When Coping Resources Fail: The Health-Sustaining and Moderating Role of Fortitude in the Relationship Between COVID-19-Related Worries and Psychological Distress

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ABSTRACT

The COVID-19 pandemic is a global public health crisis and governments worldwide have attempted to mitigate the spread of the virus by implementing a range of stringent preventative measures. However, both the pandemic and the preventative strategies enacted may undercut critical protective factors that are known to buffer the negative impact of psychological stressors. The current study aimed to characterise the mental health impact of the pandemic in South Africa by investigating the potential protective role of fortitude in the relationship between COVID-19-related worries and psychological distress, indicated by the levels of depression and hopelessness. The participants were 337 young adults who completed four self-report questionnaires: the Fortitude Questionnaire, the Beck Hopelessness Scale, the Centre for Epidemiological Depression Scale and the COVID19-Related Worries Scale. In addition to descriptive statistics, path analysis was performed to determine the direct, indirect, mediating and moderating effects of fortitude on psychological distress. In this regard, psychological distress was conceptualised as a latent variable that is defined by the two indices of depression and hopelessness. The results demonstrated unprecedented levels of hopelessness and depression among the study sample. These levels were significantly higher than those encountered in previous studies in other contexts, suggesting a possible mental health crisis in the country. Women reported higher levels of psychological distress than men. On its own, fortitude had significant direct effects on psychological distress, affirming its role as a protective factor. However, fortitude was found to have an aggravating rather than buffering effect in interaction with worries. In this regard, the relationship between COVID-19-related worries and psychological distress was stronger among those with high levels of fortitude.

Keywords: COVID-19, depression, fortitude, hopelessness, moderator, worries, South Africa

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INTRODUCTION

The 2019 coronavirus disease (COVID-19) outbreak is a major global public health crisis that resulted in the implementation of stringent pandemic-related prevention measures to curtail the spread of the virus. In South Africa, these measures included a prolonged period of national lockdown, prohibitions on in-person contact, quarantine, mandatory social distancing and stay-at-home directives. Prevention measures also included the closure of all non-essential business sectors such as hospitality, retail and tourism (South African Government Gazette, 2020). From March to July 2020, the South African public experienced a confluence of economic stressors, social isolation, job insecurities, separation from loved ones and health-related anxieties. International research has drawn a connection between these factors and an increased incidence of mental health disorders among the general population (Palgi et al., 2020; Tso & Park, 2020; Zhang et al., 2020). The increase in mental health disorders has been suggested to be particularly prevalent in countries with high rates of COVID-19 infection and those in which psychological interventions have not been formally incorporated into protocols for managing disease outbreaks (Rajkumar, 2020).

Emerging international evidence suggests that the salient mental health consequences of the pandemic include heightened COVID-19-related worries and elevated levels of anxiety, depression and hopelessness (Tso & Park, 2020; Zhang et al., 2020). Several studies have documented an increase in COVID-19-related worries among individuals who are at heightened risk of infection due to personal factors such as underlying health issues and socio-economic circumstances, among whom are those who work in high-risk environments or live in overcrowded areas with limited access to personal protective equipment (Barzilay et al., 2020; Joensen et al., 2020; Serafini et al., 2020). COVID-19-related worries are predominantly related to becoming infected, infecting others and compromising the health of family members (Barzilay et al., 2020). Fear of contracting and spreading the virus and constant vigilance regarding potential health-related threats have been found to lead to heightened anxiety and a sense of hopelessness (Dymecka et al., 2020). In addition, pandemic-related prevention measures, such as prolonged social isolation, have been connected to pervasive loneliness and depression, possibly due to the impact of these prevention measures on individuals' access to social support networks (Serafini et al., 2020). Uncertainty about the progression of the epidemic has been linked to increased worries about the possibility of infection, hopelessness about the future and reduced life satisfaction (Huang & Zhao, 2020). In sum, it is probable that each stressor (job insecurity, health-

related worries, etc.) or a combination of stressors can lead to psychological distress in the form of anxiety, depression and hopelessness.

