

In Pursuit of Emotional Stability: Exploring the Role of PsyCap and Its Correlates among Health Care Workers during Covid-19 Pandemic

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ABSTRACT

Background: A novel coronavirus pneumonia pandemic broke out, which ultimately spread over the world and affected public health. Global growth has been impeded, societal instability has been brought about, and overall mental health has been adversely affected by the COVID-19 pandemic. Health care workers, especially nurses, experienced an extensive amount of occupational stress, emotional discomfort and instability during this period. One of the positive factors that enable people to overcome psychological discomfort and hardship and enhance perseverance in their field of work is psychological capital (PsyCap). It is described as the positive and progressive state of the person, defined by HERO as a high degree of hope, efficacy, resilience and optimism.

Aim & Objectives: This study aims to identify the relationship of Psychological capital with Coping and Positive & negative affect. And further, it aims to find the differences in male and female health care workers on the basis of these variables during the COVID-19 pandemic.

Method: A correlational study was designed using purposive sampling to obtain a sample of healthcare workers in various hospitals in Kerala. The participants of age range 20 to 45 were selected for this study. After gaining the informed consent, all the scale including psychological capital questionnaire (PCQ-24), Brief Cope and positive affect and negative affect schedule (PANAS) were used in the present study. Obtained data had been statistically computed by using SPSS version 22.

Result: Result suggested that Psychological capital is significantly positively correlated with coping, positive affect dimension of PANAS and negatively correlated with negative affect which is dimension of PANAS. Further it revealed that there is no significant difference between male and female health care workers with respect to these variables namely psychological capital, brief coping, positive affect and negative affect.

Conclusion: This study paints a clear picture of the importance of psychological elements like positive affect, coping, and PsyCap in the lives of healthcare workers (HCWs) in order to improve their emotional stability, perseverance, and commitment to their jobs.

Keywords: Psychological Capital, Brief Coping, Positive and Negative Affect, Healthcare Workers.

INTRODUCTION

The COVID-19 pandemic has profoundly influenced the world causing social instability, hindered global growth, and harmed mental health at large. Since its emergence it has become a global health threat in terms of insurmountable obstacles with life threatening consequences associated with coronavirus. On January 30, 2020, India filed its first case in the state of Kerala and then it broke out in other states very rapidly. During the pandemic health care workers (HCW) such as doctors, nurses, paramedical and other support staff serves for the nation as frontline worriers while knowing the possible threats of this fatal virus. Exposure to this virus leads the HCWs and their families to unprecedented levels of risk. Thousands of HCWs got infected with COVID-19 and lost their lives and many of them had faced traumatic experience due to the demise of family members caused by COVID-19. In addition to physical risk, the pandemic has placed extraordinary levels of psychological stress on health workers who were exposed to high demand, setting for long hours, living in constant fear of disease exposure which in turn leads them to higher level of risk for their mental health. Health care personnel who are new to public health emergence require a high degree of training and professional experience, as well as resilience and social support (Cai, W. et al., 2020). In addition to this the World Health Organization (WHO, 2020) called on governments and health care leaders to address persistent threats to the health and safety of health workers and patients. “The COVID-19 pandemic has reminded all of us of the vital role health workers play to relieve suffering and save lives. No country, hospital or clinic can keep its patients safe unless it keeps its health workers safe. WHO’s Health Worker Safety Charter is a step towards ensuring that health workers have the safe working conditions, the training, the pay and the respect they deserve.” said Dr Tedros Adhanom Ghebreyesus, WHO Director-General. The pandemic has also highlighted the extent to which protecting health workers is key to ensuring a functioning health system and a functioning society through public health education and awareness. It was suggested by one study that public health education can help people feel less afraid of COVID-19. Psychological capital was found to provide a powerful explanation for the phenomena. Using the spillover theory, public health education appears to reduce COVID-19 fear, with psychological capital acting as a mediating factor. Further, the findings of this study suggested that organizations should focus on educating and training health personnel to use their positive attributes like efficiency manage their feelings of fear due to COVID-19. Holding training sessions is one approach to encourage positivity and enhancing emotional stability among nursing staff (Namra Mubarak et al., 2021).

