



# Suicidal ideation and its relationship with resilience and coping strategies in a sample of young colombians during the covid-19 pandemic

Ideación suicida y su relación con resiliencia y estrategias de afrontamiento en una muestra de jóvenes colombianos durante la pandemia de COVID-19<sup>1</sup>

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## ABSTRACT

**Objective:** The article presents results of a study aimed at describing suicidal ideation in a sample of young people between 18 and 35 years of age, from the city of Medellín, during the COVID-19 pandemic and its relationship with resilience and coping strategies. **Method:** quantitative approach study, descriptive-correlational level and the non experimental expos-facto method. The Beck et al. Suicide Ideation Scale (1979), the Coping Strategies Scale (EEC-M) validated in the Colombian population by Londoño et al. (2006) and the Argentine version of the Wagnild and Youth Resilience Scale were used for information collection (ER), validated by Rodríguez et al. (2009). 151 inhabitants of Medellín participated, with average age  $M = 24.5$  ( $Dt = 5.3$ ). **Results:** Medium level was identified in the variable attitude towards death, and low level in suicidal desire. Resilience presents medium high levels, highlighting the capacity for self-efficacy and the capacity for purpose and meaning of life. was identified a frequent use of functional coping strategies such as problem solving, positive reevaluation, seeking social support and autonomy, and also the non-functional strategies such as emotional and cognitive avoidance and denial. Was presented a negative correlation between the variables of suicidal ideation and the aspects of resilience and the use of functional coping strategies as social support search and positive reevaluation. **Conclusions:** It is concluded that the resilience ability and the use of functional coping strategies, especially related to social support and the positive re-evaluation of the situation acted as protective factors against suicidal ideation in the situation of the COVID-19 pandemic.

**Keywords:** Resilience, suicidal ideation, coping strategies, young adulthood, COVID-19.

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## RESUMEN

**Objetivo:** El artículo presenta resultados de un estudio orientado a describir la ideación suicida en una muestra de jóvenes entre 18 y 35 años de edad, de la ciudad de Medellín, durante la pandemia de COVID-19 y su relación con la resiliencia y estrategias de afrontamiento. **Método:** estudio de enfoque cuantitativo, nivel descriptivo-correlacional y el método no experimental expos-facto. Para la recolección de información se utilizaron la Escala de Ideación suicida de Beck et al. (1979), Escala de Estrategias de Afrontamiento (EEC-M) validada en la población colombiana por Londoño et al. (2006) y la versión argentina de la Escala de Resiliencia de Wagnild y Jóvenes (ER), validada por Rodríguez et al. (2009). Participaron 151 habitantes de Medellín, con edad promedio  $M=24.5$  ( $Dt=5.3$ ). **Resultados:** Se identificó nivel medio en la variable actitud hacia la muerte, y nivel bajo en el deseo suicida. La resiliencia presentó niveles medio altos a nivel general, destacando la capacidad de autoeficacia y la capacidad de propósito y sentido de vida. Se identificó un frecuente uso de estrategias de afrontamiento funcionales como como resolución de problemas, reevaluación positiva, búsqueda de apoyo social y autonomía, al igual como de las estrategias no funcionales como la evitación emocional y cognitiva y la negación. Se presentó una correlación negativa entre las variables de la ideación suicida y los aspectos de resiliencia y el uso de estrategias de afrontamiento funcionales como búsqueda del soporte social y la reevaluación positiva. **Conclusiones:** Se concluye que la habilidad de resiliencia y el uso de estrategias de afrontamiento funcionales, sobre todo relacionados con el apoyo social y la reevaluación positiva de la situación actuaron como factores protectores frente a la ideación suicida en la situación de la pandemia de COVID-19.

**Palabras clave:** Resiliencia, ideación suicida, estrategias de afrontamiento, adultez joven, COVID-19.

## INTRODUCTION

Suicide is a complex and multifactorial issue that can be related to multiple risk factors. These include: mental disorders such as depression, anxiety, bipolar disorder, schizophrenia or other mood disorders; history of previous suicide attempts; substance abuse; feelings of hopelessness and helplessness; traumatic experiences; health problems; family, work, financial problems or conflicting relationships; social isolation and lack of a solid social support network, among others (Richardson et al., 2023; Morshidi et al., 2023).

