SAPIENZA
UNIVERSITÀ EDITRICE

First COVID-19 wave in Italy: coping strategies for the prevention and prediction of burnout syndrome (BOS) in voluntary psychologists employed in telesupport

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Article info

Abstract

Introduction. The spread of the SARS-CoV-2 coronavirus and the pathology resulting from the infection, declared a pandemic on 11 March 2020, has strongly impacted the psychological health of the population. Italy was the first Western country to show significant signs of a widespread epidemic and to activate severe restrictive measures (national lockdown), with mental health consequences in the population. The National Council of the Order of Psychologists, adapting to the decree of the President of the Council of Ministers of the Italian Government, encouraged psychological support in telematic (by telephone or online) form. To respond to this emergency, several Italian psychologists activated listening desks, applying national and international guidelines on telepsychology. As part of the help profession, psychologists can develop burnout syndrome (BOS). The research hypotheses underlying this work are to investigate which are the most effective/dysfunctional coping styles in dealing with the onset of BOS and to analyse the differences between volunteer and non-volunteer psychologists.

Method. Using a non-probability convenience sampling, 468 participants were recruited through an online survey, of which 77 were male (16.5%) and 391 female (83.5%), with an average age of 40.95 years (SD = 8.98) and an age range from 26 to 72. To evaluate the three dimensions of burnout, the Maslach Burnout Inventory - Italian Version was administered. To evaluate coping strategies, the new Italian version of the Coping Orientation to the Problems Experienced Inventory (COPE-NVI-25) was administered. Correlations, MANOVA and regression were applied.

Results. Of the sample, 16.9% (79) had high levels in all three BO measures, while in the volunteer group alone, the figure increased to 17.6%. MANOVA highlights a statistical significance between volunteers and non-volunteers for Depersonalization but no gender difference in the development of BOS. Regression analysis highlights that Positive Attitude and Social Support strategies are those to focus on to prevent and contain the onset of BOS. In contrast, Orientation to the Problem and Avoidance Strategies predict the development of the syndrome. The only coping style which does not reach any significance level in all BOS dimensions is Transcendent Orientation.

Keywords: Psychology; Coping strategies; Burnout; Covid-19. Maslach Burnout Inventory; Cope-NVI-25.

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Introduction

Historically, humankind has faced many tragedies and difficulties which inevitably affected the mental health of those involved directly or indirectly. The spread of the SARS-CoV-2 coronavirus and the pathology resulting from the infection, declared a pandemic on 11 March 2020 (World Health Organization, 2020), has strongly impacted the psychological health of the population (Serafini et al., 2020; D'Ambrosi et al., 2020). Strict restrictive measures by world governments aimed to contain the pandemic, while the fear of contagion for oneself and one's family, social isolation and other stressors contributed to the onset of psychopathological outcomes (Brooks et al., 2020; Burioni, 2020; Rossi et al., 2020; Talevi et al., 2020).

Italy was the first Western country to show significant signs of a widespread epidemic and to activate severe restrictive measures (national lockdown), with consequences for mental health in the population (D'Ambrosi et al., 2020; Fiorillo & Gorwood, 2020; Giallonardo, 2020; Lazzari et al., 2020). The unpredictability and novelty of the pandemic event also strongly impacted health professionals themselves, including psychologists, increasing emotional stress related to emergency practice (Babore et al., 2020; Rana et al., 2020). The National Council of the Order of Psychologists, adapting to the decree of the President of the Council of Ministers (DPCM) of the Italian government, has encouraged psychological support in telematic (by telephone or online) form. Several Italian psychologists, responding to this emergency, have activated counselling desks, applying national and international guidelines on telepsychology (D'Ambrosi et al., 2020), with the consequent reorganization of the provision of personal services (Dikaios et al., 2020; McCord et al., 2020; Sharma et al., 2020). This may have had a major impact on mental health and help professionals, exposing them to greater work stressor loads.

