

# Subjective psychological impacts during COVID-19 lockdown on older people, risk profiles and coping strategies: Results of an online survey in Spain

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## Abstract

This study explores the psychological impacts of lockdown among older people during the coronavirus disease 2019 pandemic in Spain, and identifies risk profiles and adaptative behaviors. A cross-sectional online survey was disseminated by social networks through snowball sampling (April–June 2020). The survey included ad-hoc questions about psychological impacts on subjective cognitive functioning, emotional distress, and loneliness. Open end-questions were coded according to Lazarus and Folkman's coping strategies framework. Of the 2010 respondents, 76% experienced impact in at least one cognitive function (11% reporting severe effects), 78% frequent sadness and 13% frequent loneliness. Age 80+, women and low education increased the risk of loneliness and severe impact in memory and processing speed. Living alone was an additional risk factor for loneliness and sadness. Lockdown is associated with cognitive impacts, emotional distress, and loneliness being risk profiles related to inequality axes. Coping strategies should inform aging policies to prevent psychological impacts during the lockdown.

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**KEYWORDS**

cognitive aspects, coping skills, COVID-19, emotional aspects, loneliness, older adults, risk factors

## 1 | INTRODUCTION

The 2019–2020 coronavirus pandemic has spread the severe acute respiratory syndrome coronavirus 2 that causes coronavirus disease 2019 (COVID-19), which is associated with a high mortality. Thus, countries have adopted a variety of measures. Many governments have ordered lockdowns for entire populations living in controlled areas as an effective preventive measure to contain the dissemination of the virus (Anderson et al., 2020).

In March 2020, Spain suffered an intense impact of the pandemic, just behind the impact in China and Italy. After the declaration of the state of alarm on March 14, 2020 (Real Decreto 463/2020), the Spanish government implemented strict lockdown measures restricting all nonessential movements, including any leisure or sport activity outdoors, such as walks. Since older people are at increased risk for more serious illnesses and possible deaths associated with COVID-19 (Jiménez-Pavón et al., 2020), more restrictive lockdown de-escalation measures were applied for older people over 70 in Spain (Orden SND/380/2020) as well as more specific recommendations and restrictions for the elderly in other countries such as Ireland, United Kingdom, or Sweden.

Nevertheless, lockdown can be associated with adverse effects since it implies a high decrease in social interactions and social activities with a potential increase in social isolation. It is to be remarked that social isolation and loneliness are well-established risk factors for poor mental and physical health in older people (Santini et al., 2020). In this vein, there are increasing data available describing the psychological impacts of the COVID-19 outbreak in the general population in several countries (McGinty et al., 2020; H. Wang et al., 2020). Previous research has suggested that lockdown increases psychological impacts in relation to subjective cognitive functioning (Fiorenzato et al., 2021), emotional distress in relation to anxiety, fear, and sadness (Fiorenzato et al., 2021; Gan et al., 2020), and loneliness (Losada-Baltar, Jiménez-Gonzalo, et al., 2020). Nevertheless, people react to stress with a diversity of coping strategies (Folkman et al., 1986) and adaptation to lockdown reduces its psychological impact (Morales-Vives et al., 2020).

### 1.1 | Subjective cognitive functioning

Cognitive decline among the elderly has been related to risk factors such as advancing age and low education levels in early life, (Calatayud et al., 2021; Plassman et al., 2010; Prince et al., 2014). It has also been proposed that mental health problems can further impair cognitive functions in older people (Mukhtar, 2020). On the social sphere, poor social connections are well-known to be associated with a higher prevalence of cognitive impairment in older people (Evans et al., 2018). Cognitive effects of lockdown in the general population have been reported (Fiorenzato et al., 2021) and impact on cognitive functions have been explored in patients with COVID-19 (Holmes et al., 2020). Moreover, recent literature has suggested that lockdown can induce neurocognitive disorders on older adults (Armitage & Nellums, 2020), especially among those with cognitive impairment and dementia (Devita et al., 2021; C. Wang et al., 2020). In the near future, it will be necessary to address the cognitive impacts among older people during the COVID-19 pandemic in Spain (Pinazo-Hernandis, 2020).