International studies also indicate a significant growth of suicidal ideation in the general population (Czeisler et al., 2020; Crasta et al., 2020).

In this context, it is important to study this problem in the situation of the pandemic by COVID-19 that contributed to increase of the mental health problems (Wang et al. 2020; Shigemura et al., 2020; Lee et al., 2020). This pandemic grouped several factors that could be related to the risk of suicide, producing effects on the general population, such as threat to physical health, depression, hopelessness and anxiety, economic crisis, among others (Nicomedes & Ávila, 2020; Pieh et al., 2020).

Studies at the national level indicate that in the situation of the pandemic the high risk of suicide was associated with a high perceived stress related to COVID-19, depressive episodes and insomnia. The study suggests that one in thirteen Colombians reported a high risk of suicide during COVID-19 (Caballero-Domínguez et al., 2020).

In this order of ideas, studies indicate that increased risk of suicide during the development of the health crisis may be related to increased symptoms of fear, anxiety, frustration, sadness and nostalgia, to the extent that these feelings become constant and overwhelming, leading people to despair (Gunnell et al., 2020). Among the risk factors brought by the pandemic are fear, social isolation, feeling trapped, physical distancing and loneliness (Yao et al., 2020), rejection for people sick with COVID-19 and their families (Torok et al., 2020), job loss and economic stressors (Studdert et al., 2020).

On the other hand, and especially in the situation of adversity related to the pandemic, it is important to consider the protective factors that can mitigate and decrease the adverse reactions of mental health and prevent the suicidal ideation and real attempts of this in the population (Wasserman et al., 2020). At a general level, protective factors for suicide have been described such as effective mental health care, strong personal relationships, a social support network, life skills and adaptation ability, a good level of personal resilience, practice of active coping strategies and religious or spiritual beliefs (WHO, 2014; Suicide Prevention Resource Center, 2011; Zalsman et al., 2016; Okolie et al., 2017).

In the situation of COVID 19, WHO highlighted the importance of the use of functional coping strategies to deal with stress and anxiety and prevent their adverse effect at the mental health level (WHO, 2020). In this regard, it is recommended to be in contact with other people, perform physical exercise, maintain a healthy diet and sleep routine, reduce long-term exposure to media and practice stress management techniques such as deep breathing and mindfulness and count on professional support (Fullana et al., 2020).

On the other hand, one of the important protective factors at risk of suicide is resilience, such as the ability to overcome adverse situations and withstand the severe losses and traumas caused by a catastrophe. Studies on pandemic mental health indicate that individual and social resilience was critical in addressing stress and maintaining mental balance during the COVID 19 pandemic (Holmes et al., 2020; Vinkers et al., 2020).

Considering the above, the present study oriented its interest towards suicidal ideation and its relationship with resilience and coping strategies in a sample of young people between 18 and 35 years of the city of Medellín during the pandemic situation of COVID-19, since some authors indicated that young people were more affected by the situation of the pandemic, showing higher levels of anxiety and depression (Pieh et al., 2020). Czeisler et al. (2020) also reported that in the American population in June 2020 the percentage of seriously considering suicide in the 30 days before completing the survey was significantly higher among respondents aged 18 to 24, In addition, 75% of study participants in this age range reported at least one serious symptom related to mental health problems.

This may be due to the fact that social estrangement has alienated many young adults from their social support systems, which are usually a major protection factor against suicidal ideation. As young adulthood is a period of emerging social roles and transitions such as completing a higher education degree, entering the workforce, among others, these goals were frustrated or adjusted due to the pandemic, generating anguish and frustration and making many young adults feel insecure or hopeless about the future.

## **METHODOLOGY**

### ***Type of study:***

The study had a quantitative approach, descriptive-correlative level and cross-sectional and non experimental method.