As a result of the pandemic, HCWs have faced a range of challenges from risk associated with physical health to stigmatized social disclosure in form of exclusion and social isolation they have experienced. The complexity of these problems has been worsened by the pandemic's quick spread and rise in the number of patients all across the world. It was found in other literature that nurses directly dealing with the treatment of COVID-19 patients showed symptoms such as anorexia, fatigue, physical fall, sleep disturbance, irritability, inattention, numbness, fear and hopelessness (Li, J.B. et al., 2020). A study was conducted to look at the psychological status and self-efficacy of nurses in public hospitals during the COVID-19 epidemic revealed that self-efficacy was negatively correlated with anxiety. The psychological status of nurses in public hospital during COVID-19 outbreak needs our attention. Improving nurses’ self-efficacy in dealing with emerging infectious diseases may be helpful to their psychology (Xiong, H. et al., 2020). In another study, it was seen that during obligatory detention in Spain, employees' health perceptions and psychological capital levels deteriorated significantly. The findings also showed that emotional exhaustion is the only burnout factor capable of explaining health

variation, whereas self-efficacy does so for psychological capital. It indicates that COVID-19 forced confinement results in a substantial decline in self-perceived health and psychological capital (Mariano Meseguer de Pedro et al., 2021).

Throughout the COVID-19 pandemic, HCWs from all over the nation demonstrated psychological fortitude and hope in spite of the challenges and adversities it presented. In order to provide full-time medical attention and treatment for those who have been infected with coronavirus disease, they made the decision to be more optimistic, resilient, and dynamic. This pandemic provided an opportunity to learn and recognize our skills to deal with adversity and cope with difficulties. Earlier studies prior to COVID-19 also claimed that optimism reduces stress and emotional exertion. It was found that optimism reduced burnout in a study on nurses and it was seen in numerous studies that person with higher level of Psychological Capital could be able to deal with daily stressors, problems and adverse situations in life and it reduced the risk of anxiety and depression (Chang, Y. et al., 2015). It was found in the study that there was a relative influence of personal resilience, social support and organizational support in reducing COVID-19 anxiety in front-line nurses. Result revealed that 123 nurses (37.8%) were found to have dysfunctional levels of anxiety and nurse's characteristics were not associated with COVID-19 anxiety. The study concludes that resilient nurses and those who perceived higher organizational and social support were more likely to report lower anxiety related to COVID-19 (Labrague, L.J. et al., 2020).

Here the Psychological Capital plays a crucial role in dealing with all the stressors and adverse situation. It significantly affects the mental health of individual in a positive way. It is positive factor that is strongly linked to increased well-being, work and life satisfaction. "Psychological capital as follows: An individual's positive psychological state of development that is characterized by (1) having confidence (efficacy) to take on and put in the necessary effort to succeed to challenging tasks; (2) making a position attribution (optimism) about succeeding now and in the future; (3) preserving toward goals and when necessary, redirecting paths to goals (hope) in order to succeed ; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" (Luthans et al., 2015). The four components of Psychological Capital exhibited a "motivational propensity" to successfully complete the goals.

In India, there have been numerous instances where medical professionals—including physicians, nurses, and other support staff—have served the nation and humanity by performing their jobs with devotion and commitment, irrespective of geographical limits. Amidst this adverse and tensed situation they performed a variety of songs and danced to cheer up their patients and spread the positive vibes. A video of a doctor dancing in PPE kit had gone viral on social media which received national praise and love for her endeavours to put up a brave smile in face of this adversity while maintaining the enthusiasm and commitment to fight against COVID-19 with positive psychological capital. While the COVID-19 pandemic continues to cause uncertainty, panic and stress almost everybody, the role of emotional stability becomes very pivotal in case of HCWs to cope with such challenges positively and productively as far as mental health and social well-being is considered. It was found in a study that despite a significant direct relationship of all the stressors with nurses' psychological distress, two coping mechanism including emotion-focused and problem focused strategies as well as resilience are the important resources important to achieve an adaptive effect on nurses' mental health (Lorente et al., 2021). The word "cope" is derived from the Latin word "colpus" meaning "to alter" and, as defined in the Webster's Dictionary, is usually used in the psychological paradigm to denote "dealing with and

