



# PSYCHOLOGICAL EFFECTS OF CONFINEMENT DUE TO COVID-19 PANDEMIC IN A SAMPLE IN ADDICTION TREATMENT IN SPAIN

## *EFFECTOS PSICOLÓGICOS DEL CONFINAMIENTO POR PANDEMIA DE COVID-19 EN UNA MUESTRA EN TRATAMIENTO DE ADICCIONES EN ESPAÑA*

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**Erika Y. Bedoya Cardona\***

*Facultad de Psicología, Universidad Cooperativa de Colombia, Colombia*

<https://orcid.org/0000-0002-3398-8188>

[erika.bedoyac@campusucc.edu.co](mailto:erika.bedoyac@campusucc.edu.co)

**Gisela Hansen-Rodríguez**

*Asociación DIANOVA, España*

<https://orcid.org/0000-0002-7681-0056>

[gisela.hansen@dianova.es](mailto:gisela.hansen@dianova.es)

**Antonio Molina-Fernández**

*Departamento de Psicología Social, del Trabajo y Diferencial; Facultad de Psicología, Universidad Complutense de*

*Madrid, España*

<https://orcid.org/0000-0002-1448-3301>

[antmolin@uclm.es](mailto:antmolin@uclm.es)

**\*Correspondence to:**

[erika.bedoyac@campusucc.edu.co](mailto:erika.bedoyac@campusucc.edu.co)

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## Abstract

Objectives: Describe, compare and identify the relationship among perceived stress, coping strategies and emotional regulation, the impact of confinement, psychological distress, hopelessness, and suicidality. Method: Online administration of the PSS, COPE, ERQ, IES-R, SCL-90-R, BHS, and Okasha Suicide Scale questionnaires to 35 adults in addiction treatment, 24 men (68.67%) and 11 women (31.43%), aged 24 to 61 years (mean = 42.8; SD = 10.1) selected by non-probabilistic convenience sampling. Results: There are high scores in the strategies aimed at emotional regulation, average scores in passive coping strategies and hopelessness, and low scores in the other variables. There are differences by gender, educational level, group of cohabitants, and type of treatment resource. The first multivariate model includes a positive association of perceived stress with anxiety and treatment in the detoxification unit, and a negative association with phobic anxiety. The second model includes positive associations of the impact of the event with planning, abandonment of efforts, personal growth and hopelessness, and negative relationship with positive reinterpretation. Conclusions: Although confinement has increased addictive behaviors worldwide, receiving psychotherapeutic support is a protective factor in mental health.

## Resumen

Objetivos: Describir, comparar e identificar la relación entre estrés percibido, estrategias de afrontamiento y regulación emocional, impacto del confinamiento, malestar psicológico, desesperanza y suicidalidad. Método: Administración online de los cuestionarios PSS, COPE, ERQ, IES-R, SCL-90-R, BHS y Escala de suicidio de Okasha a 35 adultos en tratamiento de adicciones, 24 hombres (68.67%) y 11 mujeres (31.43%), con edades entre 24 a 61 años (media = 42.8; D.E.= 10.1) seleccionados mediante muestreo no probabilístico por conveniencia. Resultados: Se presentan puntuaciones altas en las estrategias dirigidas a la regulación emocional, puntuaciones medias en estrategias de afrontamiento pasivas y desesperanza, y puntuaciones bajas en las demás variables. Existen diferencias por género, nivel educativo, grupo de convivientes y tipo de recurso de tratamiento. El primer modelo multivariado incluye asociación positiva del estrés percibido con ansiedad y tratamiento en Unidad de desintoxicación, y asociación negativa con ansiedad fóbica. El segundo modelo incluye asociaciones positivas del impacto del evento con planificación, abandono de esfuerzos, crecimiento personal y desesperanza, y relación negativa con reinterpretación positiva. Conclusiones: Aunque el confinamiento ha incrementado las conductas adictivas a nivel mundial, recibir apoyo psicoterapéutico es un factor protector en salud mental.

