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SOCIO-EMOTIONAL STRENGTHS AGAINST PSYCHOPATHOLOGY AND SUICIDAL IDEATION IN FEAR OF COVID-19

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Abstract

Coronavirus disease (COVID-19) has caused a global health crisis. It also leads to different types of psychosocial problems in society as a result of preventive health measures and the disease itself. Among others, psychopathological symptoms and suicide behaviors have increased. The PsicorecurSOS COVID-19 online protocol was designed. At baseline, 1,020 Spanish adults were assessed, during confinement, for sociodemographics, fear of COVID-19, anxious-depressive symptoms, covitality, and suicidal ideation. Reliability, descriptive, and frequency analyses were carried out, and the computer tool SPSS PROCESS was used to carry out a conditional process analysis (model 59). A total of 595 participants were included (58.30% response rate from baseline; mean age = 37.18 [$SD = 13.30$]; 72.44% female). Regarding suicidal ideation, 12% responded differently to “never,” 19.3% exceeded the cutoff point on the anxiety scale, and 24% on the depression scale. Moderate mediation analysis explained 27% of the variance in suicidal ideation. In addition, the indirect effect of moderate mediation was significant ($b = -.003$, $SE = .002$ with the presence of covitality; and $b = .01$, $SE = .003$ absence of covitality). Sex and age did not influence the overall outcome of the model. The data from this study can serve as a starting point for generating social and health treatment initiatives based on self-examination of anxiety-depressive symptoms and increasing socio-emotional skills in order to prevent and alleviate the psychosocial effects of the pandemic.

Keywords: suicidal ideation, anxious-depressive symptoms, covitality, fear of COVID-19.

Highlights

- PSICORECURSOS COVID-19 protocol is a self-assessment of strengths to cope with COVID-19.
- During COVID-19 confinement, the prevalence of suicidal ideation, anxiety and depression symptoms was 12, 24, and 19.3%.
- Fear of COVID-19, anxiety, depression, and socio-emotional skills explained the 27% of risk of suicidal ideation.
- Elevated fear of COVID-19 and anxious-depressive symptoms, plus low social-emotional skills predict suicidal ideation.
- Socio-emotional strengths acts as a robust buffer against the impact of psychopathology on suicide.

Conflict of interest

Authors declare that there is no conflict of interest between the authors of the article.

1. Introduction

Since early 2020, coronavirus disease (COVID-19) has triggered a global health crisis, and in April, the World Health Organization (WHO) declared it a pandemic (WHO, 2020). Since then, this disease has already killed at least 578,319 people worldwide, according to official data collected by the European Centre for Disease Prevention and Control (2020). It is also leading to different types of psychosocial problems in society as a result of preventive health measures and the disease itself.

During the first months of the pandemic, Spain was one of the countries most affected in terms of the number of people affected and deaths: 285,430 cases of coronavirus diagnosed by PCR (polymerase chain reaction) technique and 28,443 deaths as of July 30, according to the Spanish Ministry of Health. Due to this situation, the government decreed a “state of alarm” by adopting forced confinement measures on March 14 (Ministry of the Presidency, Relations with the Courts and Democratic Memory, 2020), which lasted until the beginning of May, when a four-phase de-escalation began, which lasted until June 21, when the whole country returned to the so-called “new normality.” This new normality meant the end of most restrictions on mobility, seating capacity, etc., with the exception of the measures included in the laws and regulations defining the new normality, such as the use of masks in public places and the promotion of teleworking as well as better early detection in retirement homes.

Changes can occur in one’s psychological status during health emergencies, which can have consequences at the emotional and cognitive levels (Acherman et al., 2009; Mortensen, Becker, Ackerman, Neuberg & Kenrick, 2010; Schaller & Murray, 2008). Although the current pandemic situation is unprecedented, some studies have already reported on the psychological impact that preventive measures being implemented produce in the general population—specifically, forced quarantine.