## 1.2 | Emotional distress

At an emotional level, there are increasing available data describing emotional distress such as sadness, anxiety, and fear related to lockdown in the general population (Ahorsu et al., 2020; Brooks et al., 2020; Fiorenzato et al., 2021; Losada-Baltar, Jiménez-Gonzalo, et al., 2020; Losada-Baltar, Márquez-González, et al., 2020; McGinty et al., 2020). Likewise, as revealed from an Ipsos MORI survey carried out in the general population during the pandemic (Holmes et al., 2020), there are widespread concerns about the effect of social isolation on wellbeing. According to several authors, social isolation as a consequence of social and physical distancing has placed older people at greater risk of emotional distress (Armitage & Nellums, 2020; Brooks et al., 2020; McGinty et al., 2020; Santini et al., 2020).

## 1.3 | Loneliness

Recent studies have reported increased perception of loneliness during the COVID-19 outbreak among individuals (Losada-Baltar, Jiménez-Gonzalo, et al., 2020; Losada-Baltar, Márquez-González, et al., 2020; McGinty et al., 2020). Low capital social has been associated with indicators of psychological distress (Caballero-Domínguez et al., 2020).

Loneliness is known to be crossed by inequality axes such as gender, age, social class, disability, and ethnicity, being more reported among women, those socioeconomically disadvantaged or with disability (Jong-Gierveld et al., 2018). Previous research from Losada-Baltar, Jiménez-Gonzalo, et al. (2020) shows that chronological age would protect from loneliness. Furthermore, loneliness is heterogeneously distributed across geographic and cultural groups, being Spain one of the European countries with higher levels of loneliness (Nyqvist et al., 2018). Although data on the prevalence of loneliness in Spain are heterogeneous in the measurements used, tend to be old or based in small samples, the most reliable results show similar percentages (12.8% COURAGE study, 11.5% European Social Survey, and 14% SHARE) (Domènech-Abella et al., 2018; Sundström et al., 2009; Yang & Victor, 2011). However, there is no clear evidence of increased loneliness due to the pandemic, since studies comparing the levels of loneliness show a surge in the United Kingdom and maintenance in the United States (Bu et al., 2020; McGinty et al., 2020; Sutin et al., 2020). No data about the increase or maintenance of loneliness in Spain are available, neither identifying specific risk profiles among older people.

## 1.4 | Coping strategies

Lazarus and Folkman (1984) defined “stress” as “relationship between the person and the environment appraised by the person as taxing or exceeding his or her resources.” During the pandemic, COVID stress (Schnell & Krampe, 2020) has arisen from the need of protection against contagion, confusion, frustration, social isolation, and uncertainty and fears towards the future (Fiorillo & Gorwood, 2020; Jungmann & Witthöft, 2020). Indeed, people react to stress with a diversity of coping strategies (Folkman et al., 1986) and adaptation to lockdown reduces its psychological impact (Morales-Vives et al., 2020). Self-control and seeing a meaning in their lives has been related with a better adaptation and less substantially reported mental distress (Schnell & Krampe, 2020). Moreover, Spanish data on older people have shown that health-promoting behaviors such as physical activity during lockdown were associated with resilience and positive affect (Carriedo et al., 2020). However, adaptative behaviors put in place have been understudied.

The current pandemic, but also future epidemics or pandemics, might require new lockdowns in any part of the world that should be faced with stronger protective and preventive measures to lower lockdown's associated risks

in the most vulnerable profiles. Moreover, knowing the adverse effects of COVID-related restrictions might help understanding the needs and accordingly planning health-promoting activities. Therefore, we aim to explore the impact of lockdown on the cognitive and emotional spheres, as well as the adaptative behaviors that older people may develop.