The literature shows that the syndrome which most affects the helping professions (Gabassi et al., 2002; Magnano et al., 2015; El-Hagea et al., 2020) is burnout syndrome (BOS), already defined by ICD-11 (International Classification of Diseases) as the ineffective management of chronic work stress (World Health Organization, 2019). Studies have amply shown a directly proportional correlation between high burnout levels and increased workload and relational deterioration, with the addition of a lack of clear guidelines (Embriaco et al., 2007; Merlani et al., 2011; Sirigatti & Stefanile, 1993). BOS develops because of prolonged exposure to stressors after countless ineffective attempts to cope with it (Gabola & Albanese, 2014) and involves a state of mental, physical and emotional exhaustion (Cleric 2017; Iserson, 2018; Shirom, 2009).

In the model proposed by Maslach (1993), among the first to recognize BOS as a syndrome typical of the helping professions (Schaufeli & Van Dierendonck, 1995), three dimensions are identified: Emotional Exhaustion (EE), Depersonalization (DP) and Personal Satisfaction (RP), which are intended as a response to prolonged stressful events. Specifically, EE considers the progressive depletion of the professional's internal resources, caused by excessive involvement in responding to clients' needs. It presents with a lack of energy and inability to experience positive emotions and/or enthusiasm at work. The DP considers the cynicism, the detached and cold attitude which the professional takes towards clients; these then become the basis of the professional's malaise and are therefore responded to with hostility. Finally, the RP considers the reduction in or lack of job satisfaction (Maslach, 1993). There is a loss of interest, fatigue and frustration, which can have negative consequences on work performance (Bakker et al., 2005; Merlani et al., 2011). Despite the heterogeneity of events, people show that they have preferential ways of dealing with them, using a limited range of strategies in several situations (Conti, 2000).

Foà, Tonnarelli, Carati and Fruggeri (2015) have reconceptualized a model which includes five strategies:

Orientation to the Problem (OP) – a tendency to use strategies which aim to dominate events through cognitive processes, suppression activities, planning and search for information, underestimating the activities which help the management of stressful situations.

Positive Attitude (AP) – a tendency to proactively accept events, containment and positive reinterpretation of events, transforming them into opportunities for growth.

Transcendent Orientation (OT) – a tendency to rely on aspects and activities related to religion and spirituality.

Social Support (SS) – a tendency to implement requests for understanding, information and emotional support in their social/professional network.

Avoidance Strategies (SE) – a tendency to ignore and deny the threat of stressful events, through activities which divert attention from the problem using humour and behavioural and mental detachment.

Several studies have found the psychological predictive BOS in health volunteers by assessing burnout levels in relation to age (Chirico et al., 2021), personality traits (Bakker et al., 2005), effects on motivation (Clary et al., 1998) and the responses of voluntary operators and professional practitioners, which show some differences (Gabassi et al., 2002). Carver, Scheier and Weintraub (1987) have shown that people with the AP coping style are more likely to preserve their psychophysical health when coping with stressful situations than those who use SE and denial. Hatchett and Park (2004) also show that the AP coping style correlates positively with OP, while AP correlates negatively with an emotion-oriented coping style and SE.

On the basis of the above, the research hypotheses are:
1) The most effective coping styles in dealing with the onset of BOS of psychologists are OP, AP, SS and OT.
2) The most dysfunctional coping style in dealing with the onset of psychologists' BOS is SE.
3) BOS levels are statistically significantly higher in volunteers than in non-volunteers.
4) Age correlates inversely with EE and DP and in a directly proportional way with RP and is a protector against of the onset of BOS.

Methodology

Participants

Using a non-probabilistic convenience sample, 468 participants were recruited through an online survey, of which 77 were

male (16.5%) and 391 female (83.5%), with an average age of 40.95 (SD = 8.98) and an age range from 26 to 72.

Of the subjects, 392 (83.76%) declared themselves independent practitioners; the remaining 16.24% (76) were employees. Of the overall sample, 51.07% (239) offered free psychological telematic support to the Italian population during the application of the most restrictive measures (total lockdown) in force between March and May 2020. The remainder, the non-volunteers, provided psychological support only, for a variety of reasons, during their normal professional work.

The sample was distributed geographically in four areas: North (Piedmont, Valle d'Aosta, Liguria, Lombardy, Trentino-Alto Adige, Veneto, Friuli-Venezia Giulia, Emilia-Romagna) represented by 165 subjects (35.3%); Centre (Tuscany, Umbria, Marche, Lazio) represented by 61 subjects (13%); South (Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria) represented by 231 subjects (49.4%); and Islands (Sardinia and Sicily) with 11 subjects (2.4%).

