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This is the author's manuscript

Original Citation:

Availability:

This version is available <http://hdl.handle.net/2318/1964930> since 2024-03-26T20:17:05Z

Published version:

DOI:10.1080/13548506.2022.2113104

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To cite this article: Rossana Botto, Marco Galante, Marco Miniotti & Paolo Leombruni (2022): Demoralization during the Italian quarantine due to 2019 coronavirus disease pandemic: prevalence and association with psychological well-being and coping strategies, *Psychology, Health & Medicine*, DOI: [10.1080/13548506.2022.2113104](https://doi.org/10.1080/13548506.2022.2113104)

To link to this article: <https://doi.org/10.1080/13548506.2022.2113104>



Published online: 17 Aug 2022.



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Demoralization during the Italian quarantine due to 2019 coronavirus disease pandemic: prevalence and association with psychological well-being and coping strategies

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ABSTRACT

The aims of the study were to investigate demoralization in a sample of Italian citizens during the Italian quarantine due to COVID-19 pandemic and to explore its associations with psychological well-being, coping strategies, participants' socio-demographic characteristics and COVID-19-related factors. Italian citizens aged over 18 and quarantined in Italy were recruited. A cross-sectional online survey was launched through a snow-ball sampling and 1123 surveys were collected. Participants answered ad hoc questions and completed the Psychological General Well-Being Index, the Demoralization Scale, and the Coping Orientation to Problems Experienced-New Italian Version. Disheartenment, dysphoria, and sense of failure were the subdimensions of demoralization with higher scores. Demoralization was associated with depressed mood, positive well-being, self-control, general health, vitality, problem-solving, and avoidance and religious coping strategies. Individuals who were female, older, without children and not working during quarantine had higher demoralization. Quarantine-related changes can elicit demoralization that is associated to lower psychological well-being. Problem-solving and religious coping can protect against demoralization, while avoidant coping strategies can exacerbate it. Assessing and treating demoralization, especially in the categories of citizens most at risk of developing it, could be useful to provide adequate care against COVID-19-related distress.

ARTICLE HISTORY

Received 15 June 2021
Revised 1 August 2022
Accepted 9 August 2022

KEYWORDS

COVID-19; quarantine; demoralization; psychological well-being; coping strategies; pandemic

INTRODUCTION

In March 2020, the World Health Organization (WHO) declared 2019 coronavirus disease (COVID-19) a pandemic (Muniyappa & Gubbi, 2020). In Italy, to date – July 2022 – over nineteen million cases of COVID-19 were diagnosed, and the number of Italian citizens who died due to or with COVID-19 are over 150,000. To face the emergency, the Italian national authorities imposed the first quarantine on the entire Italian population from 10 March 2020 to 3 May 2020. Despite guaranteeing considerable sanitarian benefits against a pandemic, quarantine undoubtedly represents a new life

condition that alters previous balances and forces individuals to adapt to it, developing new routines and solutions (Naldi et al., 2021; Di Renzo et al., 2020).

Fundamental losses and changes, such as loss of control, variations in roles, life goals and relationships, uncertainty about the future, and sense of isolation can be experienced when facing life-threatening conditions and can favour the development of existential distress (Vehling & Philipp, 2018). Thus, COVID-19 and COVID-19-related quarantine could have generated this form of psychological suffering in the population. More specifically, existential distress can manifest through demoralization, that is a syndrome characterized by feelings of helplessness and hopelessness, loss of meaning and purpose, sense of failure, disheartenment, and impaired self-esteem, that arises from an ongoing inability to cope with a stressful condition (Kissane et al., 2004; Robinson et al., 2015). Relatively to the relationship between demoralization and coping, demoralization refers to the ‘giving up–given up complex’ proposed by George Engel, characterized by the perception of being unable to cope and by effectively weakened abilities to cope (Robinson et al., 2016). More in depth, self-blame seems to amplify existential distress, while functional coping strategies, such as positive reframing, can relieve it (Bovero et al., 2018). Moreover, the loss of internal or external resources, e.g., mastery, self-esteem, social support, employment, and socioeconomic status can increase demoralization (Dischinger et al., 2019).