Pandemics are generally associated with increased susceptibility to the adverse mental health outcomes described above; however, there is also evidence of differential vulnerability to psychological distress (Barzilay et al., 2020). Some people develop significant mental health problems in response to a pandemic, whereas others are able to effectively adapt to crises; this phenomenon suggests the influence of specific protective factors. Examples of protective factors include locus of control (Carter et al., 2014; Goldzweig, Hasson-Ohayon, Alon, & Shalit, 2016); self-esteem (Kong, Zhao, & You, 2013); the use of adaptive coping strategies (Prentice et al., 2020); a sense of coherence (Gómez-Salgado et al., 2020) and willingness to access supportive family networks (Brown, Doom, Lechuga-Peña, Watamura, & Koppels, 2020). These protective factors are often described as having a moderating function in that they buffer the potentially adverse effects of negative environmental conditions (Pretorius, 2020). However, there are three additional pathways by which protective factors can influence the relationship between adverse conditions and psychological functioning: direct, mediating and indirect (Shumaker & Brownell, 1984).

The direct effect hypothesis is also referred to as the health-sustaining model; and this model proposes that the effect of a protective factor (social support) on psychological well-being is independent of the level of the negative environmental conditions (Shumaker & Brownell, 1984). Therefore, an increase in the level of the protective factor would presumably result in increased wellbeing, irrespective of the level of the adverse condition. Moderator variables are presumed to have a stress-reducing or buffering function because they reduce the impact of stress on physical and psychological functioning (Shumaker & Brownell, 1984). In contrast, mediating variables are considered to be the mechanism through which the adverse environmental condition influences the psychological outcome (Pretorius, 2020). Indirect effects imply that protective factors may not be directly related to psychological functioning but may influence appraisals of the stressor and therefore influence wellbeing (Pretorius, 2020).

In the South African context, fortitude has been extensively investigated as a potential protective factor in psychological outcomes in the context of adversity (De Villiers & Van den Bergh, 2012; Padmanabhanunni, 2020; Pretorius, Padmanabhanunni, & Campbell, 2016). Fortitude is defined as the psychological strength to manage stress and remain well; and it is derived from positive cognitive appraisals of self, family and social networks (Pretorius et al., 2016).

Several studies (Hameed, Khan, Shahab, Hameed, & Qadeer, 2016; Padmanabhanunni, 2020) have confirmed that people who have higher levels of fortitude are able to effectively adapt to life stressors and maintain levels of life satisfaction and psychological wellbeing, despite adversity. Fortitude has also been found to have moderating effects in the relationship between exposure to violence and traumatic stress symptoms (Pretorius et al., 2016), locus of control and motivation (Hameed et al., 2016) and stress and anxiety-depression symptoms (Vermaas, 2010). Based on these findings, fortitude may represent an important dimension in coping and adapting in the context of the current pandemic; and it, therefore, warrants further investigation. The current study aimed to characterise the mental health impact of the pandemic in South Africa by investigating the potential protective role of fortitude in the relationship between COVID-19-related worries and psychological distress indicated by levels of depression and hopelessness.

METHODS

PARTICIPANTS

This study used a cross-sectional research design. The participants ($N = 337$) were a random sample of undergraduate students enrolled at the University of the Western Cape (UWC) in the Western Cape Province of South Africa. UWC is regarded as a historically disadvantaged institution (HDI or historically black institutions). During the apartheid era, HDIs were established by the government for black South Africans and were significantly under-resourced and mainly located in former homelands. Although there has been significant transformation in the education sector since the end of apartheid, the student population at HDIs is largely from working class backgrounds (Habib, 2016; Mdepa & Tshiwula, 2012). UWC predominantly attracts students from historically marginalised groups; and this is reflected in the racial profile of undergraduate students at the university: black African (48%), coloured (45%), white (3.8%), and Indian (2.8%). In the present study, the majority of participants were female (77.2%) and the mean age of the participants was 22 years ($SD = 4.7$). With reference to COVID-19 status, 82.5% indicated that they had not contracted the virus. A smaller proportion of students either suspected that they had COVID-19 (3.9%) but had not tested for the disease; or suspected that they had the virus and confirmed this through testing (1.2%).

INSTRUMENTS

The participants completed four self-report measures in the period March 2020 to June 2020: The Fortitude Questionnaire (FORQ; Pretorius, 1998), the Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974), the Centre for Epidemiological Depression Scale (CESD; Radloff, 1977) and the COVID 19-Related Worries Scale (COVID 19 RWS), which is a subscale of the World Health Organization (WHO) COVID 19 Behavioural Insights Tool (WHO, 2020). In addition, the participants completed a demographic questionnaire that contained items pertaining to age, gender and area of residence.