Fear, understood as an emotionally unpleasant state triggered by the perception of threatening stimuli (de Hoog et al., 2008), is a relevant factor in the pandemic. In this type of health crisis, people may have an excessive fear of the disease or related factors. This fear has been associated with suicide (Dsouza, Quadros, Hyderabadwala & Mamun, 2020; Goyal, Chauhan, Chhikara, Gupta & Singh, 2020; Mamun & Griffiths, 2020) and symptoms of anxiety and depression (e.g., Fitzpatrick, Harris & Dawve, 2020; Harper, Satchell, Fido & Latzman, 2020; Satici et al., 2020).

Through a review of the scientific literature, Brooks et al. (2020) studied the effect of quarantine on people from ten different countries who had respiratory diseases. They found that these people presented symptoms related to psychological distress, depression, and post-traumatic stress. Likewise, during the pandemic, social isolation and increased feelings of loneliness were the main adverse consequences of the measures taken to cope with the pandemic (Cowan, 2020). According to previous literature, both factors are strongly associated with anxiety, depression, self-harm, and suicide attempts throughout life (Elovainio et al., 2017; Mathews et al., 2019).

Regarding the presence of anxiety and depression symptoms, a meta-analysis by Pappa et al. (2020) has reported on the COVID-19 health crisis's impact on mental health. The 13 works published up to April of this year indicated the prevalence of anxiety and depression as 23.2% and 22.8%, respectively. Recently, a study by González-Sanguino et al. (2020) has provided information about the first three weeks of the state of alarm with a sample of 3,480 Spanish adults; in this study, 21.6 % of the sample presented symptoms of anxiety, and 18.7 % depression. Similar results were also reported in a study by Ahmed et al. (2020) among Chinese youths, where 18.9% of their sample showed medium or severe anxiety or depression.

This increase in anxious-depressive symptoms can cause serious repercussions. In previous studies, the occurrence of anxiety and depressive disorders, or the presence of symptoms, has been associated with suicidal behavior (Gili et al., 2019; Gilmour, 2016; Sareen et al., 2005; Soto-Sanz et al., 2019).

Likewise, concerning the psychological states of people in confinement, a study of 17,000 users of a Chinese social network found that messages about depression and anxiety increased, and those expressing positive emotions decreased (Li, Wang, Xue, Zhao & Zhu, 2020). Emotional well-being in relation to mental health problems is crucial because it is related to positive adaptation and coping, which, in turn, reduces risk factors for such problems (Dienel & Tay, 2015; Weare, 2015). Regarding the protective factor of emotional expression and regulation, Fernandez-Berrocal (2020) reported a negative association between emotional regulation and psychological disorders' symptomatology. In turn, it has been found that people with higher emotional intelligence (EI) scores, whether measured using the skill model (Mayer & Salovey, 1997) or mixed model (Bar-On, 1997; Goleman, 1995; Petrides, Pita & Kokkinaki, 2007), present less suicidal behavior (Domínguez-García & Fernández-Berrocal, 2018; Korkmaz et al., 2020).

In the positive psychology framework, the covitality model has recently emerged, which is understood as the "synergistic effect of positive mental health resulting from the interaction between multiple positive psychological elements" (Renshaw et al., 2014, p. 14). These elements include belief in self, belief in others, emotional competence, and engaged living (Furlong, You, Renshaw, O'Malley & Rebelez, 2013). The role of covitality is being studied in different countries among children, adolescents, youth, and adults.

Data analyzed in a study in Spain on young university students reflected that the absence of covitality explained 23% of the presence of internalizing symptoms (anxiety and depression) and externalizing symptoms (behavioral problems). In addition, vitality was shown to moderate the relationship between suicidal behaviors (ideation and attempt) and internalizing symptoms, explaining 15% of the variance in suicidal behaviors (Soto-Sanz et al., 2019).