## Palabras clave

Estrés Percibido, Estrategias de afrontamiento, Regulación emocional, Impacto del Confinamiento, Malestar Psicológico, COVID-19.

## Keywords

Perceived Stress, Coping Strategies, Emotional Regulation, Impact of Confinement, Psychological Distress, COVID-19.

Faced with the current COVID-19 pandemic, governments and entities in charge of protecting public health have taken measures such as confinement to control the increase in infections, however, these measures are taken to protect the health of the citizens, also produce negative effects at a psychological and social level (Horesh & Brown, 2020), such as stress (Polizzi et al., 2020), loneliness (Palgi et al., 2020), inability to maintain or reach social support networks, and failure in the use of coping and emotional regulation strategies (Park et al., 2020). Increased stress levels have been shown to lead to the development of alcohol or other substance abuse disorders and relapse into addiction (Columb et al., 2020; Li et al., 2020). In addition, previous studies have reported that chronic alcohol or drug use produces dysfunctional neuroadaptations in the hypothalamic, adrenocortical, and sympathetic axes, which lead to dysregulation in the cortisol response, and therefore to deficits in emotional regulation to stress, which would explain the increase in the need for consumption in response to stress (Clay & Parker, 2020).

In a crisis such as the current COVID-19 pandemic, people with addictions present a greater socio-sanitary risk and psychosocial vulnerability compared to the general population, since the people with problematic drug/alcohol use can be highly affected by poverty, physical and mental illness, experience difficulty accessing services or aids, among other difficulties associated with the pandemic (Mellis et al., 2021), which can increase the severity of addictive disorders, mostly exacerbated by the lack of positive reinforcers in the environment, activities and social interaction (Marsden et al., 2020), also entailing the risk of overdose or mixture of medications such as methadone (Arya & Gupta, 2020; Fiorillo & Gorwood, 2020), in an attempt to face the difficulty or impossibility of accessing the services of rehabilitation, which also increases the risk of accidental death or suicide (Berardelli et al., 2021; Dubè et al., 2021).

The closure of some care centers for people with addictions or the cutting of funds during the health crisis due to the COVID-19 pandemic (Morris, 2020) has caused the premature discharge of many patients or, failing that, the impossibility of access to rehabilitation services (Murray, 2020), which have increased the risk of relapses and overdoses, a situation that could worsen even more once the confinement measure has been lifted (Arya & Gupta, 2020). This situation represents a scientific and academic challenge (Blanco et al., 2020; Rubin & Wessely, 2020) since understanding how people with addictions respond to emergencies such as the COVID-19 pandemic can help those responsible for formulating public health policies to propose prevention, promotion, and intervention measures (Ornell et al., 2020).

On the other hand, in the incipient literature published to date on addictions and their treatment during the COVID-19 pandemic (González-Roz et al., 2021), there are mainly opinion articles that expose concern through figures on the increase in consumption and difficulties in sustaining rehabilitation services due to social isolation measures, economic cuts, lack of preparation for care in pandemic conditions, and difficulties or inability to access technologies and connectivity by part of the population with addictions (Sixto Costoya et al., 2021). The published studies have been developed mostly in Asian countries, with the general population, health personnel, and university students, which is why the main objective of the present study is to describe the levels of perceived stress, coping strategies and emotional regulation, the impact of confinement as a traumatic event, psychological distress, hopelessness, and suicidality in a sample of Spanish adults in addiction treatment. The second objective is to identify if there are differences in the type of psychological response to confinement according to sociodemographic characteristics and the type of treatment resource. Finally, it seeks to identify the relationship between the variables during the first phase of confinement due to the COVID-19 pandemic.

## Method

### *Design and Participants*

Quantitative, non-experimental, cross-sectional, descriptive, and correlational research. Type of non-probability sampling by convenience, through the use of an online questionnaire sent to approximately 140 adults in addiction treatment of which 35 responded, 24 men (68.67%) and 11 women (31.43%), aged 24 to 61 years (mean = 42.8; SD = 10.1).