The FORQ is a 20-item questionnaire that consists of participant appraisals in three domains: self-appraisals, family appraisals and support appraisals. Fortitude is based on the interaction between these three domains. The FORQ uses a four-point scale that ranges from *Does not apply* to *Applies very strongly*. Examples of questionnaire items include *I trust my ability to solve new and difficult problems*, *I have a deep sharing relationship with a number of members of my family* and *My friends give me the moral support I need*. Pretorius (1998) reported a coefficient alpha value of .85 for the scale. Other South African studies have reported reliability coefficients ranging from .77–.88 (Pretorius & Padmanabhanunni, 2020).

The BHS is a widely used measure of hopelessness. It contains 20 statements for which individuals must select "True" or "False" and it assesses the degree to which individuals' cognitive schemata are associated with pessimistic expectations (*I do not expect to get what I really want* or *My future seems dark to me*). Possible scores range from 0–20 with a higher score indicating a greater degree of hopelessness. Internal consistency of .93 has been reported for the BHS, with a concurrent validity of .74 with clinical ratings of hopelessness and .60 with other scales of hopelessness (Beck et al., 1974). The BHS had previously been used in South Africa with a similar sample of young adults (Heppner, Pretorius, Wei, Lee, & Wang, 2002) and an alpha coefficient of .82 was reported in that study.

The CESD scale consists of 20 symptoms, 16 of which have descriptions that are worded negatively and four of which have descriptions that are worded positively. Respondents are asked to indicate how often they experienced each of the symptoms during the past week on a four-point scale, ranging from *rarely or none of the time* (0) to *most or all of the time* (4). The items on the scale are assumed to

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represent all the major components of depressive symptomatology: (1) depressed mood, (2) feelings of guilt and worthlessness, (3) feelings of helplessness and hopelessness, (4) loss of appetite, (5) sleep disturbance and (6) psychomotor retardation (Radloff, 1977). The CESD scale has demonstrated high internal consistency (.85–.90) and test-retest reliability (.51–.67). Validity has been established through patterns of correlations with clinical ratings of depression. Research has consistently identified a four-factor structure for the CESD scale: positive affect, depressed affect, somatic activity and interpersonal relations (Ferro & Speechley, 2013). The psychometric properties of the CESD scale had previously been reported in use with a sample of South African students (Pretorius, 1991).

The COVID 19 RWS is a 14-item measure of fears and worries related to COVID-19, including personal fears (loss of a loved one) and fears related to broader societal institutions (health system collapsing) and other issues (economic recession). The respondents indicated the extent to which they worry about each of the 14 issues on a five-point scale, ranging from *Don't worry at all* (1) to *Worry a great deal* (5). The scale appears to have been developed specifically for COVID-19 research and no reliability or validity data is currently available. In the current study, the COVID 19 RWS demonstrated satisfactory reliability (see results). A preliminary exploratory factor analysis identified four possible factors: worries related to health, loss of liberties, personal finance and the economy. The total scale was used in the current study.

PROCEDURE

Google Forms was used to construct an electronic survey comprising the four instruments. The survey was distributed during the period of national lockdown from March to June 2020. Random sampling was carried out, using an Excel spreadsheet where all undergraduate student numbers were loaded and then a formula was used to select a random sample of students. These students were then contacted via email with an invitation to participate in the study and a link to the survey. Reminders were sent to participants twice per month for a four-month period.

DATA ANALYSIS

SPSS (version 26) was used to determine descriptive statistics, intercorrelations between study variables and reliabilities. Both Cronbach's alpha and McDonald's omega are reported for reliabilities due to concerns about coefficient alpha underestimating true reliability in multi-item measurement scales

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(Hayes & Coutts, 2020; Deng & Chang, 2017). The OMEGA macro, written by Hayes and Coutts (2020) for SPSS was used for this purpose.

Structural equation modelling with Amos (version 26) was used to determine the direct, indirect and moderating effects of COVID-19-related worries and fortitude on depression and hopelessness. Amos also provide bootstrapping of confidence levels, and p-values. The direct effects of fortitude on depression and hopelessness serve as a test of its health-sustaining role. In contemporary analysis, indirect effects of the predictor (worries) are regarded as a measure of mediation and the value of the indirect effects indicates the amount of mediation. When fortitude is used as predictor and worries as mediator, the indirect effects of fortitude on psychological distress serve as a measure of the extent to which fortitude affects the interpretation of the stressor (worries). In addition, confidence intervals are used to determine whether the direct and indirect effects are different from zero. If zero does not fall within the confidence interval, the direct and indirect effects are considered significant (Kenny, 2018).