Therefore, fear of COVID-19, symptoms of anxiety and depression, and aspects of well-being seem to be related. For example, Satıcı et al. (2020b) showed a statistically significant and negative relationship between fear of COVID-19 and psychological well-being. Thus, COVID-19 and confinement increase fear, and fear can lead to symptoms of anxiety and depression and, consequently, suicidal ideation. However, the protective role of psychological strength is unknown, as some people with fear of COVID-19 and anxious-depressive symptoms develop ideation, while others do not.

In short, in a public health emergency, it is especially important to study psychological impact on the population in order to develop strategies to reduce symptoms during health crises (Wang et al., 2020).

Therefore, this study aimed to study the prevalence of people who have presented suicidal ideation during confinement in Spain, its relationship with anxiety-depressive symptomatology, and the role of social-emotional competencies in this relationship.

2. Material and Methods

2.1. Study design

This study is part of a larger longitudinal survey, although the data below correspond to the first wave of cross-sectional data collection. This work is part of the Continuity Plan of the Miguel Hernández University of Elche to study and help the university community through a coordinated action plan in relation to possible

psychological problems caused by the COVID-19 health crisis (further information at <https://pdc.umh.es/>).

For this purpose, the "PsicorecurSOS COVID-19" protocol was designed. This protocol aims to self-assess personal resources to cope with the psychological impact of the current health crisis. The survey was carried out using the online data collection platform DetectaWeb (Piqueras et al., 2017). Participants completed the survey online and, at the end, received a report with their personalized results along with recommendations and suggestions for the improvement of personal resources and the reduction of the health crisis's impact.

The study was approved by the ethics committee of Miguel Hernández University (Reference: DPS.JPR.01.20). To encourage participation, the university, the Spanish Network of Healthy Universities (REUS), San Antonio de Murcia Catholic University, and the University of Alicante, disseminated information about the study through their websites and social networks, inviting the entire university community to participate. Prior to completing the protocol, participants had to agree to their participation and provide informed consent. The data provided in this study correspond with the launch of the protocol (April 21, 2020) and the end of the state of alert in Spain (July 21, 2020).

2.2 Participants

From an initial 1,020 people who agreed to participate, we only included the data of those who provided informed consent to their data being used in the study, completed the entire protocol, and chose the option "man" or "woman" in the question regarding sex. Therefore, this study analyzed data from 595 participants (58.30%), who were mostly women (72.44%).

The final sample mainly included working adults and students (68.90%) from Miguel Hernández University, whose ages ranged from 18 to 83 years ($M = 37.18$; $SD = 13.20$).

2.3 Variables

Suicidal ideation

Item 35 of the Anxiety and Depression Disorder Symptom Scale (ESTAD; Sandin et al., 2018) was used to evaluate participants' suicidal ideation. The ESTAD is a self-

report scale based on the DSM-5. It assesses seven dimensions of emotional disorder symptoms (agoraphobia, panic disorder, generalized anxiety disorder, social phobia, anxiety disorder, major depressive disorder, and obsessive-compulsive disorder). The item on suicide ideation asks whether a respondent had thought, "I have had thoughts of taking my life lately." On a 5-point Likert scale ranging from 0 (never) to 4 (many times), participants indicated how often this thought occurred since the beginning of the health crisis and confinement.

Anxious-depressive symptomatology

Through the four items of the Brief Patient Health Questionnaire (PHQ-4; Kroenke, Spitzer & Williams, 2001), anxious-depressive symptomatology was evaluated. This instrument is an abbreviated version of the PHQ-9 (Kroenke et al., 2001) and was used to determine the frequency during the last two weeks (from 0, not at all to 3, nearly every day) of the presence of these depression (PHQ-2) and anxiety (GAD-2) symptoms. Previous studies have shown this instrument to have high sensitivity, with cutoff points of three for each test (Muñoz-Navarro et al., 2017), and good psychometric properties (Cano-Vindel et al., 2018), with an alpha value of .83 and omega value of .90. This value is similar to that obtained in our study ($\alpha = .87$).