### ***Participants***

The sample of the study was chosen through the call in social networks and was composed of 151 inhabitants of Medellín, with age range between 18 and 35 years, average age  $M=24.5$  ( $Dt=5.3$ ). Among the participants 24.5% ( $N=37$ ) were male and 75.5% ( $N=114$ ) female; 58.3% ( $N=88$ ) were only studying and 41.7% ( $N=63$ ) were studying and working;

48.3% (N=73) practiced some religion and 51.7% (N=778) did not practice any religion; the highest percentage of participants belonged to the lower (2) and middle (3) socio-economic strata; and the majority (82.1% (N =124) were single.

### **Assessment**

The suicide Ideation Scale of Beck et al. (1979), validated in the Mexican population by González et al. (2000), was used to assess the risk of suicide. Scale is designed to measure and estimate the intentionality of suicide, consists of 20 items that are divided into 4 subscales: attitudes towards life and death; characteristics of suicidal thoughts and desires; characteristics of intent; and update the attempt. Subscales have shown the internal consistency of Alpha Cronbach between  $\alpha = .45$  to  $\alpha = .90$  (González et al., 2000).

Coping strategies were evaluated using the Coping Strategies Scale (EEC-M) in the version of Chorot & Sandín (1993), validated in the Colombian population by Londoño et al. (2006). The questionnaire is organized in the Likert scale format with 6 answer options: never, almost never, sometimes, often, almost always. The version obtained by the validation process consisted of 69 items, which evaluate 12 factors corresponding to the following coping strategies: problem solving, seeking social support, waiting, religion, emotional avoidance, seeking professional support, aggressive reaction, cognitive avoidance, positive reevaluation, expression of coping difficulty, denial and autonomy. Cronbach's alpha of the final test was 0.847 (Londoño et al., 2006).

For the measurement of resilience was used the Argentine version of the Wagnild and Young Resilience Scale (ER) (1993), validated by Rodriguez et al. (2009) in the Argentine population. The instrument, organized in the Likert scale format, consists of 25 statements and measures three fates: capacity of self-efficacy, ability of purpose and sense of life, and cognitive avoidance. The internal consistency according to Cronbach's Alpha of the total ER was 0.72. (Rodriguez et al., 2009).

### **Procedure and ethical aspects**

The present study took into account all technical, procedural and ethical regulations for research involving the participation of humans, as stipulated in resolution 8430 of 1993 of the Ministry of Health, as in the Code of Ethics of the psychologist. Being the instrument applied in a virtual way, informed consent was incorporated into its internal structure. To collect the information, a call was made on social networks, explaining the purpose of the study and inviting to response the online questionnaire.

#### Statistical analysis

Descriptive statistics were used to calculate the mean of the study variables. The variable distribution test showed a non-parametric distribution for all variables studied. According to the type of distribution of variables, the Mann-Whitney U statistic was used to compare variables for two groups, and Kruskal-Wallis for more than two groups. Spearman was used for the correlation. The analysis will be performed in SPSS version 25.

## **RESULTS**

The descriptive results in suicidal ideation indicated the presence of low and medium levels, being the variable with the lowest score is suicidal desire ( $M=,3(Sd=,2)$ ) and the highest attitudes towards death ( $M=1 (Sd=,7)$ ).

In resilience, high mean levels were identified at the general level, highlighting among this the capacity of self-efficacy in the study sample ( $M=3.9$  ( $Sd=.5$ ), followed by the capacity of purpose and sense of life ( $M=3.6$  ( $Sd=.7$ ).

In the coping strategies, higher scores are highlighted in the functional strategies as problem solving ( $M=3.6$  ( $Sd=.9$ ), positive re-evaluation ( $M=3.5$  ( $Sd=.7$ ) and social support search ( $M=3.2$ ( $Sd=1,2$ ) and autonomy ( $M=2,8$ ( $Sd=.7$ ), although at the general level the scores are placed in the middle level, indicating deficiencies in the use of functional strategies in the study sample. On the other hand, average levels were identified in the use of non-functional strategies such as emotional avoidance ( $M=3,4$ ( $Sd=.1$ ), cognitive avoidance ( $M=3,3$ ( $Sd=.9$ ) and negation ( $M=3,2$ ( $Sd=.4$ ), indicating, likewise, the need for improvement in the study sample by decreasing the use of such non-functional strategies.