attempting to overcome problems and difficulties." According to APA dictionary coping is defined as the use of cognitive and behavioural strategies to manage the demands of a situation when these are appraised as taxing or exceeding one's resources or to reduce the negative emotions and conflict caused by stress.¹ It was found in a study that PsyCap and coping self-efficacy mediate the positive relationship between self-leadership and health-protective behaviours. These results yield valuable insights regarding the usefulness of self-leadership and PsyCap as cognitive resources for shaping health-protective behaviours (Maykrantz et al., 2021). Further a study indicated that the lack of social and emotional support for HCWs was associated with increased anxiety, depressive symptoms, and insomnia on its own. Poor social support during the COVID-19 pandemic was related to psychological discomfort among HCWs. Independent risk factors for psychological distress among HCWs includes frontline workers' self-illness with COVID-19, and a lack of social or emotional support. Psychological distress and lack of emotional support also lower down the positive feeling that further lead to reduce well-being among HCWs while treating COVID-19 patients. HCWs' social behaviour was similarly influenced by their level of psychological discomfort (Jagiasi, B. G. et al., 2021). Another research study was conducted using the Positive and Negative Affect Schedule (PANAS) and other variables connected to their behaviours and protective factors and findings indicated a spike in negative affect (e.g., "upset," "afraid," "distressed") and a decline in positive affect after 8 weeks of lockdown as well as a general decline in overall mood. Further result found the greatest increases in negative affect among young individuals (18–35 years) and women (Gismero-González, E., et al., 2020).

"Positive affect"(PA) refers to one's propensity to experience positive emotions and interact with others and with life's challenges in a positive way. Conversely, "negative affect"(NA) involves experiencing the world in a more negative way, feeling negative emotions and more negativity in relationships and surroundings. These two states are independent of one another. Positive affect is associated with other characteristics of people who tend to be happier, like optimism, extraversion, and success. A study was conducted and it was found that 91% of respondents believed that pleasant circumstances helped them stay calm under COVID-19 pressure, showing that their mood was unaffected. 55% of respondents stated that their friends' style of life has enabled them to effectively deal with setbacks associated to COVID-19, and as a consequence, they have practically completed all of their objectives with having positive affect (Nyamai, D. K., 2021). In a study, it was suggested us to focus on the guidance and regulation for negative affect and pay attention for promoting and improving the positive affect to enhance the psychological capital in medical students (Wang, Y. et al., 2020). Psychological capital and internal locus of control were both shown to be inversely related to psychological distress and affect balance also mediated the correlation between psychological capital and psychological distress, as well as the relationship between internal locus of control and psychological discomfort (Alat, P. et al., 2021). An association was found between psychological capital (PsyCap), which was measured at the beginning of the lockdown period and some variables related to mental health such as anxiety, depression and satisfaction with life. Moreover, it was examined whether stress mediates the relationships between PsyCap and other variables. Following structural equation modelling (SEM) analyses, the results showed that PsyCap has a significant positive effect on satisfaction with life and significant negative effects on depression and anxiety. Stress mediated all the relationships (Turliuc, M. N., et al., 2021).

¹ <https://dictionary.apa.org/coping>

As a result, there is a need for healthcare professional workers to be innately involved in their work if their psychological capital is to affect their level of happiness at the workplace. And more research is needed on positive components like psychological capital and its correlates such as coping strategies among HCWs in the Indian context, regardless of the good work that has been done in this area. Research on positive aspects like psychological capital among healthcare workers is becoming more and more essential. With this backdrop, we studied psychological capital and its correlation with brief cope positive and negative affect among HCWs, as well as the gender differences in these variables, namely psychological capital, brief cope and positive and negative affect.

METHODOLOGY

Aims: To study the relationship of psychological capital with brief coping and positive and negative affect among the health care workers (HCWs) in Kerala and further it aims to find the differences in male and female health care workers on the basis of these variables during the COVID-19 pandemic outbreak.

Objectives:

- To assess the nature of Psychological capital, Brief coping and Positive and negative affects among the health care workers.
- To assess the relationship of the Psychological Capital with Brief coping and Positive and Negative affects among the health care workers.
- To compare the Psychological Capital, Brief coping and Positive and Negative affect of health care workers in regard to their gender.

Hypotheses

- **Ha1:** There would be a significant relationship between Psychological Capital and Positive and Negative affects among the health care workers.
- **Ha2:** There would be a significant relationship between Psychological Capital and Brief coping among the health care workers.
- **Ha3:** There would be a significant difference in Psychological Capital, Brief coping and Positive and Negative affects among male and female health care workers.

Research Design

The present study follows a correlational research design and comparative analysis was carried out to see the differences and similarities in the chosen variables between the groups of male and female HCWs.

Sample

Sample of the present study consists of 64 health care workers both male and female, involving health inspector, junior health inspector, nurses and staff nurses from various primary health care centres in Calicut district, Kerala. They were between the ages of 20 and 45 and their work time was 8 hours at the Covid-19 department.

Tools to be used in the collection of data

Socio-Demographic Datasheet: Socio-demographic data sheet developed by the researcher has been used to collect the socio- demographic data of the participants.