Social-emotional skills

The Social Emotional Health Survey (SEHS; Furlong, You, Shishim & Dowdy 2017) is used to study the presence of personal strengths or socio-emotional competencies and has two versions: one for university students (SEHS-HE), and one for the general population (SEHS-GP) by Piqueras et al. (2020). Both versions are identical, except for the questions referring to a university setting that in the SEHS-GP refer to a work setting (e.g., SEHS-HE: "I have a friend at my college who cares about me." versus SEHS-GP: "I have a friend at my job who cares about me."). This instrument is a multidimensional measure of covitality, which refers to the coexistence of positive intrapersonal skills and interpersonal resources, the combination of which increases the probability a person will have positive results in their development and current psychological well-being. This is achieved by adding the results obtained in terms of belief in oneself (subscales: self-efficacy, persistence, self-awareness), belief in others (subscales: family support, institutional support, peer support), emotional competence (subscales: cognitive reevaluation, empathy, self-regulation), and committed life

(subscales: gratitude, zest, optimism). This measure is obtained through 36 items with a response scale from 1, “very uncharacteristic of me,” to 6, “very characteristic” (for more information www.covitalityucsb.info). Internal consistency analyses showed a Cronbach's alpha value of .94, which was equal to that obtained by Furlong, et al. (2017). We also obtained a .96 McDonald's value.

Fear of COVID-19

To evaluate fear of COVID-19 present in the participants due to the health crisis, the recently published Spanish version (Piqueras et al., 2020) of the Fear of COVID-19 Scale (FCV-19S; Ahorsu et al., 2020) was used. Through this instrument, participants had to indicate on a 5-point Likert scale (from 1 to 5) the degree of agreement or disagreement in relation to seven items that indicated fear of COVID-19, where the higher the score, the greater the fear of COVID-19. The FCV-19S has shown good internal consistency in previous studies, with a reported Cronbach alpha coefficient of 0.82 to 0.87 (Ahorsu et al., 2020). The Spanish adaptation has also shown evidence of reliability (Cronbach's $\alpha = .86$, McDonald's $\omega = .86$). These values are similar to those obtained in our study ($\alpha = .84$, $\omega = .89$).

2.4. Statistical analysis

SPSS software (Statistical Package for the Social Sciences, version 25) for Apple (IBM., 2016) was used to analyze the collected data.

First, to determine the prevalence of suicidal ideation, fear of COVID-19, and anxiety-depressive symptoms, as well as the disposition of socio-emotional competencies or covitality, descriptive analyses (M and DT) were carried out and frequencies were counted. Consequently, the mean scores of the variables (Student's t -test for independent samples and one-factor ANOVA) were compared according to sex and age, providing effect sizes using Cohen's d (Cohen, 1988). Second, in relation to the scales, to assess internal consistency, Cronbach's alpha and McDonald's omega values were calculated (Cronbach, 1951; McDonald, 1999). An analysis of internal consistency was performed according to the reference values of George and Mallery (2003), in which a Cronbach's alpha is considered questionable if between 0.61 and 0.70, acceptable if between 0.71 and 0.80, good if between 0.81 and 0.90, and excellent if above 0.90. Bivariate correlations were performed to examine the association between the study variables. Third, hierarchical multiple regression models were used to determine the predictive capacity of the different variables on suicidal ideation. Fourth,

the computer tool SPSS PROCESS (Hayes, 2018) was used to carry out an analysis of conditional processes (model 59). Figure 1 shows the conceptual diagram of this analysis, where regression coefficients were estimated using the bootstrapping procedure (10,000 resamples) resulting in a 95% corrected bias and direct and indirect effect confidence intervals, where they are considered significant if there is no zero between the upper and lower confidence intervals (CI). A value less than 0.05 was considered significant.