Demoralization is a relevant clinical dimension since it can be a risk factor for mental health in the general population, e.g., it is associated with suicidality (Costanza et al., 2022), depression, anxiety, and fatigue (Quintero Garzón et al., 2021), stress, somatization, pain, and adverse health outcomes (Tecuta et al., 2015).

To our knowledge, demoralization related to COVID-19-quarantine has not yet been investigated. Furthermore, basing on previous literature that evidences a relationship between demoralization and psychological distress (Bovero, Botto et al., 2019; Vehling et al., 2017), we hypothesized that demoralization can be associated with lower COVID-19-quarantine-related psychological well-being. Finally, also the coping strategies adopted to face COVID-19 circumstances can have a role respect to demoralization. Therefore, the first aim of the study was to investigate demoralization in a sample of Italian citizens during the Italian quarantine due to COVID-19 pandemic. Then, as the second aim, the association of demoralization with psychological well-being, coping strategies, participants’ socio-demographic characteristics and COVID-19-related factors was explored.

MATERIALS AND METHODS

Procedures and participants

The study was cross-sectional. Data were collected through an online survey, created using the free platform Google Forms 2020 (Google Inc., USA; see <http://www.google.it/intl/it/forms/about/>). The survey consisted of multiple-choice questions and the Italian versions of three validated rating scales (see Measures section). Questions were created ad hoc to assess participants’ socio-demographic characteristics and COVID-19-related social, job-related, clinical, and economic factors (see, Table 1). All these variables were identified as salient COVID-19-related factors with a relevan

Table 1. Socio-demographic characteristics of the sample, COVID-19-related factors, and demoralization prevalence (N = 1123).

	Characteristic	
n (%)		
Sex	Male	301 (26.8)
	Female	822 (73.2)
Age		39.60
		±15.33
Marital status	Married	365 (32.5)
	With cohabiting partner	175 (15.6)
	With non-cohabiting partner	240 (21.4)
	Without a partner	256 (22.8)
	Divorced	63 (5.6)
	Widow	24 (2.1)
Children	Yes, at least with a dependent child	264 (23.5)
	Yes, no longer dependent	132 (11.8)
	No	725 (64.6)
Instruction	Intermediate school	55 (4.9)
	Secondary school	426 (37.9)
	Degree	471 (41.9)
	Master's degree	171 (15.2)
Suffering from any medical conditions (except for COVID-19)	Yes	182 (16.2)
	No	941 (83.8)
Occupational status	Student	166 (14.8)
	Trainee	63 (5.6)
	Employee	699 (62.2)
	Unemployed	62 (5.5)
	Retiree	111 (9.9)
	Housewife	22 (2.0)
Type of employee[†]	Employed	531 (47.3)
	Self-employed	154 (13.7)
	Businessman	4 (.4)
	Occasional provider	10 (.9)
Working during COVID-19 quarantine[†]	Yes, at work	139 (12.4)
	Yes, at home	296 (26.4)
	Yes, at work and home	77 (6.9)
	No	187 (16.7)
COVID-19 impact on work[†]	Loss of the job	24 (2.1)
	Interruption of the work	237 (21.1)
	Reduction of the work	229 (20.4)
	No changes	633 (56.4)
House during COVID-19 quarantine	One's own house	1083 (96.4)
	Another house	37 (3.3)
	At work	3 (.3)
Living alone during COVID-19 quarantine	Yes	166 (14.8)
	No	957 (85.2)
Number of people participants live with during COVID-19 quarantine[‡]	1	348 (31.0)
	2	276 (24.6)
	3	242 (21.5)
	4	74 (6.6)
	5	15 (1.3)
	6	2 (.2)
COVID-19-related clinical status	Not tested, and presumably not infected by COVID-19	1073 (95.5)
	Not tested, but presumably infected by COVID-19	27 (2.4)
	Tested and waiting for the result	0 (.0)
	Tested and found negative	13 (1.2)
	Tested and found positive	6 (.5)
	Tested, found positive and healed	4 (.4)

(Continued)

Table 1. (Continued).