The moderating effects of fortitude were examined by testing the direct effects of the product of the predictor and the presumed moderator (worries X fortitude). The deviation scores (score minus mean) of the predictor and the presumed moderator were used to calculate the product term to avoid the problem of multicollinearity and to assist with the interpretation of interaction effects (Cohen, Cohen, West, & Aiken, 2003).

ETHICS

Ethical approval for the study was obtained from the Humanities and Social Sciences Research Committee of the University of the Western Cape (UWC). The survey was completed anonymously and the participants provided informed consent prior to accessing the survey. Given the context of COVID-19 and the sensitive nature of the questionnaires, the participants were provided with the contact details for the South African Anxiety and Depression Group and the Centre for Student Support Services in case they experienced psychological distress as a result of completing the questionnaire.

RESULTS

The descriptive statistics, intercorrelations and reliabilities are reported in Table 1.

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Table 1: *Intercorrelations, descriptive statistics and reliabilities of variables*

Variable	1	2	3	4
1. Worries	–			
2. Hopelessness	-.01	–		
3. Depression	-.22***	.56***	–	
4. Fortitude	.11*	-.56***	-.54***	–
Mean	52.3	4.7	27.5	53.8
SD	10.7	4.4	13.4	11.5
α	.86	.88	.92	.91
ω	.86	.88	.92	.91

*** p < .001, * p < .05

The mean scores reported for depression and hopelessness (Depression: $M = 27.5$, $SD = 13.4$; Hopelessness: $M = 4.7$, $SD = 4.4$) were substantially higher than the mean scores reported for these scales in other contexts (Hopelessness: Durham, 1982: $M = 2.32$, $SD = 2.25$; Lotfi-Kashani, Fallahi, Akbari, Mansour-Moshtaghi, & Abdollahi, 2018: range = 1.70 to 4.45; Depression: Crawford, Cayley, Lovibond, Wilson, & Hartley, 2011: $M = 14.08$, $SD = 10.91$; Giuntella, Hyde, Saccardo, & Sadoff, 2020: $M = 14.59$, $SD = 9.64$). There were significant differences between men ($M = 23.3$, $SD = 12.9$) and women ($M = 28.5$, $SD = 13.2$); women reported higher levels of depression ($t_{332} = -2.99$, $p = .003$). In terms of the traditional CESD cut-off score of ≥ 16 for clinical depression (Cameron et al., 2020), 79.2% of the sample obtained a depression score of 16 or higher.

Each of the scales demonstrated satisfactory reliability in terms of the alpha and omega coefficients, which were identical (α and ω = .86–.92). Fortitude was negatively related to depression ($r_{335} = -.56$, $p < .001$) and hopelessness ($r_{335} = -.54$, $p < .001$) and the indices of psychological distress were positively related to each other ($r_{335} = .56$, $p < .001$).

