	2	2	20%
15	Anger (rage)	12	4	0	4	20%
16	Resentment	11	5	0	4	20%
17	Anguish	12	4	1	3	20%
18	Shy	14	3	1	2	15%
19	Scorn	16	2	1	1	10%
20	Envy	18	0	1	1	10%
21	Apathy	15	3	0	2	10%
22	Confusion	11	7	0	2	10%
Source: Author archives						

## DISCUSSION

The fact that adolescents with Polyaddiction predominate is a reflection of a tendency to modify consumption patterns on a global scale, but what is interesting is that this in turn is related to emotional damage suffered in childhood; in this regard, in a study, was shown that people who have been affected by psychological trauma in childhood are those who report consumption of multiple substances and severity in the consumption of crack and cocaine [7,24]. Both elevated anxiety and depression are typical findings in drug-using populations, especially in adolescents [14]. Trait anger is also an attribute associated with drug addictions, but in the case of adolescents, it is very notable and is linked to severe emotional self-control difficulties [11].

About Alexithymia, it is estimated that 35% of patients may present this disorder to some extent (as it is a rapid test, it only makes estimates of the presence or absence of a disorder and it is advisable to confirm this finding with a specialized test). Alexithymia is usually associated with alcoholism in adults as well as in female adolescents with Eating and Substance Use Disorders [16,17]. The fact that 50% of the patients suffer from tense emotional health is a logical consequence of the systemic disorders they suffer from since the majority have difficulties with emotional self-regulation typical of adolescents when they are involved in Substance Use Disorder (SUD). The other component that explains this tense emotional health is that the majority (65%) are presumably affected by some psychological trauma between the “Very possible” and “Possible”.

These last results were triangulated with those obtained in the Completion of sentences and the interview; It was then possible to confirm that 11 of those 13 suffer psychological trauma of various kinds. Among the causes of childhood trauma, some of them were victims of family violence, sexual abuse, dysfunctional attachment relationships, and parental abandonment. Six of these adolescents are polyaddicts, three are marijuana smokers and the other two ones crack users; results that coincide with the findings of other authors where polyaddiction is related to severe crack and cocaine use as well as marijuana use as a preference for individuals who suffered psychological damage in childhood [24,25].

Negativity is very high in this group. This means the presence of several negative emotions of high frequency and intensity (that we call paroxysmal) and therefore with clinical significance; qualities that have turned it into a trait and explain the social dysfunctions of these individuals. This contrasts at the same time with a deficient Positivity in these adolescents. When this is verified, it means that they have few adaptive resources from the emotional

dimension to successfully face the anguish, which worsens the psychopathological clinical situation much more. In this case, the clinician must plan health promotion efforts to enhance these three positive qualities after completing the psychotherapeutic program. In the care program developed for years at the Psychiatric Hospital of Havana for the treatment of people with problematic drug use, efforts to promote emotional health have been included using humor as a resource and strategy [26].

It should be taken into account that, according to Clark & Watson, a positivity deficit is considered one more quality of depressive states [27]. Finally, regarding the paroxysmal emotions collected, the results largely coincide with those obtained in a study with adults with drug use, especially anxiety, mistrust, and restlessness, while acknowledging that this study was carried out with an earlier version of the current instrument used [4]. The practicality of this characterization lies in the fact that it guides the therapist about which experiences to work on in the group of psychotherapy and which ones to work on in particular with some individuals; that is the essence of this perspective. Experiences such as resentment, guilt, shame, or fear, all of them related to social contexts, are usually linked to failures in social insertion, to unpleasant experiences, so it is pertinent to work on them in the psychotherapeutic consultation.

If it is about the psychological trauma reflected by the synchronous confluence in intensity and frequency of clinical significance of several emotional experiences, the study should be deepened to detail the traumatic experiences and solve them with the conviction that this will contribute to reducing the weight of the affective comorbidities that enhance the craving for consumption and largely explain the sustainability of a dependency. Working from this perspective, greater effectiveness is expected for psychotherapeutic assistance [6].

### CONCLUSION

- The group of adolescents studied is typified above all by polyaddiction as a consumption pattern, in comorbidity with anxiety, depression, trait anger, possible Alexithymia, poor emotional health, and difficulties with emotional self-control.
- It was possible to estimate and then confirmed through this strategy and instruments that the majority were affected by at least one psychological trauma.
- A group of paroxysmal emotions of clinical significance that require psychotherapeutic attention was identified because they make up the affective comorbidities of individuals. Among the higher emotions are distrust, impulsiveness, insecurity, guilt, jealousy, shame, and irritability.