### *Instruments*

The Perceived Stress Scale (PSS: Cohen et al., 1983) contains 14 items that assess the perception of stress in unexpected situations during the last month and is scored using a Likert-type scale from 0 (never) to 4 (very often). The total score is obtained by adding scores for each item. Items 4, 5, 6, 7, 9, 10, and 13 have inverted values. The scoring ranges are between 0 and 56. The higher the score, the higher the level of perceived stress. The scale shows adequate internal consistency for the present study, with a Cronbach's alpha of 0.83.

The Coping Orientations to Problems Experienced (COPE: Carver et al., 1989; Crespo & Cruzado, 1997) contains 60 items that evaluate 15 coping strategies (Seeking social support, Turning to religion, Humour, Alcohol-drug use, Planning and active coping, Abandonment of coping efforts, Focus on emotions and vent, Acceptance, Denial, Restraint coping, Concentrating efforts to solve the situation, Personal growth, Positive reinterpretation, Activities distracting from the situation, and Disengagement). It is scored on a 4-point Likert scale (1 = I never do it, 2 = I do it sometimes, 3 = I do it frequently, 4 = I do it many times). It can be applied in a dispositional way when it refers to habitual coping in stressful situations, and in a situational way in response to some stressful experience in the last three months, for the study the latter was used referring to confinement. In the present study, the instrument showed good internal consistency with Cronbach's alpha of 0.91 for the total scale, and for the subscales, it ranged from 0.32 to 0.95.

The Emotion Regulation Questionnaire (ERQ: Gross & John, 2003; Rodríguez-Carvajal et al., 2006) is a 10-item questionnaire that consists of two scales corresponding to two emotional regulation strategies: cognitive reappraisal (6 items) and expressive suppression (4 items), which are classified on a 7-point Likert scale, from totally disagree to totally agree. In the present study, Cronbach's alpha for the total scale was 0.78, and for the subscales, cognitive reevaluation (0.85) and emotional suppression (0.84), showing good internal consistency.

The Impact of Event Scale-Revised (IES-R: Weiss & Marmar, 1997; Báguena et al., 2001) contains 22 items that are scored on a Likert scale from 0 (not at all) to 4 (extremely), designed to evaluate current subjective distress resulting from a traumatic life event. The scale scores are formed for the three subscales, which reflect intrusion (8 items), avoidance (8 items), and hyperarousal (6 items). The maximum score is 88. In the present study, the scale shows high internal consistency with a Cronbach's alpha of 0.93 for the total scale, and the subscales avoidance (0.70), intrusion (0.87), and hyperarousal (0.84).

The Symptom Check-List-90 Revised (SCL-90-R: González de Rivera et al., 1989). Composed of 90 items organized within 10 dimensions (Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, Psychoticism, and Sleep Disorder), and a total scale corresponding to Psychological Distress. It is scored on a Likert scale from 0 to 4 (Not at all, Very little, Little, Quite a lot, Much). The instrument showed good internal consistency in the present study with Cronbach's alphas for the total scale of 0.98, and for the subscales, it ranged from 0.75 to 0.91.

The Beck's Hopelessness Scale (BHS: Beck & Steer, 1988). It is an instrument designed to measure the degree of severity of hopelessness. Its interpretation is as follows: 0-3, normal or asymptomatic range; 4-8, mild; 9-14, moderate; and 15-20 severe. A score greater than 9 has been observed to be a good predictor of eventual suicidal behavior. In the present study, the scale shows adequate internal consistency with a Cronbach's alpha of 0.80.

The Okasha Suicidality Scale (Okasha, Lotaif, & Sadek, 1981; Campo Arias et al., 2019) is a Likert-type scale, made up of 4 items, where the first three explore suicidal ideation (0-9 points), and the fourth item inquiry about suicide attempts. The total scale scoring range is 0-12. The scale shows adequate internal consistency for the present study, with a Cronbach's alpha of 0.89.