The PCQ-24 seeks to assess the four dimensions of Psychological Capital: The psychological capital questionnaire was designed by Luthan's in 2007 and includes 24 items and 4 subscales of self-efficacy,

hope, optimism, and resilience. Each subscale contains 6 items. The instrument is associated to a six-point Likert scale, ranging from 1 - strongly disagree to 6 - strongly agree.

The Brief-COPE: The Brief-Cope is a 28 item self-report questionnaire designed to measure effective and ineffective ways to cope with a stressful life event. “Coping” is defined broadly as an effort used to minimize distress associated with negative life experiences. The Brief-Cope was developed as a short version of the original 60-item COPE scale (Carver et al., 1989), which was theoretically derived based on various models of coping.

The Positive and Negative Affect Schedule (PANAS): Watson’s (1988) the Positive and Negative Affect Schedule (PANAS) is a self-report questionnaire that consists of two 10-item scales to measure both positive and negative affect. Each item is rated on a 5-point scale of 1 (not at all) to 5 (very much). PANAS were determined through the highest factor loadings on the exploratory factor analysis reported by Watson et al. (1988) in his original PANAS.

Procedure

Data collection has been done in Online based survey questions in Google form as well as off- line mode according to the convenience of the subjects. The participants of the study have been approached through direct visiting and some of them via message/ phone calls. The study established rapport with participants, provided questionnaires and demographic data sheets, and instructed them on filling out both an online and offline survey. The data sheet was collected and checked for omissions.

Statistical analysis

The data obtained from the participants were analysed using SPSS version 22. Correlation analysis was used to find the correlation of psychological capital and positive with brief coping and negative affect. T-test has been used to evaluate the gender difference in means of psychological capital, brief coping and positive affect and negative affect.

RESULT

Pearson Correlation was carried out to explore the association among study variables such as PsyCap, Brief Coping and Positive and negative affect. T-test was used to find out the gender differences in these study variables.

Result Table 1: Correlation of Psychological Capital Components with Each Domain of Positive Affect and Negative Affect among Health Care Workers in Kerala.

		PSYCHOLOGICAL CAPITAL			
		EFFICACY	HOPE	RESILIENCE	OPTIMISM
Positive affect	PERSON CORRELATION	.495**	.541**	.184	.261*
	SIG. (2-tailed)	.000	.000	.146	.037
	N	64	64	64	64
	PERSON CORRELATION	-.250	.122	-.231	.162
	SIG. (2-tailed)	.046	.338	.056	.200

Negative affect	N	64	64	64	64
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**p≤0.01 (2-tailed); *p≤0.05; N=64

Result table 1 shows that the positive affect is significantly positively correlated with the dimensions of psychological capital efficacy, hope, and resilience. Here the correlation coefficient of positive affect with dimensions of psychological capital; efficacy, hope, resilience and optimism is .495, .541, .184, .261 and negative affect with dimensions of psychological capital is -.250, .122, -.231 and .162 respectively. Hence it can be concluded that hypothesis Ha 1 is accepted.

Result Table 2: Correlation of Psychological Capital Components with Brief Coping among Healthcare Workers in Kerala

			PSYCHOLOGICAL CAPITAL			
			EFFICACY	HOPE	RESILIENCE	OPTIMISM
BRIEF COPE	EMOTION FOCUSED COPING	PEARSON CORRELATION	.263*	.227	.022	.232
		SIG. (2-tailed)	.036	.071	.864	.066
		N	64	64	64	64
	PROBLEM FOCUSED COPING	PEARSON CORRELATION	.459**	.540**	.267*	.247*
		SIG. (2-tailed)	.000	.000	.039	.049
		N	64	64	64	64

**p≤0.01 (2-tailed); *p≤0.05; N=64

The Result table 2 that brief cope of HCWs is significantly positively correlated with all dimensions of psychological capital. Here the correlation coefficient of emotion focused coping with the dimensions of psychological capital efficacy, hope, resilience, and optimism are .263, .227, .022, .232 and problem focused coping with dimensions of psychological capital are .459, .540, .267 and .247 respectively. Hence it can be concluded that hypothesis Ha2 is accepted.

Result table 3: Significant difference in each dimension of Psychological capital, Brief coping and PANAS among male and female health care workers in Kerala.