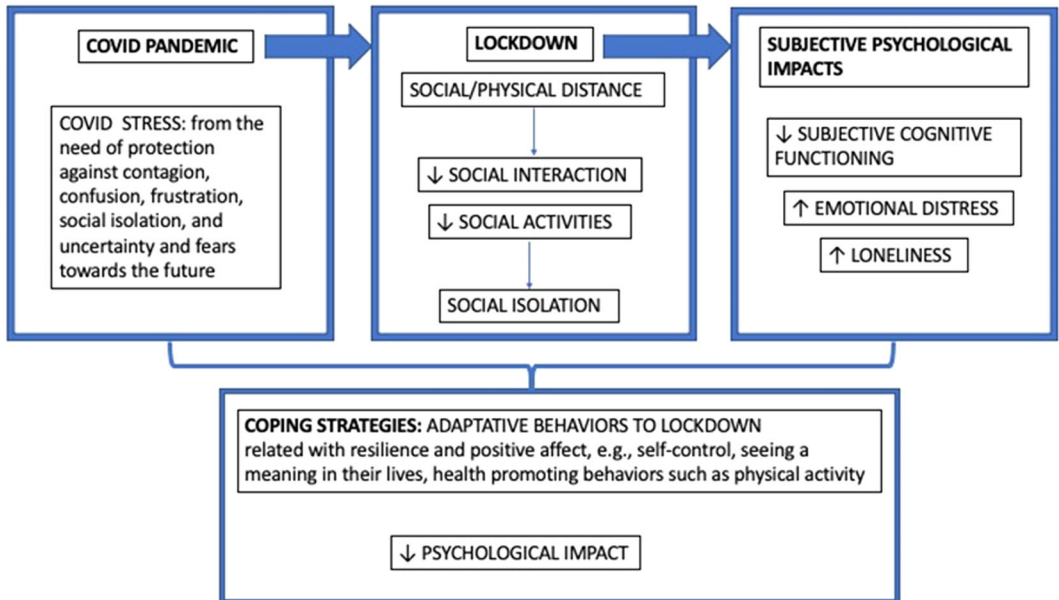
Specifically, the aims of our study are: (1) to explore subjective psychological impacts of lockdown on cognitive functioning, emotional distress, and loneliness among older people during the COVID-19 pandemic in Spain focusing on subjective changes of cognitive functioning (more severe affected) in the domains of memory and processing speed, frequently feeling lonely and feelings of sadness for not be able to share time with love ones (frequently feeling sad); (2) to identify profiles of individuals at higher risk for suffering those psychological impacts, and (3) to explore adaptative behaviors adopted and relate them with the coping strategies according to the stress process model developed by Lazarus and Folkman (1984).

Figure 1 shows the hypothesis of this study, explaining how the COVID pandemic caused COVID stress, and how the preventive measure of lockdown has increased social isolation rising psychological impacts at a cognitive and emotional level, and increasing loneliness. However, the psychological impact has been reduced when coping strategies have led to adaptative behaviors. In this study, we use the term “subjective psychological impacts” as an umbrella concept comprising subjective cognitive functioning, emotional distress, and loneliness.

## 2 | METHODS

### 2.1 | Design

A web-based cross-sectional survey with an ex post facto design was used for the study.



**FIGURE 1** Hypothesis of the study explaining the relationship between COVID pandemic, psychological impacts, and coping strategies

## 2.2 | Participants

Older adults aged 65 and over living in Catalonia (Spain) during the COVID-19 lockdown were eligible.

The recruitment was designed using diverse approaches. First, snowballing was used, including the promotion of the study through institutional and personal networks, mailing lists, and social media. Second, the survey was distributed via partnerships with local administrations, social and health care services, as well as third sector institutions such as older people's organizations and programs in charge of vulnerable older people. Complementarily, recipients of the survey were encouraged to help eligible participants without technological skills and/or without access to Internet to answer the survey.

## 2.3 | Instrument

The survey was developed using the free online survey tool Google Forms<sup>®</sup>. It included questions to collect sociodemographic data and the perception of psychological impacts of lockdown on subjective cognitive functioning, emotional distress, and loneliness.

Covariates included age groups (65–69, 70–74, 75–79, 80, and over); gender (male, female, and others); education (low: without studies or primary studies; medium: bachelor's degree or equivalent; high: degree or above) and cohabitation profile (living alone, living with one person, with two people, with three or more people).