### *Procedure*

Once this proposal was approved and a pilot test was carried out, during the months of April to June 2020, a ques-

tionnaire created with Google Forms® was applied, sending a link by email and social networks such as institutional websites, WhatsApp, Instagram, Facebook, etc., to the participants who were outside the residential center, and to those who were inside, the questionnaire was applied at the individual level in the computer rooms.

#### *Ethical considerations*

Study approved by the ethics committee of a private university in Colombia. Informed consent is included in the digital version that contains the sociodemographic questionnaire and other tests, since according to international ethical guidelines for health-related research involving human beings of the Council for International Organizations of Medical Sciences (CIOMS), and the Declaration of Helsinki, this is a risk-free investigation, since the data collection method is carried out only through standardized questionnaires for their respective purposes and are not intended to produce a psychological or psychiatric diagnosis, and therefore cannot requesting the signature of the consent and the acceptance of the participant is sufficient, which in this case was recorded in the first question of the digital questionnaire.

#### *Data Analysis*

No data were missing in any of the questionnaires. Cronbach's alpha was calculated to estimate the reliability of the scales and subscales. Normality tests were carried out to identify the type of distribution of each variable (Shapiro-Wilk), finding that the coping strategies religion, humor, alcohol and/or drug use, abandonment of efforts, hopelessness, all subscales of psychological distress except obsessive-compulsive symptoms, and suicide risk did not present normal distributions; and due to some groups of the categories of sociodemographic variables contained very few people, non-parametric statistics were performed. To compare the differences in the medians between two groups, the Mann-Whitney U test was used, and for more than three groups the Kruskal-Wallis with posthoc pairwise comparisons using the Dunn test with Bonferroni correction was employed. To analyze the association between the variables, the non-existence of multicollinearity was verified through Spearman correlations, and the Variance Inflation Factor (VIF), Linear Regression Models were used, and finally, the normal residual distribution was verified in each model. For all analyzes, p values <0.05 were considered statistically significant. Analysis was performed using STATA 16 software.

## **Results**

The main objective of the present study was to describe the levels of perceived stress, coping strategies and emotional regulation, the impact of confinement as a traumatic event, psychological distress, hopelessness, and suicidality in a sample of Spanish adults in addiction treatment. The results show that in general, the sample presents high scores in the coping strategies: acceptance and distraction activities. Medium-high scores in social support, religion, planning, denial, restraint coping, effort to resolve, personal growth, positive reinterpretation, and disengagement; in the cognitive reappraisal and expressive suppression strategies of emotional regulation; and in hopelessness. Medium scores in focus on emotions and vent. Medium-low scores in the coping strategies humour, alcohol or drug use, and abandonment of efforts; on the total scale of the impact of the event, and on intrusion and avoidance subscales; on the obsessive-compulsive symptoms subscale. The rest of the variables had low scores (Table 1). According to the cut-off point of 33 established by the authors of the IES-R scale (impact of the event) to determine the risk of post-traumatic stress disorder (PTSD), in the present study 19 participants (54.71%) scored above this. On the other hand, although the suicide scale does not have a cut-off point, any score greater than 0 could be considered risky, and in the present study, 45.71% (n = 16) present at least suicidal ideation.