**Table 1.** Descriptive data on resilience variables, suicidal ideation and coping strategies.

<b>Variables</b>	<b>M (Sd)</b>
<b>Resilience</b>	
Self-efficacy	3,9(,5)
Ability of purpose and meaning of life	3,6(,7)
Cognitive avoidance	3,3(,5)
<b>Suicidal ideation</b>	
Attitudes towards death	1 (,7)
Suicidal thoughts	,3(,2)
Characteristics of the suicide attempt	,4(,3)
Update on the suicide attempt	,4(,2)
<b>Coping strategies</b>	
<b>Problem solving</b>	<b>3,6(,9)</b>
Search for social support	3,2(1,2)
Waiting	2,8(,9)
Religion	2,9(1,3)
Emotional avoidance	3,4(1)
Seeking professional support	2,2(1,2)
Aggressive response	2,5(,9)
Cognitive avoidance	3,3(,9)
Positive re-evaluation	3,54(,7)
Expression of the difficulty of coping	2,8(,4)
Denial	3,2(,4)
Autonomy	2,8(,7)

**Source:** own.

The comparison of study variables by gender groups dont showed the significant difference for any variable. However, a trend towards higher scores can be observed in the variable attitude towards death in the female gender, and in the variable characteristics of the suicide attempt in the male gender. In coping strategies was identified a trend towards higher scores in the strategy of waiting in the group of men and higher scores in the strategy of religion in the group of women.

**Table 2.** Differences in the scores of variables of resilience, suicide attempt and coping according to gender.

Variables	Men M (Ir)	Women M (Ir)	U de Mann-Whitney	P
Self-efficacy	4(1)	3,9(4)	1955,000	,505
Ability of purpose and meaning of life	3,8(1)	3,6(1)	1935,500	,451
Cognitive avoidance	3,4(1)	3,2(1)	1959,500	,516
Attitudes towards death	,6(2)	,8(1)	1739,000	,104
Suicidal thoughts	,17(0)	,17(0)	2105,500	,986
Characteristics of the suicide attempt	,5(1)	,25(0)	1886,000	,288
Update on the suicide attempt	,4(0)	,4(0)	2017,500	,679
Problem solving	3,3(2)	3,6(1)	1883,500	,329
Search for social support	3(2)	3(2)	1905,000	,377
Waiting	3,4(1)	2,6(1)	1803,000	,185
Religion	2,2(3)	2,9(2)	1852,000	,266
Emotional avoidance	3(1)	3,2(2)	2047,000	,788
Seeking professional support	1,8(2)	2(2)	1935,000	,448
Aggressive response	2,4(1)	2,6(1)	1926,500	,428
Cognitive avoidance	3,4(1)	3,2(1)	1736,000	,105
Positive re-evaluation	3,6(2)	3,4(2)	1948,500	,487
Expression of the difficulty of coping	2,7(1)	3(1)	2073,000	,875
Denial	3(1)	3(1)	1888,500	,337
Autonomy	3(2)	3(2)	2073,500	,876

Source: own.

The comparison of study variables according to civil status did not show the presence of significant differences for any variable, except for the strategy of religion. However, the values indicate the presence of a tendency towards higher scores of variables related to suicide in the group of singles. In terms of resilience, we can observe a trend towards higher scores in their variables in the married group. Regarding the variables of coping strategies, a significant difference in religion was identified ( $p=,041$ ), in favor of the married group. Similarly, in the married group a tendency towards higher scores is identified the strategies of problem solving and positive reevaluation.