An ad-hoc questionnaire was created and questions to assess the subjective cognitive functioning included the main cognitive functions of orientation, recent memory, attention, processing speed (i.e., slowness performing tasks), executive functions (i.e., planning or switching tasks), social cognition (i.e., identification of own emotions and those of others), calculation and language. Questions were scored with a 5-point Likert scale ranging from 1 (*not at all*), 2 (*seldom*), 3 (*somewhat*), 4 (*quite*) to 5 (*a lot*). Questions about emotional distress and loneliness from lockdown included: sadness due to lockdown and not being able to be with loved ones, anxiety due to uncertainty, fear about the effect of COVID-19 on health and about not being able to face lockdown if it was extended in time, suffering from loneliness and connection with social contacts. Questions were scored with a 5-point Likert scale ranging from 1 (*never*), 2 (*occasionally*), 3 (*often*), 4 (*most of the time*) to 5 (*always*). Finally, two open questions were included about coping strategies to deal with psychological effects of lockdown ("What do you do to be mentally active?" and "Which are the things that help you to feel better during lockdown?").

An initial version of the questionnaire was developed and piloted among 20 older people. According to their feedback, the questionnaire was revised to increase its clarity and improve the plain language used.

The participation in the survey was voluntary, and completion of the questionnaire was considered to be consent for participation in the survey. The survey was anonymous and no identification data was collected. The Ethics Committee on Animal and Human Experimentation (CEEAH) of the Autonomous University of Barcelona institutional review board deemed this study not to be human participants research and waived informed consent.

## 2.4 | Procedure

Data were collected between April 21, and June 10, 2020. This timeframe corresponds to the strict lockdown period and the beginning of the de-escalation phase in Spain. A total of 2,010 participants who completed the questionnaire were included in the analysis.

## 2.5 | Data analysis

For Objective 1 (to explore the perception of psychological impacts of lockdown on cognitive functioning, emotional distress, and loneliness among older people during the COVID-19 pandemic in Spain) a descriptive analysis was conducted to characterize the sample regarding sociodemographic data as well as psychological outcome variables. Frequencies were calculated for each outcome variable. For statistical analyses, age was categorized in 5-year groups (65–69, 70–74, 75–79, 80, and over). Outcomes assessed through Likert questions were dichotomized: severity outcomes were categorized as “more severe” when the individual reported “quite” or “a lot” impact in the specific psychological area, whereas “not at all,” “seldom,” and “somewhat” were considered as “less severe.” Frequency outcomes were categorized as “more frequent” when the individual reported that the issue had happened “often,” “most of the time,” or “always” whereas “never” and “occasionally” were considered as “less frequent.”

For Objective 2 (to identify profiles of individuals at higher risk for suffering those psychological impacts) a multivariate analysis was performed using a logistic regression, with the dichotomized outcomes as dependent variables, adjusted by the independent covariables of interest (age group, gender, education, cohabitation profile), which were added simultaneously in the model in a single step. Statistical analysis was performed using R 4.0 and SPSS 21.

For Objective 3 (to explore adaptative behaviors adopted and relate them with the coping strategies used to face stress), the analysis was conducted by three independent researchers (S. D., L. C. P., and S. B. A.). Answers to open end-questions were first coded and then grouped into categories merging those with similar or closely related content in an inductive approach. Resulting categories were classified into the themes according to the framework from Folkman's psychological stress and coping theory (Lazarus & Folkman, 1984) using a deductive approach. In addition, further themes were allowed to emerge, if necessary.

## 3 | RESULTS

### 3.1 | Sociodemographic aspects

2,010 respondents answered the survey in Catalonia (Spain). Sociodemographic characteristics of respondents are shown in Table 1.

### 3.2 | Subjective cognitive functioning

Most responders (76%) experienced impact in cognitive functions, with 11% reporting severe impact in at least one domain.

The prevalence rates for cognitive problems ranged from 19% to 48%, with a greater impact on cognitive functions of orientation (48%); executive functions (42%); processing speed (42%) and attention (41%). The severe impact was also greater for these domains with a prevalence of 4%, 4.3%, 5.2%, and 5.2%, respectively.

About 28% of responders experienced impact in memory during the study period, with only 2.3% reporting severe memory problems. Cognitive functions of social cognition, language, and calculation were perceived as less affected.

Results of the multivariate logistic regression analysis for memory and processing speed are shown in Table 2.

The other cognitive functions are included as Supporting Information Appendices.