Table 1. Descriptive statistics of the psychological scales

Variable	Scale/Subscales	Minimum	Maximum	Mean	Standard Deviation	
Perceived Stress		8	46	25.74	8.9	
	Seeking social support	10	30	20	4.6	
	Turning to religion	4	15	6.8	3.6	
	Humour	4	16	6.34	3.4	
	Alcohol-drug use	4	16	6.82	4.2	
Coping Strategies	Planning and active coping	7	23	13.4	3.4	
	Abandonment of coping efforts	3	10	4.77	1.9	
	Focus on emotions and vent	4	16	8.45	2.8	
	Acceptance	5	16	11.94	2.7	
	Denial	4	12	7.37	2.2	
	Restraint coping	4	13	8.74	2.6	
	Concentrating efforts to solve the situation	4	13	8.54	2.4	
	Personal growth	2	8	5.68	1.3	
	Positive reinterpretation	5	12	7.74	2.0	
	Activities distracting from the situation	4	11	7.91	1.7	
	Disengagement	3	10	6.02	1.9	
	Emotional Regulation	Cognitive reappraisal	15	42	28.71	8.2
		Expressive suppression	4	28	15.22	6.9
Impact of the Event	Intrusion	1	31	12.08	7.2	
	Avoidance	4	29	13.11	5.7	
	Hyperarousal	0	24	8.2	5.8	
	Total Impact of event	7	84	33.4	17.5	
	Somatization	0	38	9.2	9.7	
	Obsessive-Compulsive	0	33	12.08	8.8	
	Interpersonal Sensitivity	0	32	7.57	7.8	
Psychological Distress	Depression	0	43	14.14	11.5	
	Anxiety	0	33	9.17	7.8	
	Hostility	0	19	3.45	4.4	
	Phobic anxiety	0	19	4.57	5.0	
	Paranoid Ideation	0	19	4.74	5.2	
	Psychoticism	0	31	7.62	7.5	
	Sleep disorder	0	12	3.62	3.7	
	Total Psychological distress	0	288	79.45	65.7	
Hopelessness		7	18	11.25	2.2	
Suicidality		0	12	2.31	3.4	

The second objective of the present study was to identify if there are differences in the type of psychological response to confinement according to sociodemographic characteristics and the type of treatment resource. To make comparisons of medians by the sociodemographic variables, the following categories were created: Age = 24 to 42 years (n = 18, 51.43%), and 43 to 61 years (n = 17, 48.57%); Occupation = Study or Work (n = 5, 14.29%), Unemployed (n = 20, 57.14%), Pensioner due to Sickness (n = 10, 28.57%); Educational level, cohabitants, and type of treatment resource were also categorized, however, statistically significant differences were only found in the variables described below:

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By gender, was found a significant difference ( $p < .01$ ) in the Expressive Suppression emotional regulation strategy, which is higher in men since they had a median of 19 (IQR = 8.5) and women of 10 (IQR = 7). According to the educational level, in Table 2 it is observed that people with high school education present higher medians in the coping strategy focus on emotions and vent, and in hopelessness, while professionals present higher medians in the emotional regulation strategy cognitive reevaluation.

Table 2. Comparison of medians (IQR) of the coping strategy focus on emotions and vent, the cognitive reappraisal emotional regulation strategy, and hopelessness by educational level

	N (%)	Focus on emotions and vent	Cognitive Reappraisal	Hopelessness
Total Sample	35 (100)	8 (4)	31 (15)	11 (2)
High school	18 (51.43)	9.5 (3)	23 (14)	11 (2)
Professional	17 (48.57)	7 (4)	35 (4)	10 (2)
Total Difference <sup>a</sup>		**	***	***

Note. <sup>a</sup> Mann-Whitney U test; \*\*\* $p < .001$ . \*\* $p < .01$

Regarding the differences by the group of cohabitants during confinement, in Table 3 it can be observed that those who live alone present a higher median of the acceptance strategy compared to those who live with their family or in the residential center. On the other hand, those who live in the residential center, and with their relatives present higher medians of the impact of confinement and avoidance than those who live alone.

Table 3. Comparison of medians (IQR) of the acceptance coping strategy, the total impact of the event scale, and avoidance subscale by group of cohabitants during confinement.

	N (%)	Acceptance	Impact of the event	Avoidance
Total Sample	35 (100)	12 (4)	34 (28)	13 (9)
1 Family	10 (28.57)	12.5 (2)	25.5 (30)	9 (11)
2 Live Alone	3 (8.57)	15 (3)	18 (12)	7 (6)
3 Residential Center	22 (62.86)	11.5 (4)	38.5 (25)	16 (7)
Total Difference <sup>a</sup>		*	N.D.	**
Differences among groups <sup>b</sup>		2:3*	2:3*	2:3**

Note. <sup>a</sup> Kruskal Wallis; <sup>b</sup> Dunntest with Bonferroni correction; N.D. = No Differences; \*\* $p < .01$ . \* $p < .05$ .