Number of relatives with COVID-19 (positive at buffer)	0	1059 (94.3)						
	1	48 (4.3)						
	>1	16 (1.5)						
Relatives or close associates deceased due to COVID-19	Yes	126 (11.2)						
	No	997 (88.8)						
Engaged on the frontlines against COVID-19	Yes, as social and health professional	71 (6.3)						
	Yes, as provider of essential services	80 (7.1)						
	Yes, as volunteer	2 (.2)						
	No	970 (86.4)						
Relatives engaged on the frontlines against COVID-19	Yes	412 (36.7)						
	No	711 (63.3)						
COVID-19 impact on economic status	Much worse	64 (5.7)						
	Worse	318 (28.3)						
	Unchanged	720 (64.1)						
	Improved	19 (1.7)						
	Much improved	0 (.0)						
COVID-19 impact on purchasing power	Can no longer buy basic necessities	31 (2.8)						
	Can no longer respect monthly deadlines	81 (7.2)						
	Can no longer generate or maintain savings	211 (18.8)						
	None of the previous	800 (71.2)						
	mean	sd	min	max	Q1	Q2	Q3	
DS	Loss of meaning and purpose in life	2.90	3.27	0	18	0	2	4
	Dysphoria	5.32	3.64	0	20	3	5	8
	Disheartenment	8.16	4.90	0	24	4	8	11
	Helplessness	3.04	3.14	0	16	0	2	5
	Sense of failure	5.44	3.06	0	16	3	5	7
	Total score	24.86	14.96	0	86	14	22	33

Notes. *n*, absolute frequencies; %, percent frequencies; †, information collected only from employee; ‡, information collected only from participants not living alone; *sd*, standard deviation; *min*, the lowest score in the sample; *max*, the highest score in the sample; Q1, 25° percentile; Q2, 50° percentile; Q3, 75° percentile; DS, Demoralization Scale.

psychological impact by consulting the existing literature on COVID-19 and similar diseases (Brooks et al., 2020; Jeong et al., 2016; Lai et al., 2020; Lazzerini & Putoto, 2020; Qiu et al., 2020; Wang et al., 2020) and the Italian institutional information channels. The survey was anonymous and based on voluntary participation, thereby protecting participants' personal data.

The inclusion criteria were being an Italian citizen, being aged 18 or over, speaking Italian, and living in Italy during the COVID-19 Italian quarantine.

The people who received the survey could firstly read the information on the research. Then, through the first question of the survey, participants declared to meet the inclusion criteria and provided their informed consent. Then, they could fill in the survey. If any information were needed and to receive the outcomes of the research, participants could contact R. B., the person responsible for this research study.

Through a snow-ball sampling, i.e. by inviting the receivers to spread the survey, the survey was launched on the 4th of April 2020, by using various electronic services such as Gmail, WhatsApp, Facebook social network. This sampling technique was adopted to easily reach many participants with different characteristics and because the broad criteria for inclusion allowed this type of sampling. The initial sampling target were 150 subjects, selected among authors' acquaintances, meeting the inclusion criteria, and varying according to gender, age, education and occupation. Simultaneously with

sending the survey, people were kindly asked to forward the survey to their acquaintances complying with the inclusion criteria.

Sample size was esteemed by consulting previous studies on COVID-19 using online surveys (Lai et al., 2020; Wang et al., 2020) and 1000 subjects have been determined as the minimum sample size to reach. Participants' answers to the survey were received from 4th to 16 April 2020, during the first Italian COVID-19 quarantine, and 1123 complete surveys were collected. On the 16th of April 2020, the target relative to the number of participants was reached and the survey was closed.

Measures

The Italian versions of the following validated rating scales were used.

The Demoralization Scale (DS; Costantini et al., 2013; Kissane et al., 2004) assesses demoralization through 24 items on a 5-point Likert scale, ranging from zero (never) to four (always). The total score of the scale ranges from zero (absence of demoralization) to 96 (maximum level of demoralization). DS includes five subscales: loss of meaning and purpose in life, dysphoria, disheartenment, helplessness, and sense of failure. The tool is widely used in literature and has good psychometric properties (Costantini et al., 2013).