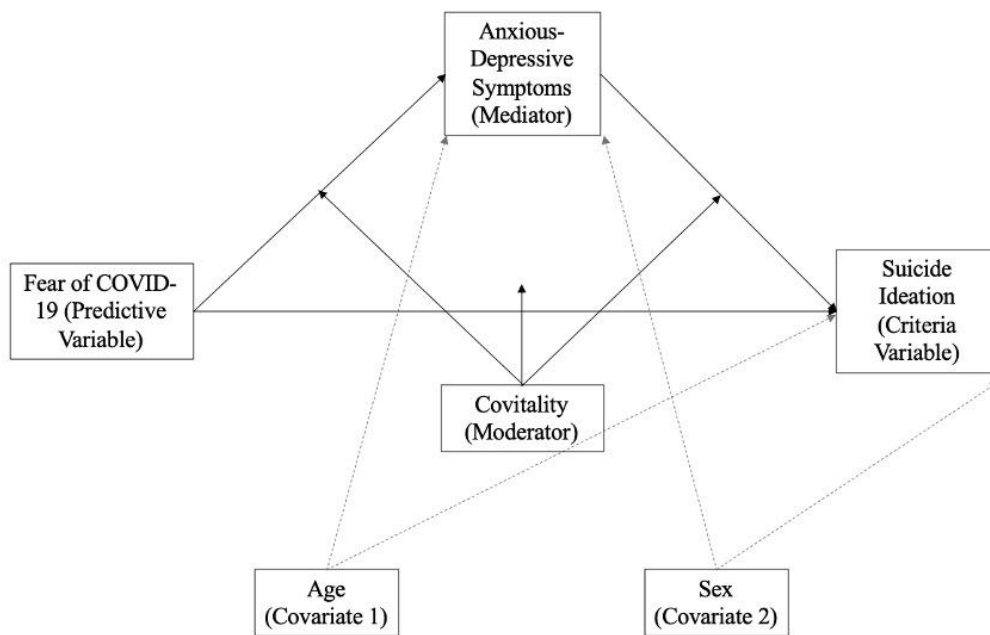


Fig.1. Conceptual and statistical diagram of Model 59.

3. Results

A total of 24.9% of the students had MDE-GAD at the 12-month follow-up. Table 1 shows the scores obtained by the participants. Regarding suicidal ideation, 12% responded differently to “never,” 19.3% exceeded the cutoff point on the anxiety scale, and 24% on the depression scale.

As shown in Table 1, there were statistically significant differences with medium effect sizes in the scores obtained for anxiety-depressive symptoms and fear of COVID-19, being higher in women.

Table 1. Descriptive statistics and sex differences.

	Total (N=595)			Men (N=164)		Women (N=431)		<i>d</i>
	<i>Range of score</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Fear of Covid	7-35	15.34	5.52	13.79	4.88	15.93	5.63	0.40***
Anxious-Depressive Symptoms	0-12	3.26	2.86	2.48	2.62	3.53	2.87	0.38***
Covitality	36-216	168.47	25.50	168.44	26.46	168.82	24.507	.01
Suicide Ideation	0-4	0.20	0.621	0.18	0.616	0.20	0.60	.03*

Note: * $p < .05$; *** $p < .001$; *M* = Mean; *SD* = Statistical Deviation; *d* = Cohen's *d* effect size

Table 2 shows the correlations with the other variables. Age correlated with suicidal ideation, covitality, and anxious-depressive symptoms.

Table 2. Bivariate correlations among study variables.

	1	2	3	4	5
1. Age	1				
2. Fear of Covid	.49	1			
3. Anxious-Depressive Symptoms	-.33**	.32***	1		
4. Covitality	.21**	-.10***	-.47**	1	
5. Suicide Ideation	-.15*	.02	.35**	-.41**	1

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; Gender was coded 0 = male, 1 = female

The correlations reflect differences according to age, being statistically significant and negative between anxiety-depressive symptomatology and suicidal ideation, and positive with covitality. Therefore, due to the differences between the scores in the different groups, they were included as covariates in the moderate mediation model to control for effects.