Measures

Maslach Burnout Inventory (MBI; Sirigatti & Stefanile, 1993). The MBI consists of 22 items where participants are asked to evaluate how often a given event occurs, using a seven-point Likert scale (0 "Never" to 6 "every day"). The instrument considers BO as an emotional exhaustion syndrome on three main aspects: Emotional Exhaustion (EE, Cronbach's Alpha = .088), Depersonalization (DP, Cronbach's Alpha = .070) and Personal Realization (RP, Cronbach's Alpha = .083) (Maslach & Jackson, 1981; Sirigatti & Stefanile, 1993).

The ranges for determining burnout severity levels for the Italian validation of the MBI questionnaire established the following ranges: high EE $\geq$ 24, DP $\geq$ 9, PA $\geq$ 37; average EE = 15–23, DP = 4–8, PA = 30–36; and low EE $\leq$ 14, DP $\leq$ 3, PA $\leq$ 29 (Maslach & Jackson, 1981; Sirigatti & Stefanile, 1993). High scores in the EE and DP scales indicate a condition of emotional exhaustion and depersonalization respectively, while high scores on the RP scale indicate a positive consideration of one's personal accomplishment.

The new Italian version of the *Coping Orientation to the Problems Experienced Inventory* (COPE-NVI-25; Foà et al., 2015). COPE-NVI-25 consists of 25 items expressed on a 6-point Likert scale (from 1 "I never do it" to 6 "I always do it"), covering five different coping strategies: SE (5 Items), OT (4 Items), AP (6 Items), SS (5 Items) and OP (5 Items); Cronbach's Alpha index is between 0.63 and 0.96 (Foà et al., 2015).

Procedure

The data were collected from 10 June to 10 July 2020 via an online questionnaire, using the public emails of Italian psychologists as well as the adoption of an advertising campaign on the main social networks (Twitter, Facebook and LinkedIn). Initially, 516 psychologists joined; 48 incomplete questionnaires were deleted, with the creation of a definitive sample of 468 participants. Based on the significant difference

between the groups of volunteers and non-volunteers, linear regression was applied to understand the predictive role of coping styles on BOS. Correlation, Manova and regression were tested using the statistical software SPSS V.20 (IBM Corp. 2012).

Results

Of the sample, 16.9% (79) had high levels in all three BO measures, while in the volunteer group alone, the figure increased to 17.6%; the statistical significance of the differences in BO measures between volunteers and non-volunteers was tested (Tab 3). The results presented in Table 1 show the correlations between coping styles and the three burnout dimensions.

Tab. 1. Correlation between Coping Strategies, Age and Burnout (n = 468)

	EE	DP	RP
SE	0.388**	0.389**	-0.366**
OT	0.030	0.006	-0.004
AP	-0.321**	-0.289**	0.415**
SS	0.005	-0.134**	0.135**
OP	-0.094*	-0.054	0.173**
AGE	-0.031	-0.051	0.132**

Note. * The correlation is significant at the 0.05 alpha level (2-tailed). **. The correlation is significant at the 0.01 alpha level (2-tailed). SE = Avoidance Strategies, OT = Transcendental Orientation, AP = Positive Attitude, SS = Social Support, OP = Orientation to the Problem.

The results show that SE correlates directly proportionally with EE (r = 0.388, p = 0.00) and DP (r = 0.389, p = 0.000) and inversely proportionally to RP in a statistically significant way (r = 0.366, p = 0.000). This indicates that as SE strategies increase, EE and DP levels also increase, while RP decreases. For OT, on the other hand, there is no statistically significant correlation. AP correlate negatively with EE (r = 0.321, p = 0.000) and DP (r = 0.289, p = 0.000) and positively with RP (r = 0.415, p = 0.000). SS correlates negatively and significantly with the DP dimension (r = 0.134, p = 0.004) and positively with RP (r = 0.135, p = 0.003). The EE dimension correlates negatively with OP (r = 0.094, p = 0.042 and positively with RP (r = 0.173, p = 0.000). Age correlates positively and significantly only with RP (r = 0.132, p = 0.004).