According to the type of treatment resource, people in the detoxification unit have a higher median in the alcohol-drug use coping strategy compared to those in the therapeutic community and on the reinsertion flat. On the other hand, those who live at home and received telematics monitoring, and those who are in a detoxification unit present higher medians of the expressive suppression emotional regulation strategy (Table 4).

Table 4. Comparison of medians (IQR) of the alcohol and/or drug use coping strategy and the expressive suppression emotional regulation strategy by type of treatment resource

	N (%)	Alcohol-drug use	Expressive Suppression
Total Sample	35 (100)	4 (7)	16 (11)
1 Therapeutic Community	22 (62.86)	4 (2)	13 (10)
2 Reinsertion Flat	5 (14.29)	4 (0)	14 (16)
3 Detoxification Unit	5 (14.29)	12 (2)	20 (3)
4 Home with telematics monitoring	3 (8.57)	4 (8)	26 (9)
Total Difference <sup>a</sup>		**	*
Differences among groups <sup>b</sup>		1:3** 2:3***	N.D.

Note. <sup>a</sup> Kruskal Wallis; <sup>b</sup> Dunntest with Bonferroni correction; N.D. = No Differences; \*\*\*p < .001. \*\*p < .01. \*p < .05.

The third objective of the present study was to identify the relationship between the variables during the first phase of confinement due to the COVID-19 pandemic. Before carrying out the linear regression models, it was verified that there was no multicollinearity between the correlated variables using the variance inflation factor (VIF). To analyze the association between perceived stress and the impact of the event with the other variables, univariate and multivariate models were performed using the normal distribution of the residuals and the non-collinearity between the variables for the definition of the goodness of fit. The first of the most functional multivariate model with an  $R^2 = .55$ , includes a positive and significant association (increase) of the perceived stress with anxiety and the detoxification unit type of treatment resource, while the only negative (decreases) and significantly associated variable is phobic anxiety (see Table 5). The second multivariate model with an  $R^2 = .57$ , includes significant positive associations (increase) of the impact of the event with the coping strategies planning, abandonment of efforts, personal growth, and hopelessness, and a negative relationship (decreases) with the positive reinterpretation coping strategy (Table 6).

Table 5. Multivariate Linear Regression Model of perceived stress with anxiety, phobic anxiety, and type of treatment resource (Ref. Therapeutic Community)

Perceived Stress	Coefficient	Standard Error	T	P> t	95% CI	
					LL	UL
Anxiety	.96	.22	4.31	.000	.50	1.42
Phobic Anxiety	-.76	.35	-2.13	.042	-1.49	-.03
Reinsertion Flat	-1.5	3.2	-.47	.641	-8.12	5.0
Detoxification Unit	8.5	3.4	2.47	.020	1.46	15.70
Home with telematics monitoring	4.0	4.0	1.00	.324	-4.18	12.25
_cons	19.01	1.90	9.99	.000	15.11	22.90

Note.  $R^2 = .55$ ; p < .05; CI = confidence interval; LL = lower limit; UL = upper limit.

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Table 6. *Multivariate Linear Regression Model of Impact of the event (Confinement) with coping strategies and hopelessness*

Impact of the Event	Coefficient	Standard Error	T	P> t	95% CI	
					LL	UL
Planning and active coping	2.5	.86	2.95	.006	.78	4.32
Abandonment of coping efforts	5.5	1.3	4.24	.000	2.85	8.18
Personal growth	4.7	1.9	2.40	.023	.68	8.70
Positive reinterpretation	-5.9	1.6	-3.59	.001	-9.32	-2.55
Hopelessness	3.3	1.0	3.24	.003	1.23	5.46
_cons	-45.5	18.5	-2.47	.020	-83.35	-7.76

Note.  $R^2 = .57$ ;  $p < .05$ ; CI = confidence interval; LL = lower limit; UL = upper limit.