The Psychological General Well-Being Index (PGWBI; Dupuy, 1984; Grossi et al., 2002) is composed by 22 items on a 6-point Likert Scale, ranging from zero to five. The scale provides a total score, ranging from zero to 110. Higher scores indicate a greater psychological well-being. Furthermore, the scale investigates the following six health-related quality of life domains: anxiety, depressed mood, positive well-being, self-control, general health, and vitality. The scale has been used in many countries on general population and is a cross-culturally validated tool, guaranteeing a useful deepening of the mental health (Grossi et al., 2002).

The Coping Orientation to Problems Experienced-New Italian Version (COPE-NVI; Carver et al., 1989; Sica et al., 2008) is a self-report scale that investigates different coping strategies. It consists of 60 items on a 4-point Likert Scale, ranging from one (never) to four (always). The New Italian Version of the tool has five subscales, that represent the following coping strategies: social support (12 items), avoidance strategies (16 items), positive attitude (12 items), problem solving (12 items), and turning to religion (eight items). For the study, participants were invited to answer by referring to the COVID-19 pandemic and quarantine. The COPE-NVI is a valid and useful tool to measure coping in the Italian context (Sica et al., 2008).

Statistical analyses

Descriptive statistics included frequencies, means, standard deviations, percentiles, and minimum and maximum scores. Multiple linear regression was performed to analyse the association of demoralization with psychological well-being, coping strategies, participants' socio-demographic characteristics and COVID-19-related factors. DS total score was considered as the dependent variable, while PGWBI and COPE-NVI subscales, sample's socio-demographic characteristics and COVID-19-related factors as the independent variables. The categorical variables were included in the regression model only if their groups were balanced or could be balanced. The amount of variance in demoralization

explained by each independent variable was investigated through semi-partial correlations. p values less than .05 were considered statistically significant. Statistical analysis was executed using the software SPSS Statistics Version 26.0 (IBM Corp. Armonk, NY, USA).

RESULTS

Participants' socio-demographic characteristics and COVID-19 related factors

The sample consisted of 1123 Italian citizens, who were quarantined for an average of 28.45 days ($sd = 4.76$, range 24–36; median = 30). Participants had an average age of 39.60 years ($sd = 15.33$; range 18–89; median = 34) and most of them were married or with a cohabitant partner ($n = 540$, 48.1%), did not have children ($n = 725$, 64.6%), were employed ($n = 531$, 47.3%), did not suffer from any medical conditions except for COVID-19 ($n = 941$, 83.8%), and were not engaged on the frontlines against COVID-19 ($n = 970$, 86.4%). 1090 (97.06%) citizens were not positive or supposed not to be infected with the COVID-19. COVID-19 resulted in the loss of employment, interruption, or reduction of work activities for about half of the participants ($n = 490$, 43.6%) and worsened the economic status of 382 (34.02%) citizens. See, [Table 1](#) also for the other sample's characteristics.

Demoralization prevalence and associations between demoralization and the other variables

DS mean total score was 24.86 ($sd = 14.96$) and the 75% of participants had a total score ≤ 33 (33 has been identified as the third quartile of the data set, scores range of DS scale: 0–96). Disheartenment was the DS subscale with higher scores, followed by dysphoria and sense of failure. DS scores are presented in [Table 1](#).

DS total score was significantly associated with depressed mood, positive well-being, self-control, general health, and vitality PGWBI subscales, and with avoidance strategies, problem solving, and turning to religion COPE-NVI subscales ($F = 218.681$; $p \leq .01$).

Participants who were female, older, and without children had higher DS scores ($F = 218.681$, $p \leq .01$). Participants who were not working during the quarantine had higher DS scores ($F = 218.681$, $p \leq .01$).

The results of the multiple linear regression are presented in [Table 2](#).

DISCUSSION

Concerning the first aim of the study, data on demoralization prevalence seem to suggest low demoralization levels in the sample. In this regard, the sample differed from the Italian population as follows: it had lower average age and a lower percentage of people affected by medical conditions, and a higher percentage of people with a partner, not living alone, and workers ("ISTAT," 2020). Furthermore, the number of participants affected by COVID-19 and engaged on the frontlines against COVID-19 was low. These findings seem to counter the hypothesis that COVID-19-related quarantine could elicit existential distress. The reason could be that since all these factors can promote the preservation of adequate levels of psychological well-being (Lai et al., 2020; Naldi et al.,

Table 2. Multiple linear regression (N = 1123).