**Table 3.** Comparison of scores of variables by marital status.

Variables	Single M (Ir)	Married M (Ir)	Free union M (Ir)	Chi cua- drado	p
Self-efficacy	3,7(1)	4(1)	3,9(1)	,956	,620
Ability of purpose and meaning of life	3,4(1)	3,9(1)	3,6(1)	1,394	,498
Cognitive avoidance	3,2(1)	3,3(1)	3(1)	,347	,841
Attitudes towards death	,8(1)	,6(2)	,6(2)	1,220	,543
Suicidal thoughts	,25(0)	,17(0)	,17(0)	1,048	,592

<b>Variables</b>	<b>Single M (Ir)</b>	<b>Married M (Ir)</b>	<b>Free union M (Ir)</b>	<b>Chi cua- drado</b>	<b>p</b>
Characteristics of the suicide attempt	,38(1)	,25(0)	,25(0)	2,475	,290
Update on the suicide attempt	,6(0)	,4(0)	,4(0)	1,568	,457
Problem solving	3,6(1)	4,2(1)	3,4(2)	5,407	,067
Search for social support	3(2)	3(2)	2,9(1)	,613	,736
Waiting	2,6(1)	2,8(1)	2,7(1)	,349	,840
Religion	2,8(2)	3,9(1)	2,7(2)	6,400	,041
Emotional avoidance	3,2(2)	3,2(2)	3(1)	2,449	,294
Seeking professional support	2(2)	3(2)	1,8(2)	2,067	,356
Aggressive response	2,6(1)	2,6(1)	2,6(1)	,717	,699
Cognitive avoidance	3,2(1)	3,3(1)	3,4(1)	,516	,772
Positive re-evaluation	3,5(2)	4,4(3)	3(2)	,830	,660
Expression of the difficulty of coping	3(1)	3,2(2)	3(1)	1,773	,412
Denial	3(1)	2,8(1)	3(2)	1,381	,501
Autonomy	3(2)	3(3)	3(2)	,296	,862

**Source:** own

The comparison of resilience variables according to age showed a statistically significant difference for self-efficacy capacity ( $p=,012$ ), indicating increased scores with increasing age. Similarly, in coping strategies, a statistically significant difference was obtained for waiting ( $p=,010$ ) and religion ( $p=,001$ ), indicated increase in use of these strategies with increase the age. On the other hand, one can identify a trend towards higher scores in the strategies of problem solving and positive reevaluation and the trend towards the decrease of scores in the variable of denial as age increases.

**Table 4.** Differences of variables by age.

<b>Variables</b>	<b>17-22 M (Ir)</b>	<b>23-28 M (Ir)</b>	<b>29-35 M (Ir)</b>	<b>Chi cua- drado</b>	<b>p</b>
Self-efficacy	3,8(1)	4(1)	4,1(0)	8,852	,012*
Ability of purpose and meaning of life	3,6(1)	3,6(1)	3,8(1)	4,937	,085
Cognitive avoidance	3,2(1)	3,2(1)	3,3(1)	3,836	,147
Attitudes towards death	,8(2)	,6(1)	,17(0)	1,880	,391
Suicidal thoughts	,17(0)	,17(0)	,15(0)	1,123	,570
Characteristics of the suicide attempt	,25(0)	,25(0)	,15(0)	1,011	,603
Update on the suicide attempt	,4(0)	,4(0)	,4(0)	,784	,676
Problem solving	3,4(1)	3,5(2)	3,8(1)	3,276	,194
Search for social support	3(2)	3(2)	2,9(2)	,309	,857
Waiting	2,4(1)	2,9(1)	2,9(2)	9,188	,010*
Religion	2,6(2)	3,4(3)	3,9(1)	14,041	,001**
Emotional avoidance	3,1(2)	3,1(1)	3,3(1)	,533	,766

<b>Variables</b>	<b>17-22 M (Ir)</b>	<b>23-28 M (Ir)</b>	<b>29-35 M (Ir)</b>	<b>Chi cua- drado</b>	<b>P</b>
Seeking professional support	1,8(2)	2(2)	2(2)	3,342	,188
Aggressive response	2,6(1)	2,6(1)	2,5(1)	1,117	,572
Cognitive avoidance	3,2(1)	3,4(1)	3(1)	,123	,941
Positive re-evaluation	3,4(2)	3,5(2)	3,7(2)	1,731	,421
Expression of the difficulty of coping	3(1)	3(1)	3(1)	,091	,955
Denial	3,3(1)	3(1)	2,9(1)	5,725	,057
Autonomy	3(2)	3(1)	3(1)	3,199	,202

\*\* Level of significance is ,01 \* Level of significance is ,05

**Source:** own

The comparison of study variables according to groups of the religión practice identified the statistically significant difference in the strategy of coping with religion ( $p=,000$ ), in favor of the group that practices religion. Similarly, this group shows the trend towards higher scores in the positive re-evaluation strategy. The rest of the variables dont presented difference in scores between the groups.