### DECLARATIONS

#### Conflict of Interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### REFERENCES

- [1] Medina, Carmen L. Rivera, and Guillermo Bernal. "[Measurement in psychotherapeutic change: towards an evidence-based and measurement-based psychological practice.](#)" *Puerto Rican Journal of Psychology*, Vol. 19, 2008, pp. 223-44.
- [2] Salaberría, Karmele, et al. "[Terapias psicológicas basadas en la evidencia: limitaciones y retos de futuro.](#)" *Revista argentina de clínica psicológica*, Vol. 19, No. 3, 2010, pp. 247-56.
- [3] Garcia P. H., "[Concurrent validity of Grau's Experiential Self-Report Transdiagnostic Test Modified for a more Comprehensive Assessment of the Affective Dimension](#)" *Journal of Clinical Research and Reports*, Vol. 10, No. 5, 2022, 1-5
- [4] von Hammerstein, Cora, et al. "[Psychometric properties of the transaddiction craving triggers questionnaire in alcohol use disorder.](#)" *International journal of methods in psychiatric research*, Vol. 29, No. 1, 2020, p. 1815.
- [5] Greenberg, Leslie S., and Jeanne C. "[Watson. Emotion-focused therapy for depression.](#)" *American Psychological Association*, 2006.
- [6] Penedo, Humberto G., et al. "[Efectividad de la psicoterapia experiencial correctiva en drogodependientes en el Hospital Psiquiátrico de La Habana.](#)" *Revista del Hospital Psiquiátrico de La Habana*, Vol. 17, No. 2, 2022.
- [7] Fernández Artamendi, S., and Sara-Eva W. López. "[Avances en la evaluación de las adicciones.](#)" *Papeles del psicólogo* 2016.
- [8] Eaton, Nicholas R., et al. "[Transdiagnostic factors of psychopathology and substance use disorders: a review.](#)" *Social psychiatry and psychiatric epidemiology*, Vol. 50, No. 2, 2015, pp. 171-82.
- [9] Dalgleish, Tim, et al. "[Transdiagnostic approaches to mental health problems: Current status and future directions.](#)" *Journal of consulting and clinical psychology*, Vol. 88, No. 3, 2020, p. 179.
- [10] Rivas, Barbara I., et al. "[Comorbidity between alcohol dependence and anxiety disorders in hospitalized male patients.](#)" *Magazine of the Psychiatric Hospital of Havana*, Vol. 12, No. 1, 2015.
- [11] Flores-Garza, P., et al. "[Alcohol Consumption and its Relationship with Aggression in High School Adolescents: Alcohol Consumption and Aggression in Adolescents.](#)" *International Journal of Addiction Research*, Vol. 5, No. 1, 2019, pp. 31-38.
- [12] Carmona-Perera, Martina, et al. "[Reduced autonomic responses to emotional stimuli in alcoholism: the relevance of impulsivity.](#)" *Addictions*, Vol. 31, No. 3, 2018, pp. 221-32.
- [13] Laitano, Helen V., et al. "[Anger and substance abuse: a systematic review and meta-analysis.](#)" *Brazilian Journal of Psychiatry*, Vol. 44, No. 1, 2021, pp. 103-10.
- [14] Higareda-Sánchez, Jesús J., et al. "[Consumo De Alcohol Y Rasgos De Ansiedad Y Depresión En Adolescentes Escolarizados.](#)" *Health & Addictions/Salud y Drogas*, Vol. 21, No. 2, 2021, pp. 44-59.
- [15] Penedo, Humberto G., et al. "[Effectiveness of the testimony as a psychotherapeutic instrument with drug addicts in the Psychiatric Hospital of Havana.](#)" *Magazine of the Psychiatric Hospital of Havana*, vol. 16, No. 3, 2021, pp. 13-26.
- [16] Handelsman, Leonard, et al. "[A latent variable analysis of coexisting emotional deficits in substance abusers: alexithymia, hostility, and PTSD.](#)" *Addictive behaviors*, Vol. 25, No. 3, 2000, pp. 423-28.