Gender, age, level of education, and cohabitation were risk factors associated with different cognitive functions. Female gender increased the risk of severe problems in memory (odds ratio [OR]: 2.4, 95% confidence

**TABLE 1** Sociodemographic characteristics of respondents

	Men (N = 701)	Women (N = 1309)	Overall (N = 2010)
Age (mean $\pm$ SD)	73.43 $\pm$ 5.95	72.38 $\pm$ 5.64	72.75 $\pm$ 5.77
Age group			
65–69	31.4%	40.6%	37.4%
70–74	36.1%	33.5%	34.4%
75–79	19.8%	16.5%	17.7%
80 or +	12.7%	9.4%	10.5%
Education			
Low	10.8%	13.6%	12.6%
Medium	30.2%	38.7%	35.8%
High	58.9%	47.7%	51.6%
Cohabiting persons			
None	11.6%	33.3%	25.8%
1	64.3%	46.1%	52.5%
2	17.1%	13.7%	14.9%
3 or +	7.0%	6.8%	6.9%

Column % unless otherwise specified.

Abbreviation: SD, standard deviation.

interval [CI]: 1.1–5.2) and processing speed (OR: 1.7, 95% CI: 1.0–2.8), while being 80 years old and over increased the risk of severe problems for almost all cognitive functions, particularly memory (OR: 4.8, 95% CI: 2.0–11.1), processing speed (OR: 3.3, 95% CI: 1.8–5.9) and language (OR: 4.5, 95% CI: 1.9–10.5). A low level of education has also an important impact on memory (OR: 4.7, 95% CI: 2.1–10.3) and processing speed (OR: 2.0, 95% CI: 1.2–3.5), as well as social cognition and calculation (see Supporting Information Appendices).

### 3.3 | Emotional distress and loneliness

A total of 83% of responders reported frequent emotional distress of sadness, anxiety, fears, and loneliness. Responders reported suffering frequent sadness, 78% for not being able to share time with loved ones and 38% due to the lockdown.

Moreover, 39% of them expressed suffering frequent anxiety for the uncertainty of the situation. Almost one in four reported having frequent fear for their health and 21% feared for not being able to face lockdown if it was extended in time.

Multivariate analysis showed living alone (OR: 1.8, 95% CI: 1.2–2.7) as the only risk factor for suffering frequent sadness for not being able to share time with loved ones (Table 2).

Female gender and low education were the risk factors for suffering frequent sadness due to lockdown, anxiety, and fears (Supporting Information Appendices). However, being 80 years and over was not associated with any of the emotional distress domains included in the analysis.

Almost half of participants reported some degree of loneliness due to lockdown (i.e., at least occasionally), with 13% suffering from frequent loneliness. Three in four participants had face-to-face or virtual contact with 6 or more

**TABLE 2** Multivariate logistic regression predicting more severe memory and processing speed problems and frequent sadness and loneliness due to lockdown

	Memory more severe affected OR (95% CI)	Processing speed more severe affected OR (95% CI)	Frequently feeling sad OR (95% CI)	Frequently feeling alone OR (95% CI)
<b>Age</b>				
65–69	1 (reference)	1 (reference)	1 (reference)	1 (reference)
70–74	0.7 (0.2, 1.8)	0.8 (0.4, 1.4)	0.9 (0.7, 1.2)	0.8 (0.6, 1.2)
75–79	0.9 (0.3, 2.7)	1.0 (0.5, 2.0)	0.8 (0.6, 1.2)	1.3 (0.9, 1.9)
Over 80	4.8 (2.0, 11.1) <sup>***</sup>	3.3 (1.8, 5.9) <sup>**</sup>	0.8 (0.5, 1.1)	1.6 (1.0, 2.5) <sup>*</sup>
<b>Gender</b>				
Male	1 (reference)	1 (reference)	1 (reference)	1 (reference)
Female	2.4 (1.1, 5.2) <sup>*</sup>	1.7 (1.0, 2.8) <sup>*</sup>	1.0 (0.8, 1.3)	1.7 (1.2, 2.5) <sup>**</sup>
<b>Education</b>				
High	1 (reference)	1 (reference)	1 (reference)	1 (reference)
Medium	1.05 (0.4, 2.4)	0.6 (0.3, 1.1)	1.0 (0.8–1.0)	1.1 (0.8–1.5)
Low	4.7 (2.1, 10.3) <sup>***</sup>	2.0 (1.2, 3.5) <sup>**</sup>	1.1 (0.7, 1.5)	2.0 (1.3, 3.0) <sup>***</sup>
<b>Cohabitation</b>				
Living with three or more persons	1 (reference)	1 (reference)	1 (reference)	1 (reference)
Living with two persons	3.5 (0.9, 13.8)	0.9 (0.3, 2.2)	2.0 (1.3, 3.3) <sup>***</sup>	2.5 (1.0, 6.0) <sup>*</sup>
Living with one person	1.7 (0.4, 6.3)	0.7 (0.3, 1.6)	2.2 (1.5, 3.3) <sup>***</sup>	1.9 (0.8, 4.3)
Living alone	1.8 (0.4, 6.9)	1.2 (0.5, 2.7)	1.8 (1.2, 2.7) <sup>***</sup>	7.5 (3.3, 16.7) <sup>***</sup>

