PERSONAL RESOURCES THAT HELP IN COPING WITH DISTRESS: WHAT HAS THE COVID-19 PANDEMIC REVEALED TO US?

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Abstract

The COVID-19 pandemic has run into all aspects of people's life and individuals were emotionally drained from its social, financial, and emotional impact. Thus, this global situation has resulted in increased levels of distress (e.g., stress, anxiety, and depression). Given the individual differences observed in how people faced the pandemic, it was hypothesized that certain personal resources may help in coping with distress. The aim of the research was to evaluate the impact of psychological inflexibility, mindfulness, and resilience on the susceptibility to experiencing stress, anxiety, and depression. Study 1 recruited 501 participants (58.9% women; mean age = 26.97 years, SD = 11.85) who completed the following scales: the Acceptance and Action Questionnaire (AAQ-II), the Mindful Attention Awareness Scale (MAAS), the Connor-Davidson Resilience Scale (CD-RISC-10), and the Depression Anxiety Stress Scale (DASS-21). The same measures were administered to 423 participants in Study 2 (62.4% women; mean age = 30.97, SD = 12.46) selected from a larger sample because they had a more intense subjective perception of loneliness (scored a 3-item-UCLA Loneliness Scale ≥ 6). In Study 1, linear regression showed that the AAQ predicted stress (β=.29), anxiety (β=.34), and depression (β=.44). Moreover, the higher the MAAS score, the lower the stress (β=-.15) and anxiety (β=-.10), while the CD-RISC was not a significant predictor. In Study 2, the predictive role of the AAQ on stress, anxiety, and depression was confirmed (β=.42, β=.40, and β=.46, respectively), Moreover, resiliency was negatively associated with depression (β=-.17). The current results showed that psychological inflexibility interferes with coping with distress, and mindfulness and resilience can prevent stress, anxiety, and depression even in an unexpected and complex situation, such as the pandemic. Indeed, some personal resources continued to act as protective factors as previously documented in the literature on "everyday" time also among people who subjectively perceived greater loneliness. This result underlines the relevance of these resources and, therefore, the need to develop interventions aimed at strengthening them.

Keywords: Personal resources, mental disorders, psychological inflexibility, resiliency, mindfulness.

1. Introduction

The spread of COVID-19 has led to inevitable consequences for the mental health of people who experience it. Most surveys of the general population show an increase in symptoms of depression, anxiety, and stress as a result of pandemic-related stressors such as fear of illness, fear of negative economic effects, and daily life disruption (Li et al., 2020; Yuan et al. 2020). Although the experience of distress during the pandemic may have a negative impact on the mental health and well-being of some individuals, this may not be the case for all people. Individual differences in personal resources may influence how a person responds to stressful experiences. In particular, the tendency to control one's thoughts by avoiding negative experiences (Bond, 2011), named psychological inflexibility, is often functionally associated with many of the major psychological disorders (Hayes et al., 2006). Psychological inflexibility refers to patterns of behavior characterized by experiential avoidance and cognitive control at the expense of personal values and contact with direct experience. It generally prompts rigid responses (e.g., persistent avoidance) to internal and external stimuli that interfere with engagement in meaningful activities. Its inverse is psychological flexibility defined as the ability to thoughtfully observe experiences occurring in the present moment to intentionally choose tailored actions and solutions in line with personal values (Hayes et al., 2006).

Because it is directly related to psychological flexibility (Kashdan & Rottenberg, 2010), resilience tends to protect against experiencing depression and may decrease the risk of not being depressed (Edward, 2005). In general terms, all definitions of resilience are divided into two macro-groups: resilience as a personality trait and resilience as a developmental factor (Mestre et al., 2017). The first group of definitions states that resilience is a fixed and stable element over time (Lee et al., 2012). In contrast, the second group of definitions states that resilience is a dynamic process, changeable over time and influenced by the environment, thus a kind of adaptation process in the face of adversity (American Psychological Association, 2017). According to this second group of definitions, resilience is a process that is built on the skills that the individual puts into practice to overcome trauma. Therefore, they view resilience as the ability to overcome traumatic situations that are based on the interaction between the individual and his or her coping strategies (Connor et al., 2003).

In addition, it was shown that having a great awareness of the present moment (i.e., mindfulness) minimizes depressive, anxious, and stressful symptoms through lasting effects over time (Cash & Whittingham, 2010; Idusohan-Moizer et al., 2015). Mindfulness is based on the ability to bring one's attention to what they are currently experiencing in the present moment, to accept it without judgment, and to identify sensations, emotions, and thoughts (Vásquez-Dextre, 2016). As a broader disposition or trait, it refers to a relatively stable (natural or trained) tendency to engage mental states in everyday experiences (Brown & Ryan, 2003). Conversely, the fear of contracting the virus (Fitzpatrick et al., 2020) and/or losing a loved one to death as a result of the disease (Bertuccio & Runion, 2020) means to be focused on future events, and not on the present time.