- [17] Cruz-Saez, Maria S., et al. "[Riesgo de trastorno de la conducta alimentaria, consumo de sustancias adictivas y dificultades emocionales en chicas adolescentes.](#)" *Anales de Psicología/Annals of Psychology*, Vol. 29, No. 3, 2013, pp. 724-33.
- [18] Carrillo, Jesus M., et al. "[The role of positive and negative emotions in the prediction of depression: the principle of addition of emotions in Psychological Behaviorism.](#)" *Clinic and Health*, Vol. 17, No. 3, 2006, pp. 277-95.
- [19] Fredrickson, Barbara L. "[The value of positive emotions: The emerging science of positive psychology is coming to understand why it's good to feel good.](#)" *American scientist*, Vol. 91, No. 4, 2003, pp. 330-35.
- [20] Carbelo, Begona, and Eduardo Jauregui. "[Positive emotions: positive humor.](#)" *Psychologist Papers*, Vol. 27, No. 1, 2006, pp. 18-30.
- [21] Lee Duckworth, A., Tracy A. Steen, and Martin E. Seligman. "[Positive psychology in clinical practice.](#)" *Annual Review of Clinical Psychology*, Vol. 1, 2005, pp. 629-51.
- [22] Humberto Garcia P., et al. "[Concurrent validity of Grau's Experiential Self-Report Transdiagnostic Test Modified for a more Comprehensive Assessment of the Affective Dimension](#)" *International Journal of Medical Science and Clinical Research*, Vol. 10, No. 5, 2022, pp. 629-55.
- [23] García P. H., et al. "II International Scientific Convention of the Central University of Las Villas" *Marta Abreu" de Las Villas*, 2019.
- [24] Hoffmann, Aline, et al. "[Childhood trauma subtypes may influence the pattern of substance use and preferential substance in men with alcohol and/or crack-cocaine addiction.](#)" *Brazilian Journal of Psychiatry*, Vol. 44, 2022, pp. 416-19.
- [25] Martínez-Mota, L., et al. "[Types of violence in childhood that affect cannabis abuse and dependence among adolescents: a systematic review and meta-analysis.](#)" *Addictions*, Vol. 32, No. 1, 2018, pp. 63-76.
- [26] Gonzalez Menendez, R. "[Modalities of humor: neuropsychophysiological mechanisms that support their preventive potential in addictions and value as DRY recreations.](#)" *Havana Psychiatric Hospital*, Vol. 3. No. 1. 2005.
- [27] Clark, Lee A., and David Watson. "[Tripartite model of anxiety and depression: psychometric evidence and taxonomic implications.](#)" *Journal of abnormal psychology*, Vol. 100, No. 3, 1991, pp. 316.

#### APPENDIX


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 have felt them.

You should check only one box per row that 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

Appendix 1 Results through the Grau's Modified Emotional Self report (N=20)

Intensity		Scarcely			Moderately			Intensely			-	
Frequency		0	1	2	0	1	2	0	1	2		T
1	Restless	3	0	0	0	8	0	0	2	7	20	
2	Distrustful	5	4	0	0	1	1	1	1	7	20	
3	Good Mood	2	1	0	0	5	4	0	1	7		20
4	Sad	7	2	1	1	3	1	0	1	4	20	
5	Unmotivated	7	2	1	0	4	0	0	2	4	20	
6	Envious	19	0	0	0	0	1	0	0	0	20	
7	Fearful	11	3	0	0	3	1	0	1	1	20	
8	Insecure	7	0	0	1	3	0	1	4	4	20	
9	Irritable	6	0	1	2	3	1	2	1	4	20	
10	Shy	9	4	1	0	2	1	1	0	2	20	
11	Optimist	4	2	0	2	6	1	0	1	4		20
12	Impulsive	4	0	0	3	2	2	0	2	7	20	
13	Long-suffering	2	3	1	3	2	0	0	1	8	20	
14	Jealous	8	0	2	1	5	0	0	0	4	20	
15	Angry	6	3	3	0	4	0	0	0	4	20	
16	Scorn	12	3	1	0	1	0	1	0	2	20	
17	Resentful	8	2	1	1	4	0	0	0	4	20	
18	Guilty	3	4	0	1	5	4	0	1	2	20	
19	Broken-hearted	9	2	0	1	2	1	0	2	3	20	
20	Ashamed	5	2	0	2	5	0	2	1	3	20	
21	Apathetic	13	1	1	0	2	0	2	0	1	20	
22	Anxious	3	3	0	1	1	1	0	5	6	20	
23	Confused	6	5	0	0	6	0	0	1	2	20	
24	Glad	1	0	1	0	4	3	0	0	11		20
25	Unpleasant emotion that I am not able to define	6	2	1	0	4	2	0	3	2	20	
	Total per columns	158	37	14	15	80	15	7	27	87	440	60
		36%	8.40%	3%	3.40%	18%	3.40%	1.60%	6%	19.70%		
	Value per columns	0	0	0	0	1	2	0	3	4		
0= seldom		1= sometimes	2= very often									


  
 With clinical significance