Abbreviations: CI, confidence interval; OR, odds ratio.

<sup>\*</sup>*p* < 0.05; <sup>\*\*</sup>*p* < 0.01; <sup>\*\*\*</sup>*p* < 0.001.

people during the week before answering the survey. Family members (85%) were the most frequently reported contacts during lockdown, followed by friends (52%).

In the case of loneliness, age 80 and over (OR: 1.6, 95% CI: 1.0–2.5), female gender (OR: 1.7, 95% CI: 1.2–2.5), low education (OR: 2.0, 95% CI: 1.3–3.0), and living alone (OR: 7.5, 95% CI: 3.3–16.7) were all risk factors for frequent loneliness (Table 2). Cohabitation showed results difficult to interpret, as both living alone and living with one or two persons were situations associated with more frequent feelings of sadness and loneliness, but they were not related to other cognitive functions.

### 3.4 | Coping strategies

About 91% of responders answered at least one of the three open-ended questions.

Categories resulted from the codes fitted in all themes: planful problem-solving, escape-avoidance, accepting reappraisal, positive reappraisal, distancing, self-controlling, and seeking social support) except confrontive coping.



Three overarching categories emerged: daily activities, healthy lifestyle, and solidarity; and were included in the theme positive reappraisal, defined by the framework as “Create positive meaning by focusing on personal growth.”

Table 3 shows the themes and categories resulting from the analysis on the coping strategies used by older people to prevent and manage psychological problems during lockdown.

Furthermore, several contextual aspects were mentioned as limitations or strengths influencing coping strategies, such as living in an urban or rural area, housing (access to natural light, availability of indoor and outdoor space for private or community use), and digital literacy skills.

## 4 | DISCUSSION

This study was aimed to explore the psychological impacts of lockdown among older people during the COVID-19 pandemic in Spain, identify risk profiles and adaptative behaviors. In summary, 2,010 older people from Catalonia responded the survey and we found that 76% of participants reported a perception of cognitive dysfunctions, with 11% reporting more severe effects. About 78% experienced frequent sadness and 13% frequent loneliness. Regarding the risk profiles, at age 80+, female gender and low education and living alone increased the risk of severe psychological impacts. Lazarus and Folkman's (1984) framework was useful to identify the following coping strategies: playful problem-solving, escape-avoidance, accepting reappraisal, positive reappraisal, confrontive coping, distancing, self-controlling, and seeking social support.

The risk profile identified (female gender, low education, and older age) to worsen the cognitive performance is in line with previous studies (Calatayud et al., 2021; Plassman et al., 2010; Prince et al., 2014).

As expected, in our study participants experienced frequent emotional distress and loneliness was in accordance with other studies among older adults (Armitage & Nellums, 2020; Caballero-Domínguez et al., 2020; Santini et al., 2020). Our results on anxiety are in accordance with a study among the general population in China (Shi et al., 2020). Prevalence results on anxiety in a study of the Spanish population (González-Sanguino et al., 2020) was similar although slightly lower, since authors reported that 21.6% of responders suffered anxiety.