Dependent variable: Demoralization total score			
Independent variables	B	sr	sR ² (%)
Constant			
Depressed mood (PGWBI)	-2.131**	-.188	3.5
Positive well-being (PGWBI)	-1.106**	-.151	2.3
Self-control (PGWBI)	-.672**	-.085	0.7
General health (PGWBI)	-.471**	-.043	0.2
Vitality (PGWBI)	-.362*	-.039	0.2
Avoidance strategies (COPE-NVI)	.486**	.152	2.3
Problem solving (COPE-NVI)	-.279**	-.098	1
Turning to religion (COPE-NVI)	-.172**	-.048	0.2
Sex	-1.396*	-.040	0.2
Age	.101**	.074	0.5
Working during COVID-19 quarantine	2.356**	.054	0.3
Children	1.809*	.076	0.6

Notes. Adjusted R², .700. sR², single R²; B, unstandardized regression coefficient; sr, semi-partial correlation coefficient; *, p-value ≤ .05; **, p-value ≤ .01; PGWBI, Psychological General Well-being Index; COPE-NVI, Coping Orientation to Problems Experienced-New Italian Version.

2021; Reneflot & Mamelund, 2012; Steptoe et al., 2015; Van Stolk et al., 2014), they could also protect against demoralization. At the same time, considering the role of these sociodemographic aspects, there could be subpopulations of Italian citizens more at risk for demoralization. Future research and citizenship assistance programs should focus on them.

Disheartenment, dysphoria, and sense of failure are the clinical subdimensions of demoralization with which the participants of the study seem to be more affected. These clinical conditions are characterized by a state of discouragement, loss of confidence, emotional distress, and loss of sense of worth and efficacy, resulting from unsuccessful coping or unsatisfied desires (Kissane, 2001). Therefore, these forms of demoralization could be manifested during quarantine when the individual struggles to adapt to the quarantine-related life changes. Qualitative investigations could better clarify the dynamics that lead to these symptoms. Moreover, psychotherapy could help demoralized people in gain awareness on their way to live limits, losses, and impossibility, and in transform it if it is not beneficial, maintaining self-esteem and self-efficacy.

Regarding the association between demoralization and psychological well-being, higher demoralization was associated with higher depressed mood, and lower positive well-being, general health, vitality, and self-control. Literature evidence that many quarantine-related aspects, such as limitations in the freedom and restrictions in activities, social isolation, fear for health, job-related changes, and financial losses can reduce the psychological well-being (Brooks et al., 2020; Jeong et al., 2016). Moreover, 'demoralization can be a risk factor for the manifestation of psychopathology' (De Figueiredo, 2013). Hence, it is conceivable that failing in coping with these quarantine-related aspects may generate demoralization, that contributes to reducing the psychological well-being. Treating demoralization and helping the individual in coping could play a preventive role against the onset of emotional symptoms which can affect his/her health and functioning. Mediation models could confirm or not these hypotheses.

As far as the association between demoralization and coping strategies, problem-solving, i.e., actively facing issues, planning attempts and solutions, and modulating the