Finally, along with unpredictability and uncertainty, physical blockage and lockdown can lead to social isolation and loneliness, which in turn is strongly correlated with negative physical and mental health outcomes, including depression, anxiety, and chronic stress (Bruce et al., 2019; McHugh & Lawlor, 2013).

Starting from this premise, the objective of this study was to assess the impact of psychological flexibility, mindfulness, and resilience on susceptibility to experiencing stress, anxiety, and depression during the COVID-19 pandemic. It was expected that higher levels of psychological flexibility and greater predisposition toward mindfulness and resilience would be predictive of less distress. In addition, within a selected sample of people experiencing intense levels of loneliness, the influence of these personal resources on distress was investigated.

2. Methods

The current work consists of two studies. In Study 1, 501 Italian participants (59% women; mean age: M=26.97, SD=11.85) were recruited, and 234 (46%) were college students. For Study 2, a total of 3003 questionnaires were collected from the general Italian population, and approximately one-sixth was selected based on scores obtained on the Three-Item UCLA Loneliness Scale (Hughes et al., 2020). We calculated the scale score (range 3–9) and used a score of 6 or greater to define a dichotomous loneliness variable (Rosenberg et al., 2020) to constitute the nonrandomly selected sample for this study. More specifically, the sample consisted of 423 Italian participants (62.4% women; mean age: M=30.97, SD=12.46). Data collection took place in 2021. For each study a questionnaire was administered using GoogleForms that included scales measuring the following constructs.

Psychological inflexibility. Acceptance and Action Questionnaire-II (AAQ-II) (Bond et al., 2011; Italian version: Pennato et al., 2013) is a measure of psychological inflexibility and experiential avoidance which are related to a wide range of psychological disorders and quality of life. In this study, the ten-item Italian version is evaluated on a seven-point Likert scale (*from 1=never true to 7=always true*) was utilized. It is a unidimensional measure where higher scores indicate greater psychological inflexibility.

Resilience. Connor Davidson Resilience Scale 10© (CD-RISC 10) (Connor & Davidson 2003; Campbell-Sills et al., 2006; Italian version: Di Fabio et al., 2012) is a brief, self-rated measure of resilience that examines one's ability to cope with adversity. Ten items are rated on a scale from 0 to 4 (*0 = not true at all to 4 = true nearly all the time*). A higher score indicates greater resilience.

Mindfulness. The Mindful Attention Awareness Scale (MAAS-11) (Brown & Ryan, 2003; Italian version: Chiesi et al., 2017) measures the awareness and attention to the present moment. Respondents rate how often they experience this kind of consciousness on a six-point Likert-type scale, ranging from "almost always" to "almost never." A higher score indicates lower mindfulness.

Psychological Distress. Depression Anxiety Stress Scales-21 (DASS-21) (Henry & Crawford, 2005; Italian version: Bottesi et al., 2015) is a self-report questionnaire with 21-items measuring depression, stress, and anxiety (seven items for each subscale) based on a four-point rating scale (with endpoints labelled *0= did not apply to me at all* and *3=applied to me much, or most of the time*). A high score on each subscale indicates elevated depression, anxiety, or stress.

Participation was voluntary and anonymous. The university's local institutional review board approved the study in accordance with the Ethical Standards of the 1964 Declaration of Helsinki. The average time to complete the questionnaire was 20 minutes.

3. Results

After having checked for the absence of multicollinearity (see Tolerance and VIF values in Tables 1 and Table 2), multiple linear regressions were conducted to test the hypotheses. The criterion variables were stress, anxiety, and depression, while the predictors were psychological inflexibility, mindfulness, and resilience.

Psychological inflexibility, mindfulness, and resilience explained 33% and 26% of the variance of stress in the two studies, respectively ($R^2 = .33$, $R^2 = .26$). The same variables explained 31% and 20% of the variance of anxiety ($R^2 = .31$; $R^2 = .20$), and 43% and 32% of the variance of depression ($R^2 = .43$; $R^2 = .32$). In Study 1, the predictor with the highest β value was psychological inflexibility for the criteria of stress ($\beta = .29$), anxiety ($\beta = .34$) and depression ($\beta = .44$). Similarly, in Study 2 psychological inflexibility was the most influential in predicting stress ($\beta = .42$), anxiety ($\beta = .40$), and depression ($\beta = .46$). Mindfulness significantly predicted anxiety ($\beta = -.10$) and stress ($\beta = -.15$) in the first study, but only this latter relationship was confirmed in the second study ($\beta = -.10$). Finally, although no evidence was found in the first study, in Study 2 the depression criterion was predicted by resilience ($\beta = -.17$). To sum up, psychological inflexibility was a significant predictor for all criteria in both studies, whereas mindfulness was never significant for depressive symptoms. Resilience was not a significant predictor in Study 1, but it was for depression in Study 2.