The prevalence of loneliness identified in our study, compared with available data before the pandemic ranging from 11.5%–14% in Spain, would be in line with those studies showing a maintenance of the prevalence of loneliness during the pandemic (Domènech-Abella et al., 2018; McGinty et al., 2020; Sundström et al., 2009; Sutin et al., 2020; Yang & Victor, 2011). Furthermore, our study, although conducted in the same country, contradicts the results from Losada-Baltar, Jiménez-Gonzalo, et al. (2020) that chronological age would protect from loneliness. Nevertheless, our results are in line with previous and current research that shows that risk factors for loneliness among older people have not changed with the pandemic (Bu et al., 2020).

Regarding the risk profile in emotional distress, the female gender has been associated with greater emotional distress also in previous studies among the general population (González-Sanguino et al., 2020; H. Wang et al., 2020). Further, low education as a risk factor is also in consistency with the study of H. Wang et al. (2020). Accordingly, inequality axes such as gender and lower education are related to a higher perception of psychological impacts. Our study reported that being 80 years and over was not related to emotional distress. This result is in accordance with other Spanish studies since being in the older age group was even a protective factor against psychological distress (Gómez-Salgado et al., 2020; González-Sanguino et al., 2020). Indeed, in another Spanish recent study (Losada-Baltar, Márquez-González, et al., 2020) older people reported less anxiety and sadness than middle-aged adults, and middle-aged adults reported lower levels than younger participants.

As expected, most of the responders formed coping responses to psychological impacts during this extraordinary situation. Daily personal routines, healthy habits and being active, filling up time or distraction, and seeking emotional support were frequently informed strategies to manage psychological stress as reported by other studies (Holmes et al., 2020; Park et al., 2020). Furthermore, altruistic actions were taken as indicated by Pinazo-Hernandis (2020). Ensuring physical and mental health, well-being and social connectedness using television-based-telehealth

**TABLE 3** Themes and categories resulting from the analysis on the coping strategies used by older people to prevent and manage psychological problems during lockdown according to the framework adapted from Folkman et al. (1986)

Themes	Definition	Categories
Planful problem-solving	"Deliberate problem-focused efforts to alter the situation"	<ul style="list-style-type: none"> <li>Using techniques to reduce anxiety: meditation exercises, yoga, tai chi, qigong</li> <li>Enhancing the ability to adapt to changes</li> </ul>
Escape-avoidance	"Wishful thinking and behavioral efforts to escape or avoid"	<ul style="list-style-type: none"> <li>Laughing</li> <li>Using a good sense of humor</li> </ul>
Accepting reappraisal	"Acknowledges one's own role in the problem with a concomitant theme of trying to put things right"	<ul style="list-style-type: none"> <li>Performing activities of daily living: personal care, housekeeping, purchases, caring for others, caring for pets...</li> <li>Enhancing the ability to adapt to changes</li> <li>Taking advantage of the comfort zone (routines and avoidance of unnecessary risks)</li> <li>Following the recommendations of the health authorities</li> </ul>
Positive reappraisal	"Create positive meaning by focusing on personal growth"	<p><i>Daily activities</i></p> <ul style="list-style-type: none"> <li>Performing activities of daily living: personal care, housekeeping, caring for others...</li> <li>Living, wanting to live and having a positive attitude towards life</li> <li>Performing meaningful activities that make sense to you: cooking, crafts, gardening, sewing, photography...</li> <li>Using creativity to do new things</li> </ul> <p><i>Healthy lifestyle</i></p> <ul style="list-style-type: none"> <li>Maintaining healthy diet</li> <li>Doing physical activity (walking, dancing, gymnastics)</li> </ul> <p><i>Solidarity</i></p> <ul style="list-style-type: none"> <li>Encouraging generosity, solidarity, and being useful to others (family, friends, community)</li> <li>Performing altruist activities (sewing protection material as masks, calling vulnerable people or persons living alone)</li> </ul>
Confrontive coping	"Aggressive efforts to alter the situation"	None
Distancing	"Efforts to detach oneself" and "creating a positive outlook"	<ul style="list-style-type: none"> <li>Enjoying the little things (contemplate, see the sun every day...)</li> <li>Enjoying the moments of silence</li> <li>Keeping the mind active: Reading, attending on-line conferences, writing, cognitive stimulation programs, planning activities, writing a lockdown diary...</li> </ul>
Self-controlling	"Regulate one's own feelings and actions"	<ul style="list-style-type: none"> <li>Using internal strength and resilience forged in previous situations</li> <li>Having hope that "everything will be fine"</li> <li>Having enthusiasm</li> </ul>

**TABLE 3** (Continued)

Themes	Definition	Categories
Seeking social support	"Seek informational support and emotional support"	<ul style="list-style-type: none"> <li>• Having social relationship with others through on-line channels or phone: family, friends, neighbors, reconnecting with old friends, participating in online meetings</li> <li>• Being active in social networks (for social relationships, medical consultations...)</li> </ul>

support (Goodman-Casanova et al., 2020) or telephone calls (Chan et al., 2007) could be an option for those most vulnerable who do not use the Internet or mobile applications such as WhatsApp.