To explore the possibility that fear of COVID-10 was related to suicidal ideation mediated by the presence of anxiety-depressive symptoms and moderated by covitality, a moderate mediation model was constructed, which included age and sex as covariates.

As can be seen in Figure 2, this moderate mediation analysis showed that the participants who presented higher scores in fear of COVID-19, presence of anxiety-depressive symptoms, and lower scores in covitality, presented a higher risk of reporting suicidal ideation, explaining 27% of the variance in suicidal ideation. In addition, the indirect effect of moderate mediation was significant ($b = -.003$, $SE = .002$ with the presence of covitality and $b = .01$; $SE = .003$ absence of covitality). Also, sex and age did not influence the overall outcome of the model.

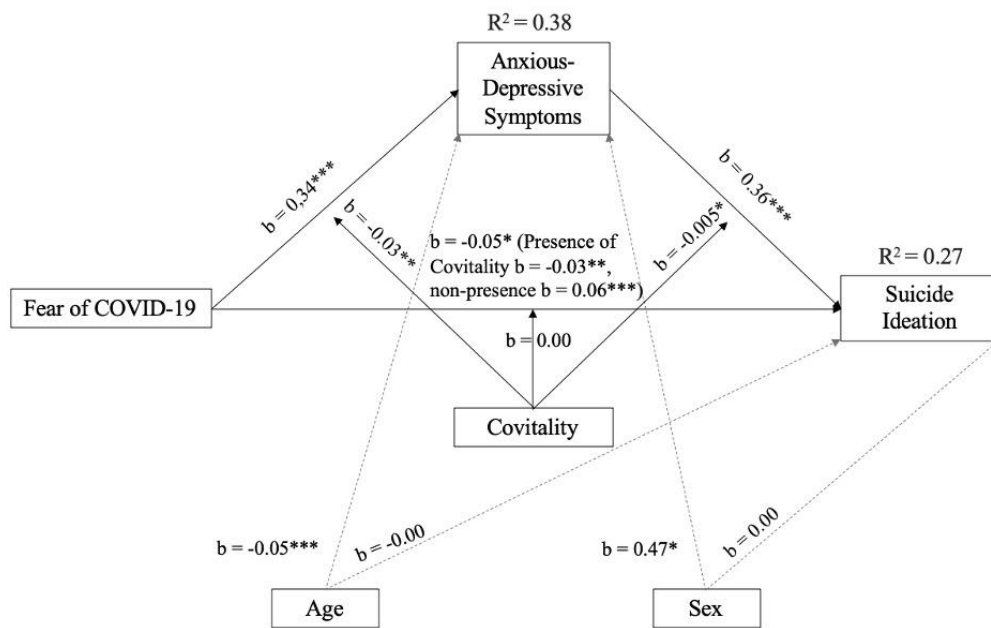


Fig. 2. Moderate mediation model

Note: Statistical diagram of the mediation model for the influence of Fear of COVID-19 and its association with anxious-depressive symptoms as mediator and Covitality as moderator controlling age and sex. The values are represented with non-standardized regression coefficients. The value outside brackets represents the total effect and the value in brackets represents the direct effect of the bootstrapping analysis of Fear of Covid after the inclusion of the mediating, moderating and covariates variables.

4. Discussion

4.1. Main findings

This study aimed to study the prevalence of suicidal ideation during confinement as well as to analyze the role of vitality in the presence of anxious-depressive symptoms and suicidal ideation in a Spanish sample.

First, in this study, the prevalence of suicidal ideation during confinement due to the COVID-19 health crisis was 12%; concerning anxiety and depression symptoms, 24% and 19.3%, respectively, exceeded the clinical cutoff. Considering these data, it appears that the percentage of ideation during the period of confinement was higher than that reported in previous studies conducted with the general population. In the meta-analysis of Castillejos, Huertas, Martin, and Moreno (2020) on the prevalence of suicidal ideation in Europe, they found that, in 24 studies, the 12 months prevalence rate was 2.9%, and lifetime prevalence was 5.55%. In the study by Nock et al. (2008), with more than 85,000 adult participants, the reported lifetime prevalence was 9.2%. There was therefore an increase in suicidal ideation during the confinement period.