Table 1. Multiple regression analysis with dependent variables stress, anxiety, and depression and as predictors psychological inflexibility, mindfulness, resilience for those in the general population (Study 1).

	STRESS			ANXIETY			DEPRESSION		
	F(3,453)=38.34***			F(3,455)=36.18***			F(3,460)=58.84***		
	R^2=.33			R^2=.31			R^2= .43		
Predictor	B	T	VIF	B	T	VIF	B	T	VIF
Psychological Inflexibility	.29***	.46	2.19	.34***	.45	2.22	.44***	.46	2.19
Mindfulness	-.15**	.75	1.33	-.10**	.74	1.36	-.07	.74	1.35
Resilience	-.02	.67	1.50	.04	.65	1.54	-.07	.67	1.49

Note. B = standardized beta value; T = Tolerance, VIF = Variance inflation factor. VIF >10 and T < .020 values indicate absence of multicollinearity. Statistical significance: *p<.05 **p<.01 *** p < .001.

Table 2. Multiple regression analysis with dependent variables stress, anxiety, and depression and as predictors psychological inflexibility, mindfulness, resilience for those who experienced more loneliness (Study 2).

	STRESS			ANXIETY			DEPRESSION		
	F(3,418)=37.70***			F(3,418)=25.52***			F(3,418)=48.19***		
	R^2=.26			R^2=.20			R^2= .32		
Predictor	β	T	VIF	B	Tol	VIF	B	T	VIF
Psychological Inflexibility	.42***	.81	1.23	.40***	.81	1.23	.46***	.81	1.23
Mindfulness	-.10*	.92	1.08	.00	.92	1.08	-.04	.92	1.08
Resilience	-.09	.80	1.26	-.07	.80	1.26	-.17***	.80	1.26

Note. B = standardized beta value; T = Tolerance, VIF = Variance inflation factor. VIF >10 and T < .020 values indicate absence of multicollinearity. Statistical significance: *p<.05 **p<.01 *** p < .001.

4. Conclusions

Based on the literature, there is often an increase in distress in terms of anxiety, depression, and stress among people during the pandemic. Because early indications point to an enduring impact of the pandemic on mental health (Wang et al., 2020), the identification of modifiable therapeutic processes is critical to the development of targeted interventions.

Overall, the findings of the present study suggested that during the pandemic in situations where loneliness and social isolation are associated with a lack of viable personal resources (e.g., psychological flexibility, mindfulness, resilience), the conditions for the development of a mental disorder are created. In agreement with our first hypothesis, psychological flexibility seems to be the most important determinant of decreased anxiety, stress, and depression in the first study (Hayes et al., 2006). Within the same study, similar but smaller effects were also found for mindfulness, which reduced stress and anxiety in pandemic situations (Cash & Whittingham, 2010; Idusohan-Moizer et al., 2015). However, resilience showed no significant effect. In Study 2 we measured the subjective perception of loneliness to confirm the effects of psychological flexibility as a protective factor in coping with distress. These findings echo the literature results showing that individuals who experience loneliness are more likely to experience distress (McHugh & Lawlor, 2013). Mindfulness was found to have a role as a personal resource in protecting against stress, while resilience was shown to be a significant personal disposition against depression among those who subjectively perceived greater loneliness (Edward, 2005).

The COVID-19 pandemic produced a threatening combination of unknown events, uncertainty, fear of illness, fear of negative economic effects, daily life routine disruption, and loneliness that have been a negative impact on people's mental health. Nonetheless, even in this unexpected and complex situation, we observed that some personal resources were able to shield from distress (as previously documented in the literature on "everyday" time) and continued to act as protective factors. This result underlines the relevance of these resources and, therefore, the need to develop interventions aimed at strengthening them. For example, interventions proposed by *Acceptance and Commitment Therapy (ACT)* may be used to promote greater psychological flexibility that improves resistance to adversities by creating a more adaptive way of relating to experiences regardless of their exceptionality and unpredictability. Also, dispositional mindfulness has the potential to be used as a treatment for stress-related and other mental health disorders (Baer, 2003). Fortunately, mindfulness is a free-cost and easily accessible personal resource that can be implemented by individuals to diminish the adverse psychological effects associated with large-scale stressors. Finally, resilience-training programs developed for, and conducted in, a variety of clinical and non-clinical populations using various formats, such as multimedia programs or face-to-face settings, and delivered in a group or individual context can be adopted to contrast mood disorders (Southwick & Charney, 2018). Finally, the current findings not only provide evidence of the importance of the above-mentioned protective factors but also suggest the need to test the existing tailored interventions after the destructive effects produced by the pandemic.

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