The statistical model that was used to determine the direct, indirect (for both fortitude and COVID-19-related worries) and moderating effects is shown in Figure 1.
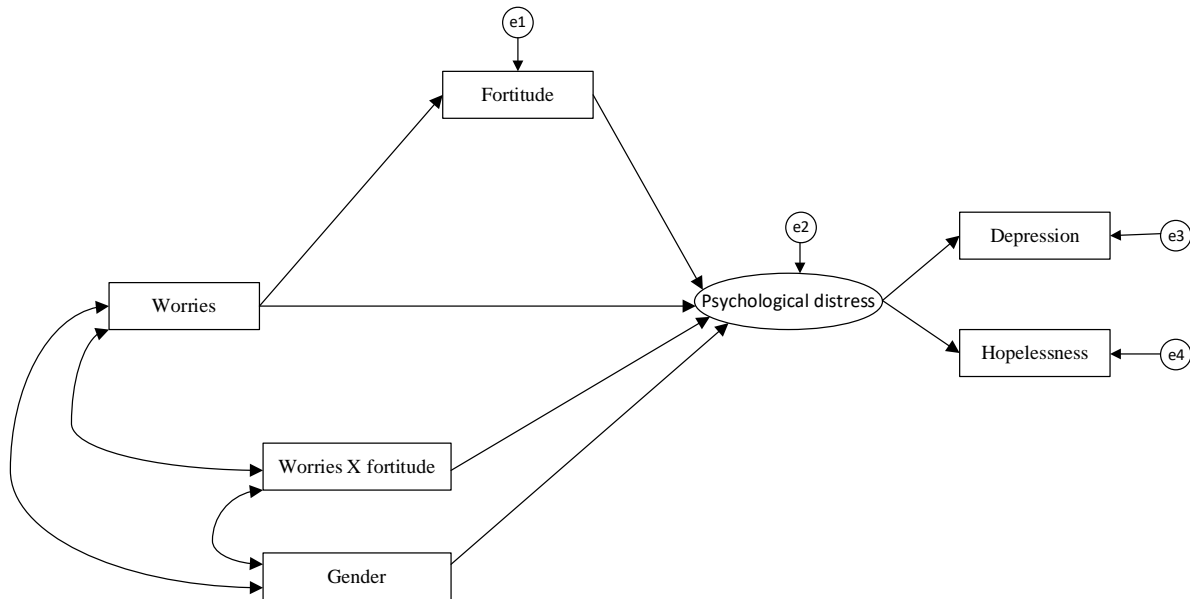
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Figure 1: Testing the direct, indirect and moderating effects of worries and fortitude on psychological distress

Note. Rectangles are observed variables and ellipse is a latent variable

The model in Figure 1 provides for a predictor variable (COVID-19-related worries) and a presumed mediator (fortitude). The outcome variable is a latent variable (psychological distress) that is defined by the two indices of depression and hopelessness. The model also contains an interaction term (worries X fortitude) that tests the potential moderating role of fortitude. Finally, gender is included as a covariate, because there were significant gender differences in the levels of depression. An alternate path analysis used fortitude as predictor and worries as mediator to test the indirect effects of fortitude on psychological distress.

The results of the structural equation modelling related to Figure 1 are shown in Table 2.

Table 2: Direct and indirect effects of COVID-19-related variables on psychological distress

Variable	Beta	SE	β	95% CI	p
Direct Effects					
1. Gender	.957	.342	.14	[.047, .248]	.006
2. Worries	.074	.014	.25	[.132, .358]	.004
3. Fortitude	-.202	.022	-.74	[-.808, -.648]	.008
4. Worries X Fortitude	.004	.001	.15	[.049, .239]	.004
Indirect Effects					
1. Worries[a]	.012	.004	-.08	[-.158, .017]	.068
2. Fortitude[b]	.007	.004	.03	[-.003, .063]	.061

Note. [a]Worries as predictor, fortitude as mediator

[b]Fortitude as predictor, worries as mediator

Table 2 indicates that each of the direct effects was significant because zero falls outside the confidence intervals and $p < .01$ in all instances. These findings indicate that an increase in COVID-19-related worries is associated with an increase in psychological distress ($\beta = .25$, $p = .004$). The direct negative association of fortitude with psychological distress ($\beta = -.74$, $p = .008$) supports the health-sustaining hypothesis in that increased levels of fortitude are associated with decreased levels of psychological distress. However, the indirect effects were not significant, which indicates that neither fortitude nor worries has a mediating effect. The interactive effect was significant ($\beta = .15$, $p = .004$); however, the moderation effect occurred in an unexpected direction in that the interaction of fortitude with worries led to an increase in psychological distress, rather than a decrease. In addition, the factor loadings of depression and hopelessness on psychological distress were both significant (hopelessness: .71, $p = .005$; depression: .80, $p = .006$), which demonstrates that the latent variable of psychological distress adequately represents these variables.