## Discussion

The main objective of the present study was to describe the variables, finding that the group, in general, presents high scores in coping strategies aimed at regulating emotional impact (Gross & Thompson, 2007), medium scores in passive coping strategies (Carver et al., 1989), and hopelessness. On the other hand, there were low scores in perceived stress, the impact of the event (confinement), psychological distress, and suicidality, which indicates that although the COVID-19 pandemic could be considered a massive, complex, and multiple traumatic event (Kira et al., 2020), it will not necessarily affect all people in the same way, because according to the Diagnostic and Statistical Manual of Mental Disorders -DSM-V (APA, 2014), trauma is defined as an emotional response to a real or imminent event of injury or death of oneself or of those close to them, such as an accident, a rape or a natural disaster, which does not strictly conform to what was experienced by the population of the present study during the initial phase of confinement in Spain.

Similarly, the results of the present study indicate that, although the addiction treatment population has experienced stress and psychological distress during the COVID-19 pandemic, the confinement is not necessarily a traumatic event that can lead to a PTSD, such as reported in a study with the general population in New Zealand (Sibley et al., 2020), where they state that the initial stages of confinement showed minimal impact on physical and mental health, except for a moderate increase in stress in some participants. As in the study by Makarowski et al. (2020), where it was found that the pandemic did not lead to an increase in perceived stress, while a moderate use of planning was proven as an effective strategy to reduce stress. This result is contrary to that reported by Bedoya et al. (2021), where, as in the present study, the planning strategy has influenced the increase in the impact of the event.

Although the suicide scale does not have a cut-off point, any score greater than 0 could be considered risky, in the present study there are low scores and almost half of participants have at least suicidal ideation, this result is supported by previous studies that have found that during the COVID-19 pandemic, people with psychological disorders have worsened their condition, which is associated with a higher risk of suicide (Gobbi et al., 2020; Gunnell et al., 2020; Plomecka et al., 2020). Furthermore, as stated by Sheffler et al. (2021) in their interpersonal theory of suicide, confinement and pandemic have increased social isolation, the conviction of not being necessary or useful, and the exposure to suffering from losses and deaths.

Regarding the second objective of the study on the differences according to some sociodemographic characteristics, some results are similar to those reported in a multicenter study with the general population and university students in 5 countries (Bedoya et al., 2021). In the case in which men present higher medians than women in the expressive suppression emotional regulation strategy, it must be taken into account that this strategy consists of inhibiting the expressive behavior of the ongoing emotions to control behavioral responses that come from negative emotions, but could also affect the modulation of positive emotional expressions (Gross, 1998), being emotional modulation one of the main intervention aspects in addictive disorders in the 20th century (Ruíz & Pedrero, 2014).

Likewise, concerning the scores that indicate risk of PTSD in the present study, it is found that in the drug-dependent population the presence of this is very common, but differently in men and women in treatment, since in the case of men, the risk of a PTSD is usually before the addictive behavior, assuming it as one of the triggers of the addiction; while for women, it is the addiction itself that supposes a trauma, both the experience of the dependence itself and the consequences of it (Najavits, 2007).

On the other hand, the fact that people with high school education presented higher medians in the focus on emotions and vent coping strategy and in hopelessness, while professional people presented higher medians in the cognitive reappraisal strategy of emotional regulation, the literature reports that people with a lower educational level tend to make greater use of unreliable information media and are more influenced by conspiracy theories (Hossain et al., 2020; Martínez-Taboas, 2020).

Regarding the result according to which those who live alone present greater acceptance, less avoidance, and less impact of the event compared to those who live in the residential center or with their relatives, it has been found that during the COVID-19 pandemic, being close to the family or other people, it can strengthen relationships, but it can also create coexistence problems (Murray, 2020), because some people with addiction can become irritable due to lack of freedom, medications or other containment factors, in addition, aspects such as confined spaces, difficulties in terms of economic income, job losses, debt, domestic violence, etc., aggravate stress during confinement (De Sousa et al., 2020). On the other hand, the fact that the participants who lived in the residential center during the confinement period presented lower scores in acceptance and higher scores in avoidance and impact of the event, could be explained as argued by Li and Zhang (2020) when exposing that institutionalized people with mental illnesses had to remain isolated or with more difficulties to visit or be visited by their relatives and friends to avoid contagion, and also remain without communication because they were not allowed access to mobile phones or other devices or social networks (Gobbi et al., 2020; Inchausti et al., 2020).