Variables	Gender	Mean	SD	t	Sig (2 tailed)
Efficacy	Male (32)	30.06	4.839	1.578	.120
	Female (32)	27.72	6.869		
Hope	Male (32)	28.75	2.817	-1.215	.229
	Female (32)	29.72	3.522		
Resilience	Male (32)	25.38	3.679	-.025	.980
	Female (32)	25.41	5.951		
Optimism	Male (32)	23.34	7.464	-1.163	.249
	Female (32)	25.34	6.235		
Positive Affect	Male (32)	32.56	11.382		

	Female (32)	29.28	9.222	1.267	.210
Negative affect	Male (32)	26.06	7.383	-1.368	.176
	Female (32)	28.84	8.821		
Problem Focused Coping	Male (32)	45.19	9.437	.756	.452
	Female (32)	43.34	10.060		
Emotion Focused Coping	Male (32)			.108	.914
		40.19	8.154		
	Female (32)	39.97	7.998		

The independent sample t-test was carried out to compare the psychological capital, brief cope and positive and negative affect of health care workers with respect to their gender. Result table 3 shows the significant value obtained by each domain of psychological capital, efficacy, hope, resilience and optimism are .120, .229, .980, and .249 respectively, each domain of positive affect and negative affect are .210, .176 respectively and each domain of brief cope, emotion focused coping and problem focused coping are .452 and .914 respectively. It revealed that there is no significant difference in psychological capital, brief cope and positive and negative affect of HCWs with respect to their gender. Hence it can be concluded that the hypothesis Ha 3 is rejected.

DISCUSSION

The result of this study revealed that regarding the first hypothesis, correlation analysis clearly stated that all the dimensions of the psychological capital (namely efficacy, hope and optimism) is significantly positively correlated with positive affect dimension of PANAS and domains of PsyCap (namely efficacy and resilience) negatively correlated with negative affect dimension of PANAS. Individuals with higher psychological capital are more robust, hopeful, optimistic, and self-efficient, which could make them less susceptible to negative emotions like anxiety or stress, fatigue, and depression, resulting in them feeling more violent. The results of the present study have been supported by a prior study, which found that PsyCap significantly reduces anxiety and depression and significantly increases life satisfaction (Turliuc & Candel, 2022). The concept of PsyCap is strongly linked to increased wellbeing, work, and life satisfaction and it was stated by the previous study's result that PsyCap is positively associated with more vitality at work, satisfaction and further favourably relates to positivity (Rozkwitalska-Welenc et al., 2024). In order to increase medical students' psychological capital, a different study suggested emphasizing on the regulation and direction of negative affect as well as encouraging and enhancing positive affect (Wang et al., 2020).

Further regarding the second hypothesis, correlation analysis clearly stated that all the dimensions of the Psychological Capital (namely efficacy, hope, resilience and optimism) are positively correlated with only a single dimension of the brief cope i.e., Problem focused coping domain, whereas the other dimension did not have any significant relation. This may be explained as those who possess high psychological capital more likely to show high coping, an individual might invest one's own conscious efforts, to solve personal and interpersonal problems, in order to try to master, minimize or tolerate stress inducing conflicts. Problem-focused coping styles, characterized by recognizing difficult situations as personal challenges, can help nurses with high psychological capital to protect themselves from work-related stress and burnout. It was also suggested in one study that revealed, different coping

strategies are negatively associated with psychological distress as well as through the simultaneous concurrent effect of problem-focused, emotion-focused strategies and resilience (one of the domains of PsyCap), moreover, this study discovered a crucial mediation sequence of stressors on psychological discomfort (Lorente et al., 2021).

The result further revealed that regarding third hypotheses, there is no significant gender difference among health care workers with respect to these three variables namely psychological capital, brief cope and positive and negative affect. The study outcomes revealed that organizations should focus on educating nursing staff to overcome fear of COVID-19 and focus on the way to induce positivity among nursing staff is by holding trainings.

CONCLUSION

In the present study, Psychological capital was shown to be favourably connected with positive affect dimension of PANAS, brief cope including its all domain and inversely associated with negative affect dimension of PANAS. In terms of psychological capital, brief cope, negative affect, and positive affect, the findings demonstrated that there is no substantial difference between male and female health care professionals. The present study has found the important role of psychological capital, brief cope and positive affect and negative affect among health care workers in Kerala. It will be helpful for the health care settings to improve mental health and occupation related problems such as workload, job burnout and stress among the employees working there.

The study has only included relatively small number of sample and this study focused only on one occupational group. For further research, it is recommended to increase the sample size and collect data from a wide range geographical region including other age group, different occupational groups.

Conflict of Interest: There is no conflict of interest among the authors of Department of Psychological Sciences, Central University of South Bihar, Gaya.

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