MANOVA applied with bias corrected accelerated to BOS' dimensions in the comparison between volunteers/non-volunteers and males/females. In the first case, Pillai Trace, Wilks' Lambda, Hotelling's Trace and Roy's largest root intercept independent variable were applied, with p = 0.026; no gender difference was found (p = 0.076). Table 2 shows effects tests between subjects in MANOVA to verify which dependent variables were statistically significantly different for volunteers and non-volunteers.

Tab. 2. MANOVA Effects Test between Volunteer Subjects (n = 239)/ Non-volunteers (229) for the Three Dimensions of Burnout

Source	DV	SS Type III	df	MS	F	sig.
	EE	31.378	1	31.378	0.264	0.608
Model	DP	160.722	1	160.722	6.405	**0.012**
	RP	155.747	1	155.747	2.554	0.111
	EE	266,736.686	1	266,736.686	2242.439	**0.000**
Intercept	DP	32,754.569	1	32,754.569	1305.3	**0.000**
	RP	1,037,927.371	1	1,037,927.371	17,018.015	**0.000**
	EE	31.378	1	31.378	0.264	0.608
Voluntarism	DP	160.722	1	160.722	6.405	**0.012**
	RP	155.747	1	155.747	2.554	0.111

Note. EE = Emotional Exhaustion; DP = Depersonalization; RP = Personal Realization; DV = Dependent Variable.

The results show statistically significant differences between volunteers and non-volunteers in the DP dimension of BOS (p = 0.012).

Based on the significance previously obtained, linear regression has been applied to volunteering psychologists only (Table 3).

The data show that the coping styles influencing EE as predictors are SE (B = 1.426; β = 0.417, p = 0.000) and OP (B = 0.633; β = 0.183, p = 0.003), while AP is a protective factor (B = 0.888; β = 0.324, p = 0.000).

For the DP dimension, the predictor styles are SE (B = 0.750; β = 0.440, p = 0.00) and OP (B = 0.424; β = 0.246, p = 0.000), while AP (B = 0.444; β = 0.325, p = 0.000) and SS (B = 0.242; β = 0.175, p = 0.002) are protective.

For RP, the last dimension, positive factors such as the development of adequate personal satisfaction are AP (B = 0.939; β = 0.478, p = 0.000) and SS (B = 0.162; β = 0.081, p = 0.00), while SE (B = 0.811; β = 0.311, p = 0.000) and OP (B = 0.321; β = 0.129, p = 0.000) play negative roles. The only coping style which does not reach any significance level in all BOS dimensions is OT.

Discussion

This work demonstrates that Italian psychologists who have carried out voluntary support services have obtained a higher score only in the DP dimension of BOS (Table 4), partially confirming the hypothesis that volunteers are more inclined to develop high levels of BOS. This aspect can be justified by the unique and unforeseen emergency situation which has seen Italian psychologists resorting to new ways of structuring the setting, a factor which strongly correlates with BOS (Kelly, 1984). Having no gender difference might be an artefact in this research, due to the low representation of males in the sample. Nevertheless, our sample may be considered as representative of the reference population because of the national gender statistics of psychologists showing 83% female and 17% male psychologists (National Council of the Order of Psychologists, 2017).

The results are partially in line with most of the literature, which shows that the coping strategy most predictive of BOS development is SE (Van Mol et al., 2015). In contrast, for the volunteer psychologists of this study, there is a propensity to use defensive mechanisms aimed at denying and minimizing the threat of the stressful event, through activities which divert attention from the problem using humour and behavioural and mental detachment, i.e. OP (Dorz et al., 2004; Leiter et al., 2015;), which can lead to high levels of BO. The literature places OP as protective during the onset of BOS in health professionals (e.g. physicians, nurses, physiotherapists) (Embriaco et al., 2007; Nowakowska-Domagala et al., 2015), while on the basis of this study, we can say that for psychologists it is a factor which favours the development of the syndrome. In our opinion, this characteristic is derived from the very nature of the psychological profession, in which the focus and use of the individual's (both professional and patient) internal resources, is prominent, in contrast to the resolution of a physical and/or material problem with less personal involvement of the clinician.