Although telematics psychological treatments are considered ideal in situations such as the current COVID-19 pandemic (Roncero et al., 2020), where some face-to-face services were not possible due to social distancing and/or confinement measures, the use of technologies and telecommunications allows virtual therapeutic meetings and patient follow-up (Fisher et al., 2020; Murray, 2020), equally effective as face-to-face care (Cregg & Cheavens, 2020; Hendriks et al., 2020), however, many centers do not have the equipment or the necessary training to provide them, and many users also do not have the means to access these, with which they may feel less supported than those who attend face-to-face services (Columb et al., 2020), becoming even more isolated of what they are already found due to the global critical situation, a situation that can be evidenced in the present study from the result in which it is shown that those who live at home with telematic monitoring and those who are in the detoxification unit, who do not receive psychotherapeutic support, present higher levels of stress, anxiety, use of expressive suppression and drug/alcohol use coping strategies. This result could also support the position of Koydemir et al. (2020), who argue that face-to-face interventions are more effective than technologically mediated ones.

With regard to the third objective about the relationship between the variables, the results of the present study evidenced in the model in which the coping strategies such as planning, abandonment of efforts, personal growth, and positive reinterpretation are related to an increase in the impact of the event, is relatively contrary to that expected since from the conceptual point of view active strategies such as behavioral activation predict psychological well-being (Dekel et al., 2015), produce positive emotions necessary for resilience and recovery from traumatic events (Polizzi et al., 2020). In the same way, the coping strategy based on acceptance implies a different relationship with the stressor from a conscious, tolerant and planned point of view, with which one does not seek to be distracted or change the situation, but rather to allow oneself to feel fear, doubts or other emotions that the situation elicits fluidly (Bonanno et al., 2008). In addition, experiencing positive emotions in the face of an adverse situation plays a crucial role in adaptive coping and resilience, and although most research tends to report the negative impact of the pandemic, the present study, like that of Brouzos et al. (2020), showed that when faced with a traumatic event, some people may experience personal growth and changes in the way they relate to themselves, to others and the world.

## Conclusions

Although the literature reports that the COVID-19 pandemic and confinement have increased addictive behaviors and drug and alcohol consumption in a large part of the world population (Alexander et al., 2020; Avena et al., 2021; Becker & Fiellin, 2020; Volkow, 2020), and that given the critical situation, some services for people with addictions have had to be closed or interrupted, in addition to cuts to funds for this cause (Morris, 2020; Murray, 2020), it has also been shown that receiving some type of psychotherapeutic support or psychological treatment (even telematically) during the health crisis caused by COVID-19 is a protective factor for mental health in general (Brouzos et al., 2021; Roncero et al., 2020), and especially in people with diagnoses of addiction or other mental illnesses (Blanco et al., 2020; Gobbi et al., 2020).

Notwithstanding the present study has the advantage of being one of the first in Spain to evaluate this type of variables in the population undergoing treatment for addictions, and that this evaluation was carried out during the period in which they were in full confinement, it has some limitations that must be taken into account when interpreting the results. At the methodological level, the type of non-probabilistic sampling and the small sample size does not allow reaching representativeness of the population, which makes it difficult to generalize the findings. Another fundamental aspect to take into account is that the evaluation of the variables of the present study was carried out at the individual and not collective level, which is valuable in that it allows identifying individual differences, especially when proposing intervention plans, however, in a situation of great magnitude such as the current pandemic requires the implementation of collective actions. Finally, as it is a cross-sectional and correlational study, causality cannot be inferred, therefore, longitudinal studies are required to evaluate the evolution of mental health in people with addictions not only during confinement but also after it, to know the consequences from a psychosocial point of view.

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