**Table 5.** Differences of variables according to the practice of religion.

<b>Variables</b>	<b>Yes M (Ir)</b>	<b>No M (Ir)</b>	<b>U de Mann-Whitney</b>	<b>P</b>
Self-efficacy	3,9(0)	4(1)	2804,000	,873
Ability of purpose and meaning of life	3,8(1)	3,6(1)	2759,500	,744
Cognitive avoidance	3,2(1)	3,2(1)	2830,500	,951
Attitudes towards death	,8(2)	,8(1)	2815,500	,905
Suicidal thoughts	,17(0)	,17(0)	2701,500	,530
Characteristics of the suicide attempt	,25(1)	,25(1)	2654,000	,429
Update on the suicide attempt	,4(0)	,4(0)	2391,000	,076
Problem solving	3,6(1)	3,4(1)	2478,500	,170
Search for social support	3(1)	3(2)	2717,500	,629
Waiting	2,5(1)	2,7(1)	2637,500	,435
Religion	3,4(2)	2,1(2)	1388,500	,000*
Emotional avoidance	3,1(1)	3,1(2)	2772,500	,781
Seeking professional support	2(2)	1,8(2)	2530,500	,234
Aggressive response	2,6(1)	2,6(1)	2794,500	,845
Cognitive avoidance	3,2(1)	3,4(1)	2540,500	,252
Positive re-evaluation	4(2)	3,4(2)	2500,500	,196
Expression of the difficulty of coping	3(1)	2,8(1)	2689,500	,555
Denial	2,6(1)	3,3(1)	2177,000	,012*
Autonomy	3(2)	3(2)	2614,000	,377

\*\* Level of significance is ,01 \* Level of significance is ,05

**Source:** own.



The comparison of resilience variables according to the occupational groups (only study/ study and work) indicated the significant difference for the variables of capacity of self-efficacy ( $p=,000$ ) and the capacity of purpose meaning of life ( $p=,009$ ) in favour of the group of those who study and work. Regarding coping strategies, was identified the significant difference in religion strategy ( $p=,000$ ), in favor of the group that works and studies.

**Table 6.** Differences of variables according to occupation.

Variables	Only study M (Ir)	Study and work M (Ir)	U de Mann-Whitney	p
Self-efficacy	3,9(1)	4,1(0)	1627,000	,000**
Ability of purpose and meaning of life	3,6(1)	3,8(1)	2079,000	,009**
Cognitive avoidance	3,2(1)	3,2(1)	2522,000	,343
Attitudes towards death	,8(2)	,8(1)	2770,500	,995
Suicidal thoughts	,17(0)	,17(0)	2756,500	,946
Characteristics of the suicide attempt	,5(1)	,25(0)	2339,500	,072
Update on the suicide attempt	,4(0)	,4(0)	2333,000	,083
Problem solving	3,4(1)	3,6(1)	2373,000	,132
Search for social support	3(2)	3(2)	2722,500	,852
Waiting	2,6(1)	2,6(1)	2759,500	,962
Religion	2,5(2)	3,5(2)	1798,500	,000**
Emotional avoidance	3,1(2)	3,1(1)	2658,000	,667
Seeking professional support	1,9(2)	2, 1(2)	2702,000	,790
Aggressive response	2,6(1)	2,4(1)	2468,000	,250
Cognitive avoidance	3,4(1)	3,2(1)	2531,000	,361
Positive re-evaluation	3,4(2)	3,4(2)	2484,500	,277
Expression of the difficulty of coping	3(1)	2,8(1)	2573,000	,450
Denial	3(1)	3(2)	2670,000	,699
Autonomy	3(2)	3(2)	2691,000	,756

\*\* Level of significance is ,01

Source: own.