To understand the nature of the interaction between the predictor and the moderator, Cohen et al. (2003) has suggested the calculation of two regression lines: one for those with high fortitude (at or above the 75th percentile, $n = 92$) and one for those with low fortitude (at or below the 25th percentile, $n = 85$). The graphs of these regression lines for the relationship between worries and psychological distress for the fortitude subgroups are shown in Figure 2.
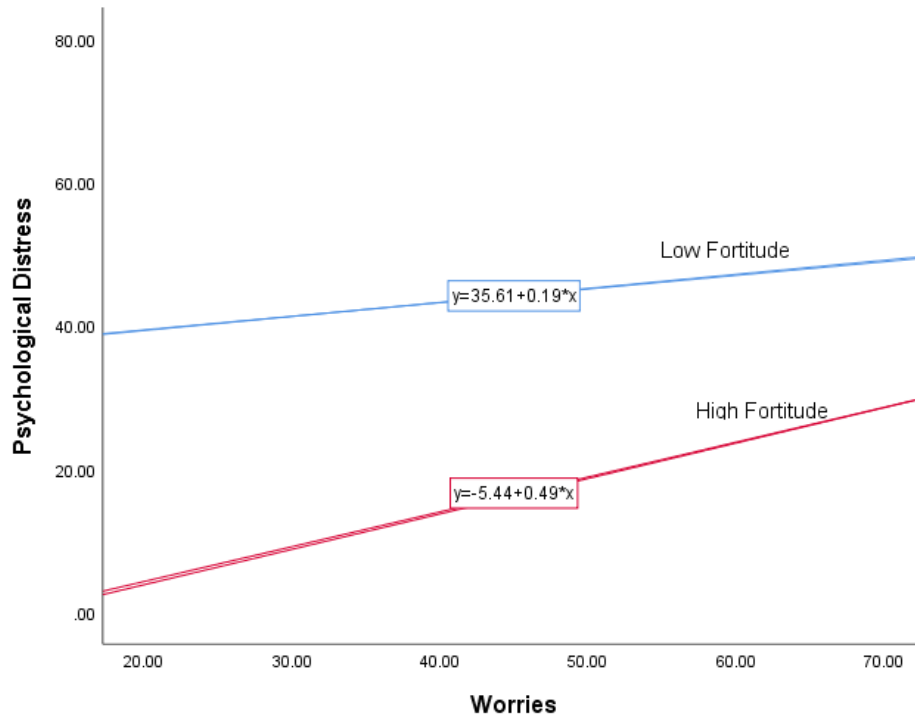
Figure 2: The regression of psychological distress on COVID-19-related worries for those with high and low fortitude

Figure 2 indicates that, although those with high fortitude experienced less psychological distress in relation to COVID-19-related worries, the regression line for those with high fortitude was steeper (slope = 0.49) than for those with low fortitude (slope = 0.19). There was also a significant positive relationship between worries and psychological distress for those with high fortitude ($r = 0.43$, $p = .022$), whereas this relationship was not significant for those with low fortitude ($r = 0.18$, $p = 0.165$).

DISCUSSION

The current study investigated COVID-19-related worries, hopelessness and depression among young adults in South Africa and the influence of fortitude on psychological distress. There were several significant findings. First, unprecedented levels of psychological distress were reported in the current sample. The levels of hopelessness and depression exceeded those documented in the existing literature in other contexts (Giuntella et al., 2020; Hacimusalar, Kahve, Yasar, & Aydin, 2020). The elevated levels may be related to the drastic changes that young adults in South Africa experienced as a

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consequence of the COVID-19 pandemic. These changes include the abrupt closure of universities and rapid transition to online modes of learning in resource-constrained conditions; disconnection from peers and other social support networks due to home confinement; financial pressures; a declining labour market and uncertainties about the future. In addition, a significant portion of the South African population live in community contexts characterised by poverty and over-crowding, which may aggravate worries about infection and one's capacity to engage in protective behaviours. These factors can heighten despair and increase hopelessness and depression (Cao et al., 2020). Furthermore, the current COVID-19 outbreak in South Africa is occurring against the backdrop of chronic disease epidemics, such as HIV and tuberculosis; and the prevalence of these chronic diseases could aggravate worries about the potential impact of becoming infected with COVID-19; and thus produce a sense of despair (Kim, Nyengerai, & Mendenhall, 2020).

Second, the study found gender differences in psychological outcomes, similar to previous studies (Özdin & Bayrak Özdin, 2020; Rossi et al., 2020) with women reporting higher levels of depression than men. These gender differences may be due to disruptions in the social support networks that women typically use for coping. Gender role socialisation often leads women to prioritise affiliations with friends and family and disruptions to these relationships due to home confinement and social distancing protocols can lead to loneliness, which is associated with depression. In addition, the rates of gender-based violence have significantly increased in South Africa during the pandemic (Adebayo, 2020) and this increase may result in women experiencing a decreased sense of safety and heightened sense of threat at home, which can lead to feelings of hopelessness and despair.