emotional distress, was related to lower demoralization. Therefore, problem-solving could help in maintaining proactivity, flexibility and tolerance against the stressors and in guaranteeing the perception of internal resources such as self-esteem, self-reliance, and mastery protecting from demoralization. Furthermore, a more use of religious coping was associated to lower demoralization. In this regard, it seems that, when facing apparently uncontrollable distress, who adheres to a religious belief can experience relief in trusting the divine and searching for meaning in a transcendental dimension (Bovero, Tosi et al., 2019). This spiritual coping could allow the individual to maintain control on the situation and to make sense of it. Also, spirituality offers the opportunity to feel connected to oneself, others, time, nature, love, beauty, God, and this favour the acceptance of imperfections and limits and the experience of 'being whole' despite life difficulties (Breitbart, 2017). On the contrary, avoidance strategies, such as denial, substances use and disengagement (Sica et al., 2008), were associated with higher demoralization, probably because they are defence mechanisms implemented to reduce the suffering associated with the stressor which, however, do not let to effectively face it. Thus, these strategies represent dysfunctional mental attitudes and behaviours that could aggravate yet complicated conditions and exacerbate demoralization. Therefore, it could be hypothesized that the type of coping implemented to adapt to quarantine-related concerns and its effectiveness can play a role in the generation of demoralization, which, in turn, can favour the reduction of the psychological wellbeing. It is not so much the objective events themselves that generate pain, but rather our subjective reading and reaction to them, our way of being with them (Guidano, 2007). Finally, regarding the association of demoralization with participants' sociodemographic characteristics and COVID-19-related factors, demoralization was higher in females. This evidence is consistent with previous findings in the literature (Quintero Garzón et al., 2021; Robinson et al., 2015) and is in line with the findings of Ding et al. (2021) and Mazza et al. (2020) on Covid-19: a possible explanation is that women tend to be more vulnerable to experiencing stress (Mazza et al., 2020) and have higher levels of pathogen disgust sensitivity and consequent disease-avoidance motivations (Ding et al., 2021), and these characteristics could exacerbate demoralization. Furthermore, demoralization was higher in older people, citizens without children and individuals not working during the quarantine, as already evidenced relatively to the psychological wellbeing (Lai et al., 2020; Steptoe et al., 2015; Van Stolk et al., 2014). Besides, having children and being healthy and active in work could stimulate problem-solving capacities and promote actively coping, protecting from demoralization. Thus, vitality and activity in life could make the individual more resilient to stressors and more flexible and effective in the adaptation to them. On the other hand, there could be cases of elderly, unemployed, and who failed to have children in which depressive aspects could create difficulties in coping and favour demoralization. A deeper assessment on previous psycho-social conditions influencing demoralization could be useful for both clinical practice and research.

The study has some limitations. The snow-ball sampling did not allow to manage the recruitment, opening to possible selection biases or preventing variability on factors of interest. Then, its cross-sectional design hindered from making inferences on the causal relationships and the mediation roles between variables. Finally, the homogeneity of the sample respect to some aspects limits generalisations, but enabled to investigate a sample of adequate size, representative of Italian subpopulations with specific characteristics.

Future research should better investigate demoralization in the general and healthy population, focusing on specific influencing psycho-social factors, such as demographic characteristics or individual's vitality and level of functioning, and addressing the peculiar clinical processes that lead to the onset of demoralization.

To conclude, quarantine-related changes and restrictions can elicit demoralization that is associated to lower psychological well-being. Problem-solving and religious coping can protect against demoralization, while avoidant coping strategies can exacerbate it. Finally, specific categories of citizens seem to be most at risk of developing demoralization. Identifying the most vulnerable citizens may favour preventive and supportive strategies addressed to population and better orient the interventions. Concerning the psychological interventions, psychotherapeutic strategies such as renegotiating life goals, favouring meaning-focused coping, establishing new priorities, changing in perspectives, and encouraging acceptance might be effective to alleviate demoralization and to promote a functional process of adaptation to the events (Vehling & Philipp, 2018).

Data availability statement

The datasets generated during and/or analysed during the current study are available by emailing the corresponding author.

Ethical approval

The study was performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. The study was granted exemption from requiring ethics approval, because the survey has been addressed to free citizens, and not directly to people belonging to specific institutions. Informed consent was obtained from all individual participants included in the study.

Acknowledgments

The authors desire to extend a special thanks to all the Italian citizens who agreed to participate in the research for their precious contribute, that has allowed to deepen the knowledge of this unique condition and historical period.

They also wish to thank Dr. Marta Opezzo for her help in the work, her willingness and generosity.

Authorship

Rossana Botto: Conceptualization, Data curation, Formal Analysis, Methodology, Writing - original draft. Marco Galante: Data curation, Formal Analysis, Methodology, Reviewing – original draft. Marco Miniotti: Conceptualization, Formal Analysis, Reviewing – original draft. Paolo Leombruni: Reviewing – original draft, Supervision.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The author(s) reported there is no funding associated with the work featured in this article.

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