Concerning anxiety and depression, a survey was conducted in Spain in 2017 in which more than 29,195 non-institutionalized people over the age of 15 years participated (Spanish National Health Survey: ENSE, 2017). In the ENSE, 4% of men and 9.2% of women self-reported anxiety, and 4.3% of men and 9.1% of women reported depression. These data were lower than those in our study. However, similar results have also been found in previous studies regarding increase in the presence of this symptomatology. In Spain, both in the study by Ozamiz-Etxebarria, Dosil-Santamaria, Picaza-Gorrochategui & Idoiaga-Mondragon (2020) with 976 adults and the study by González-Sanguino et al., (2020) with 3,480, during March, 11.84% and 18.7% of their participants presented symptoms of depression and 24.62% and 21.60% anxiety, respectively. Similar percentages were also reflected in a study with a Chinese population, with 16.5% of participants presenting depressive symptoms (moderate to severe), and 28.8% anxiety (Wang et al., 2020). Regarding the covitality score, in a previous study with university students aged 17 to 25 years, the mean score was 163.35 ($SD = 20.49$; Soto-Sanz et al., 2018), similar to that found in this age group in this study ($M = 162.72$, $SD = 24.29$). There is thus not enough information to determine whether the score found during confinement due to COVID-19 and in the different age groups, is different or not.

Second, there were differences between sex and age. Women in this study scored higher than men on anxious-depressive symptoms and fear of COVID-19, with medium effect sizes. As for age, the correlation reflected that being younger was correlated with higher scores in anxious-depressive symptoms and suicidal ideation, and older with higher scores in covitality. In relation to anxious-depressive symptoms, being older was significantly negatively related with depression and anxiety, as in the study

by Gonzalez-Sanguino et al. (2020), with women exhibiting higher scores in anxious-depressive symptoms both in their study and ours. Regarding fear of COVID-19, previous studies have highlighted the difference between sexes, with fear being significantly higher in women (Bakioglu, Korkmaz & Ercan, 2020). Additionally, in the study by Castillejos et al. (2020), an association was found between lower age and higher suicidal ideation scores.

Third, the moderate mediation analysis revealed an explained variance of 27%. Participants with higher scores in fear of COVID-19, presence of anxious-depressive symptoms, and low covitality, were at higher risk of reporting suicidal ideation. In relation to these findings, no studies were found where the COVID-19 fear score and its relation to suicidal ideation were analyzed through anxiety-depressive symptoms and social-emotional competencies in the general population. However, it has been found that anxious-depressive symptoms mediate between COVID-19 fear and life satisfaction (Satici, Gocet-Tekin, Deniz & Satici, 2020a) and that positive factors may protect against suicidal ideation (Chang et al., 2017; Sánchez-Alvarez et al., 2020). As regards the relationship between anxious-depressive symptoms and suicide ideation, previous studies have shown this to be a positive relationship (Blasco et al., 2018; Soto-Sanz et al., 2019). Fear of COVID-19 has previously been associated with depression and anxiety symptoms as a statistically significant variable (Fitzpatrick et al., 2020; Harper et al., 2020; Satici et al., 2020a).

4.2. Limitations

Several limitations of this study should be acknowledged. First, the cross-sectional design did not provide evidence of a causal relationship between fear of COVID-19, anxious-depressive symptoms, covitality, and suicidal ideation. Our findings, along with previous research, suggest a mechanism through which these factors may be related; longitudinal research is needed to determine whether the direction of the correlations may differ from what is assumed in our theoretical model, although there is empirical evidence that fear of COVID-19 precedes changes in anxious-depressive symptoms, and this influence of suicide ideation, experimental and longitudinal perspectives would help to clarify causal pathways. Second, although the use of self-report measures has shown good reliability, shared method variance may have inflated relationships found between instruments. Hence, future studies would benefit from using other methods to generalize our findings (e.g., multiple informants) and test other results related to suicide risk. Relatedly, other questions about suicide risk