A negative correlation was found between attitude towards death and capacity for self-efficacy ( $p=,028/r=-,730$ ) and the capacity for purpose and sense of life ( $p=,045/r=-,504$ ). Similarly, both variables of resilience (capacity of self-efficacy ( $p=,036/r=-,489$ ) and capacity of purpose and meaning of life ( $p=,013/r=-,680$ )) were negatively correlated with the variable of suicide desire.

**Table 7.** Correlation between suicide and resilience variables.

Variables	Spearman	p
Attitude toward death/ self-efficacy	-,730*	,028
Attitude toward death/ ability of purpose and meaning of life	-,504*	,045
Desire for suicide/ self-efficacy	-,489*	,036
Desire for suicide/ ability of purpose and meaning of life	-,680*	,013

\* The correlation is significant in the level 0,05 (bilaterally).

**Source:** *own.*

The positive correlation between the strategy of aggressive reaction and attitude towards death was identified ( $p=,047/r=,358$ ) and the attempt update ( $p=,010/r=,209$ ), indicating that greater use of this strategy is related to higher scores in these two suicide variables in the sample of the present study.

The variable update on the suicide attempt was negatively correlated with the search for social support ( $p=,048/r=-,282$ ) and positive reevaluation ( $p=,033/r=-,173$ ). Finally, the strategy of negation ( $p=,043/r=-,165$ ) was negatively correlated with the variable of suicide desire ( $p=,038/r=-,169$ ) and update on the suicide attempt ( $p=,043/r=-,165$ ).

**Table 8.** Correlation between suicide variables and coping strategies

Variables	Spearman	p
Attitude toward death/ aggressive response	,359*	,047
Desire for suicide/negation	-,169*	,038
Update on the suicide attempt/ search for social support	-,282*	,048
Update on the suicide attempt/ aggressive response	,209*	,010
Update on the suicide attempt/positive re-evaluation	-,173*	,033
Update on the suicide attempt/negation	-,165*	,043

\* The correlation is significant in the level 0,05 (bilaterally).

**Source:** *own.*

## DISCUSSION

In the first place, it is important to highlight the presence of the average level in the scores in the variable attitude towards death, which indicates the presence of a high degree of thought about death in the study sample. However, this is contrasted with a low level of scores in the variable suicidal desire, indicating that study participants do not have active intentions towards suicide.

In this regard, the moderate presence of thoughts about death could be related to the situation of the COVID 19 pandemic, including a constant exposure to media, that directed people's thoughts towards a possible and eventual death of their own and loved ones. However, overall, the level of suicidal ideation was low in the study sample.

Regarding the above, the authors indicate that investigative interest towards suicide and suicidal ideation increased during the pandemic of COVID 19 (Palod et al., 2022), due to a growing number of mental health problems and suicide attempts during the pandemic, associated with multiple risk factors derived from the pandemic situation (Hall et al., 2023; García-Iglesias et al., 2023).

In the present study, the presence of suicidal ideation was not significantly associated with sociodemographic variables such as gender, age, marital status, occupation and practice of religion. However, it was possible to observe a trend towards a higher score in the attitude towards death in the female gender, which could be related to the fact that women during the pandemic presented higher levels of concern for the life and health of their families, and increased levels of commitment in the care and protection of their families (Thompson, 2023; Dinella et al., 2023).

Likewise, a tendency toward higher scores in suicidal ideation could be observed in the group of singles, which could be related to the absence of the protective family environment, because open family communication is highlighted as a protective factor of mental health in crisis contexts because it can help prevent suicide and alleviate the concerns or affectations generated by COVID-19 (Garcés-Prettel & Geney Castro, et al., 2023).

The above was also related to the fact that the married group showed statistically higher scores in the strategy of coping with religion and higher scores in the strategies of problem solving and positive reevaluation, which raises the possibility that the family environment encourages the use of more effective coping strategies against the emerging problems of the pandemic and reduce suicidal ideation.

The occupation variable was not significantly associated with suicidal ideation, indicating only a lower score in the suicide attempt characteristics variable in the group of participants who study and work. In this respect, this group also observed higher scores in the capacity of self-efficacy and purpose and meaning of life, which could be related to lower risk of suicide in this group. In this sense, the authors indicate that having a job and a healthy lifestyle during the pandemic acted as a protective factor against mental health problems and suicide risk (Tripoli et al., 2023).