Third, fortitude was found to have a significant direct effect on psychological distress, irrespective of the level of COVID-19-related worries. Specifically, increased fortitude was associated with decreased levels of psychological distress, regardless of personal worries about infection or broader fears about the social and economic implications of the COVID-19 pandemic. This finding lends further support to prior studies conducted by Padmanabhanunni (2020) and Pretorius et al. (2016) that have attested to the potential health-sustaining role of fortitude. Fortitude was also found to have a significant moderating effect. The moderator can either reduce the impact of the predictor on the outcome as a buffering effect or increase the impact of the predictor as a magnifying/aggravating effect (Francoeur, 2011; Nye & Witt, 1995). In this study, fortitude had a magnifying effect. The results of subgroup analysis (those with low and high fortitude) indicated that the relationship between COVID-19-related worries and psychological distress was stronger for those with high fortitude than for those with low fortitude.

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There are several explanations for the above finding. The COVID-19 pandemic is a highly complex stressor, because it is characterised by significant uncertainty about disease progression, life-threatening environmental conditions, prolonged exposure to anxiety-provoking information (global statistics on infection and death rates), potential loss of loved ones, financial insecurity, disrupted daily routines and ways of life and an actual physical health threat (Gruber et al., 2020). The pandemic has fundamentally impacted perceptions of personal safety and security and the predictability of daily life. In addition, COVID-19-related prevention measures (social distancing, quarantine and stay-at-home directives) have inadvertently reduced access to social resources that are important for maintaining psychological health. In high-income countries, digital technologies were used to circumvent the restrictions on in-person social contact. However, developing countries, like South Africa, have limited access to digital technologies and internet connectivity; therefore, digital modes of social engagement may not be possible. Given the multiple and unparalleled stressors of the COVID-19 pandemic, it is plausible that even individuals who have high fortitude would experience increased worries and distress.

In the current study, there was a stronger relationship between worry and psychological distress for those high in fortitude compared to those low in fortitude. However, it needs to be underscored that for those high in fortitude these levels of worry and distress were still relatively lower compared to those low in fortitude. In explaining the former finding, it is necessary to draw on the fortigenic theory, in terms of which fortitude is derived from adaptive cognitive appraisals of self, family support and other significant sources of support. Individuals with high levels of fortitude tend to appraise themselves as capable of managing life stressors and use active, solution-focused strategies (being task-oriented, planning ahead and seeking advice and support: Prentice et al., 2020). Under pandemic-related conditions, it is probable that these coping strategies do not yield similar results, which may aggravate distress. Furthermore, typical sources of social support, including family and friends, are under actual physical threat due to the probability of infection; and it is possible that awareness of the very real potential for loss of loved ones may heighten worries among those with high fortitude. The nature of the worries (loss of loved ones, fears about family contracting the virus, etc.) can impact the sources of fortitude, which may further explain the aggravating role of fortitude.

In sum, fortitude on its own has a direct negative association with psychological distress. However, when considered in conjunction with COVID-19-related worries, fortitude has an aggravating effect on the relationship between such worries and psychological distress.

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LIMITATIONS

The study was cross-sectional, which limits the ability to draw conclusions regarding causal relationships. Nevertheless, the findings on adverse mental health outcomes associated with the COVID-19 pandemic are consistent with the existing international literature (Groarke et al., 2020; Luchetti et al., 2020). The survey was delivered electronically, which could restrict participation to those who had internet connectivity. However, reports from UWC Communications (2020) indicate that 94% of the student body at the University had been able to engage with electronic modes of communication. The study also used random sampling, which increases the generalisability of the findings.

CONCLUSION

To the authors' knowledge, this is the first study to investigate COVID-19-related worries, depression and hopelessness among young adults in South Africa. The unprecedented levels of psychological distress observed among the current sample suggest a mental health crisis and the need for psychological intervention strategies to be incorporated into pandemic-related mitigation plans. The health-sustaining role of fortitude has been confirmed, which suggests that interventions aimed to increase positive appraisals of self, family support and social support could potentially help people cope with the mental health consequences of COVID-19. Several studies have demonstrated that the FORQ measures a construct that is changeable (De Villiers & Van den Bergh, 2012; Laureano, Grobbelaar, & Nienaber, 2014; Van Schalkwyk & Wissing, 2013). Therefore, modification of fortigenic appraisals, through cognitive restructuring interventions, could affect an individual's wellbeing and adjustment in the context of the COVID-19 pandemic.

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