are needed to complement suicidal ideation items in order to test more complex models of suicide risk. Finally, it would be interesting to examine the longitudinal effects of covitality on suicidal ideation and behaviors, as this would improve our understanding of the temporal dynamics of the associations between factors relevant to bullying. Despite these limitations, our findings provide an initial step towards a better understanding of the indirect effect of anxious-depressive symptoms and covitality via its association with fear of COVID-19 and suicidal ideation and suggest that covitality may be an appropriate target for therapeutic programs in suicide prevention efforts among people with fear of COVID-19 and anxious-depressive symptoms.

Finally, in this study, the differences between the different age and sex groups did not affect the model. However, the sample size in the different groups was too different to be able to adequately study these possible differences. More research on the detection of risk groups is needed, following the study carried out by Pakpour and Griffiths (2020) that emphasized the importance of determining risk groups based on socio-demographic variables in order to develop prevention programs to help overcome fear of COVID-19.

5. Conclusion

The current study provides important contributions to the possible causes of the current mental health crisis and the protective role of social-emotional competencies, as it suggests that people without social-emotional competencies who present fear of COVID-19 and anxiety-depressive symptoms are more at risk of suicidal ideation. Covitality moderates the impact of COVID-19 fear on suicidal ideation through anxiety-depressive symptomatology. This confirms the importance of social-emotional skills to protect against the effects of fear of COVID-19.

Our study results suggest that, although further longitudinal studies are needed to confirm our results, individuals with belief in self (self-awareness, self-efficacy, and persistence), belief in others (academic or work support, family coherence, and peer support), have emotional competence (emotion regulation, empathy, and self-control), and engaged living (optimism, zest, and gratitude) are more protected against the impact of the fear of COVID-19, while anxious-depressive symptoms may cause suicidal ideation. This implies that, in the face of a crisis of this type, the population must be prepared psychologically and must strengthen their socio-emotional competencies. This suggests prevention and management of effective socio-health measures because it is possible to truly operationalize primary prevention in mental health (Wolf, 2012).

Entities such as the European Observatory on Health Systems and Policies, the Organization for Economic Co-operation and Development, and the WHO Regional Office for Europe have collected data indicating that influencing the risk behavior for different diseases, including mental health disorders, is an efficient use of government resources, and that government policies can have a high impact on risk behavior for mental health disorders (McDaid, Sassi & Merkur, 2015).

Unfortunately, the high risk of suicide may be the result of an undiagnosed mental disorder or long periods without access to available treatments (de Girolamo et al., 2012). Therefore, early detection of emotional symptoms can be a good measure to prevent suicide—specifically, by using online screening measures for lower costs and faster detection.

To this end, preventive actions should be designed at various levels. First, at a universal level, with two mental health education-related measures. The first measure should focus on raising public awareness of the detection of changes in mental state as a result of COVID-19. This would involve educating the population on the need to self-explore for possible psychological changes (just as self-exploration is encouraged in breast cancer prevention). The second measure, which would focus on carrying out mental health and well-being promotion campaigns, would emphasize social-emotional skills training. Second, there should be prevention, online detection, and intervention in people whose mental health is affected by the health crisis. In short, growing evidence suggests that preventive interventions in psychiatry are feasible, safe, and cost-effective. Universal, indicated, and targeted prevention strategies could be effective in improving psychological well-being or preventing mental disorders (Arango et al., 2018).

In sum, in this situation of unprecedented confinement for the Spanish population, it is very important to attend to the psychological factors of the population. It is also necessary to continue studying the effects that the COVID-19 crisis will have on people's health. To that end, this study aimed to help generate social and health treatment initiatives to prevent and alleviate the psychosocial effects of the pandemic. Thus, this work can provide an interesting starting point for further research on the importance of socio-emotional skills—namely, covitality.

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