With regard to the sociodemographic variable of age, the scores in suicidal ideation don't showed the statistically significant difference, however, was observed a decrease in the score with age. This could be related to the observed increase in the capacity of self-efficacy and, equally, in the strategies of problem solving and positive reevaluation and the reduction of scores in the strategy of denial with the increase of the age of the participants. In this regard, the authors indicate resilience and coping strategies as a protective factor for suicide risk (Spafford et al., 2023).

The variable of the practice of religion was not associated with any of the variables evaluated, only with the use of coping strategy based on religion. In this regard, it is necessary to emphasize that the relationship between religion and suicidal ideation is complex, because there are studies that indicate the presence of both trends: a positive relationship between them (Lawrence et al., 2016), and, also, a negative association (Osafo et al., 2023).

Also, the results of this study show a negative correlation between the variables of attitude towards death and desire for suicide and two variables of resilience: the capacity of self-efficacy and the capacity of purpose and sense of life.

Respect of this, resilience has been indicated as a very effective protective factor against suicide in different ages and genders (Haelim & Hyunjin, 2023; Ariapooran et al., 2023), highlighting aspects such as interpersonal connection, significant activities related to the meaning of life, hope and empowerment (Boydell et al., 2023).

Likewise, it can be evidenced in the sample of this study that low levels of suicidal ideation in general were related to medium high levels of resilience, especially in the variable of self-efficacy and in the ability to establish the purpose and meaning of life.

On the other hand, the sample of this study also showed high levels of use of effective coping strategies such as problem solving, positive reevaluation, search for social support and autonomy, as well as low levels of non-functional strategies such as emotional and cognitive avoidance and denial.

In this order of ideas, it was found that the strategies of seeking professional support and positive reevaluation were correlated negatively with the variable of update of the suicide attempt in the study sample. These results indicate that functional coping strategies act as

a protective factor against suicidal ideation in difficult situations, for example, associated with the COVID 19 pandemic, and these data are confirmed by other studies (Ariapooran et al., 2023).

On the other hand, the strategy of non-functional coping as the aggressive reaction was positively associated with attitude towards death and updating of the suicide attempt, confirming, likewise, stated by other authors who indicate the importance of promoting functional coping strategies as suicide prevention (Liang et al., 2020).

However, in the present study it was identified that the strategy of non-functional coping as negation correlated inversely with the variable of suicide desire and suicide attempt update, indicated that the greater use of this strategy is related to a lower score in these variables.

This data may be related to the particular situation of the COVID 19 pandemic where the excessive exposure of people to media information and news about deaths and affectations of the general population was associated with greater problems mental health and increased risk of suicide (Sarwar et al., 2021; Nugroho et al., 2021; Garcés-Prettel & Barredo-Ibáñez, et al., 2023).

In this context, the denial strategy, considered as a non-functional coping strategy, could act as a positive strategy aimed at reducing the negative and stressful impact of the media on the fatal panorama of deaths and spread of the virus.

## **CONCLUSIONS**

The present study highlighted the presence of frequent thoughts about death and its possibility related to the variable of attitudes towards death, especially in women in the study sample. It is likely that this situation was related to the constant risk to health and possible death from the virus, in the context of the COVID-19 pandemic, especially accentuating these thoughts in women who were responsible for caring for their families. Were also evident in the study sample good levels of resilience and use of functional strategies.

This scenario showed that resilience, especially the capacity for self-efficacy and ability to find the purpose and meaning of life acted as a protective factor for suicidal ideation in the situation of the pandemic. Likewise, the use of coping strategies, especially related to the search for social support and positive re-evaluation of the situation, allowed contributing to reduce aspects related to suicidal ideation in the study sample during the COVID-19 pandemic. It is recommended be deepened the studies about the factors associated with the problem of suicidal ideation, especially in emergency and disaster situations, expanding the sample and considering other cultural contexts and emergency situations.

## **Conflict of interest**

The authors of this brief declare that they do not have any conflict of interest of a labor, contractual or personal nature that could cause an unintended bias in the investigative process.

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