Only OT has no statistical significance; it does not perform any protective or predictive function with respect to the onset of BOS. This is in line with Cameron (2015), indicating the tendency of psychologists to direct their work mainly towards enhancing internal resources (locus of internal control) rather than towards the spiritual sphere, which pushes the person to seek outside support (external locus of control). It is possible

Tab. 3. Regression Analysis between Coping Strategies and Burnout

Pred.	EE					DP					RP				
	B	β	T	p	CI 95%	B	β	T	p	CI 95%	B	β	T	p	CI 95%
Cost	22.385		3.656	.000	[8.789; 36.234]	10.093		3.458	.000	[4.050; 16.251]	30.592		7.477	.000	[22.241; 38.742]
SE	1.426	0.417	7.274	.000	[.987; 1.861]	0.750	.440	8.026	.000	[.537; .962]	-.811	-.331	-6.189	.000	[-1.106; 528]
OT	.073	.033	.601	.549	[-.230; .333]	-.046	-.042	-.796	.427	[-.160; .065]	.077	.049	.949	.343	[-.075; .262]
AP	-.888	-.324	5.130	.000	[1.242; .493]	-.444	-.325	-5.385	.000	[.630; .253]	.939	.478	8.119	.000	[.650; 1.190]
SS	-.054	-.020	.334	.739	[-.396; .327]	-.242	-.175	-3.107	.002	[.410; .072]	.162	.081	1.482	.140	[.042; .394]
OP	.633	.183	2.972	.003	[.176; 1.053]	.424	.246	4.175	.000	[.192; .638]	-.321	-.129	-2.252	.025	[-.576; .032]

Note. Pred. = Predictors, Cost = Costant, SE = Avoidance Strategies, OT = Transcendental Orientation, AP = Positive Attitude, SS = Social Support, OP = Orientation to the Problem, CI= Confidence Interval.

to assume that the OT strategy may be *a side-by-side tool* in the psychological profession (Chiri & Sica, 2007; Sica et al., 2008).

However, the AP coping strategy is protective for all BOS dimensions, as reported in the literature (Mancini et al., 2013). The sense of self-efficacy perceived by psychologists was found to be positively modulated by AP and, to a lesser extent, by OP (Sica et al., 2008). In essence, the tendency to be more self-effective – along with proactive acceptance of events – allows individuals to positively reinterpret contingent situations and turn them into opportunities.

The SS coping strategy is protective for the DP and RP dimensions. The data show that the tendency to implement requests for information, understanding and emotional support in one's social/professional network is protective during the onset of depersonalisation. The relational aspect, in fact, is understood as an element of human and professional support which activates recognition mechanisms which serve to protect against the tendency to show emotional detachment towards one's clients and their work, starting a process of containment of depersonalization.

Conclusions

This study investigated which coping strategies have proved most effective and adaptive in dealing with BOS and which, in contrast, are dysfunctional. Like all studies, this is not without limitations. The most obvious are inherent in the imbalance of the sample, with a low representation of the male gender; this does not allow a generalization of the results with respect to gender differences either with respect to BOS or coping strategies. A further limitation is the impossibility of verifying the previous presence of adverse events which could have functioned as triggers to the development of the BOS; similarly, it was not possible to carry out a pre- and post-evaluation with respect to BO levels. However, the results do suggest that AP and SS strategies are those to focus on to prevent and contain the onset of BOS. The activation of preventive measures could begin through the strengthening of the social and communication skills of health professionals (Zarei et al., 2019). The results indicate that psychologists are also a category not exempt from the onset of BOS but that, unlike other helping professions, OP has a role as a predictor of the onset of BOS, while OT is inconsistent in its role.

Every hypothesis at the basis of this study is partially supported by our data. The first showed that only AP and SS have a protective function in BOS development, while surprisingly, OP has a predictive role and OT plays no role. The second hypothesis is partially valid, as OP correlates with the development of the psychologists' BOS. The third hypothesis shows only difference for DP. The fourth shows that age has a protective role only for RP and is inconsistent for EE and DP. These results add important data on the development of psychologists' BOS, which remains little investigated. In future, further research could investigate the correlations between coping styles, BOS and personality traits to help the effectiveness of telepsychology pathways. Lastly, it would

be useful to investigate which coping styles are most used in relation to the various categories of helping professionals.

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