In summary, the study hypothesis presented in Figure 1 would be confirmed, except the increase in loneliness could not be proofed.

## 5 | STRENGTHS AND LIMITATIONS OF THE STUDY

### 5.1 | The current study presents several limitations

The first limitation is that the sample chosen through the snowball method may not represent the entire Spanish population of people aged 65 and over, since it is skewed towards a higher educational level than the regional average (García-Altés et al., 2018). However, although the sample may not be representative, the large sample size influenced the precision of our estimates and the power of the study to draw conclusions. This fact has implications in the interpretation of the results. While we could have reached more older people with a higher level of well-being, it is also plausible the older people more concerned and affected by psychological impacts would have answered the survey. Thus, our results could be either over- or underestimating the prevalence of impacts in the real population.

The second limitation is the use of ad hoc questions instead of validated questionnaires to assess the perception of psychological impacts. However, this questionnaire was developed to be answered in the required online modality and to comprise a broad range of psychological spheres while being short. Thus, it reached a high acceptance and a high response rate after being piloted and improved. Moreover, the online survey used is one of the few studies evaluating the effects of age, gender, education, and cohabitation on the psychological impact (cognitive, emotional distress, and loneliness) of lockdown on the elderly in Spain.

Finally, none of the open answers showed a confrontive coping (i.e., aggressive efforts to alter the situation) and this might highlight a limitation of the self-reported survey underestimating aggressive behaviors as a reaction to stress.

Nevertheless, as far as we know this is the first study to explore the impact of lockdown on psychological aspects including cognition and targeting specifically older people in Spain. Moreover, it consists of a large sample of the Spanish elderly population.

### 5.2 | Implications for practice, policy, and research

Governments and international institutions have issued recommendations to avoid the adverse effects of lockdown. In Spain, the Spanish Society of Geriatrics and Gerontology (Pinazo-Hernandis, 2020) recommended activities to

promote physical activity, cognitive stimulation, socialization, and emotional wellbeing. However, these recommendations have not considered what older people themselves want and do during this exceptional situation. Accordingly, it is required to involve people to build recommendations based on their lived experience (Holmes et al., 2020).

Our findings suggest the necessity to generate real recommendations on how to prevent or alleviate the psychological impact of lockdown on the elderly in Spain. It agrees with some authors who emphasized the urgency of providing quality evidence and implementing preventive strategies (Brooke & Jackson, 2020; Sun et al., 2020). However, it should be noted that special attention should be paid to the most vulnerable groups of people during the lockdown.

Our results underline the importance of describing the cognitive effects during the lockdown experience, as described by Pinazo-Hernandis (2020). In clinical practice and future research, the cognitive consequences of lockdown should be considered.

Additionally, our results may not only inform services and policies but also may be helpful to other stakeholders—not only the elderly individuals themselves but also their family and peers, in being aware of the potential effects of lockdown and conduct an early promotion of coping strategies should lockdowns be reinstated in the future.

## 6 | CONCLUSION

Lockdown is related to cognitive impacts, emotional distress, and loneliness, especially in people with risk profiles. Severe cognitive disorders were reported in 1 out of 10 cases, but for their relevance they should be systematically screened and prevented. Risks for emotional distress and loneliness should be a focal target in interventions to protect wellbeing, especially among those profiles at higher risk (age 80+, women, low education, and living alone), being risk profiles related with inequality axes. The coping strategies reported are a useful resource to design and reinforce active aging policies and practices in case of new lockdowns.

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### CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

### DATA AVAILABILITY STATEMENT

The data that supports the findings of this study are available in the Supporting Information Material of this article.

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