International Journal of Environmental Sciences
ISSN: 2229-7359
Vol. 11 No. 8s, 2025
https://www.theaspd.com/ijes.php

Effects of Psychological Capital on Job Engagement and Mental Health: with special reference to Public Healthcare Professionals

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Abstract: Recent study has focused on the impact psychological capital (PsyCap) has on employee well-being and organizational results. The purpose of this study is to investigate how PsyCap affects public health workers' mental health and workplace engagement. Increased workplace engagement was linked to higher PsyCap levels, indicating that healthcare workers with strong psychological resources are more engaged, passionate, and committed in their work. Furthermore, PsyCap demonstrated a robust inverse correlation with mental distress symptoms, suggesting that it has a protective function in reducing mental health problems. Particular aspects of PsyCap, such hope and resilience, have a significant impact on this connection. The results highlight the potential advantages of encouraging PsyCap among medical practitioners, particularly in the demanding context of public health. The research adds to the body of knowledge on positive organizational psychology and offers useful recommendations for managers and policymakers who want to improve employee wellbeing and engagement in public health contexts.
Keywords: *Effects, Psychological Capital, Job Engagement, Mental Health, Healthcare Professionals*

1. INTRODUCTION

The idea of Psychological Capital (PsyCap) has become well-known in organizational psychology as a critical component that affects worker engagement, well-being, and output. PsyCap, which has its roots in the Positive Psychology movement, is a term used to describe a person's positive psychological development state and is made up of four essential elements: optimism, resilience, hope, and self-efficacy (Harms, 2017). These factors affect a person's mental health in addition to their attitude toward their work. Because of the nature of their work, public health professionals frequently find themselves in circumstances where lives are at stake. As a result, they must always remain informed and alert while also managing extreme strain and emotional exhaustion (Laschinger, 2014). Their mental health and work engagement are vital for both themselves and the patients they treat because of this particular mix of issues. It is impossible to overestimate the importance of their mental health and involvement, particularly in light of the possible effects on patient satisfaction and healthcare results (Luthans, 2007). The significant impacts of PsyCap on mental health and work engagement for public health practitioners. Understanding how PsyCap may be used to increase work satisfaction, lessen burnout, and encourage a healthy mental state for these professionals will pave the path for enhanced healthcare delivery and personal well-being as the healthcare industry grows more demanding (Halbesleben, 2010).

1.1 Psychological Capital and its Importance

In the last several decades, organizational behavior and human resource management have come to recognize the significance of Psychological Capital (PsyCap). PsyCap, or positive psychological capabilities of hope, effectiveness, resilience, and optimism—often abbreviated as HERO—is a key factor in determining how well employees perform and are satisfied with their work environment. PsyCap is more significant than just an abstract idea; actual research has connected it to real results including lower

employee turnover, better job performance, and happier employees (Shanafelt, 2015). In their groundbreaking study, Luthans et al. (2007) contended that PsyCap captures an individual's positive psychological condition of growth, going beyond human and social capitals. Given how competitive today's workplace is, it is critical for firms to comprehend and use PsyCap if they want to succeed.

1.2 Psychological Capital and Job Engagement

A sustained and widespread affective-cognitive state marked by energy, devotion, and immersion is known as job engagement. Studies repeatedly demonstrate that workers who have high PsyCap are more likely to be highly engaged at work. For example, PsyCap dimensions and staff engagement levels were found to positively correlate in a research conducted by Harter et al. (2002). There are several processes that explain this association. Workers that possess high hope, which is one of the PsyCap components, typically establish more specific objectives and are persistent, which increases engagement. Similarly, those who possess high efficacy have a strong sense of confidence in their capacity to complete tasks, which leads to more engagement in their work. Interventions aimed at improving PsyCap may therefore be advantageous for organizations seeking to increase employee engagement (Kinman, 2018).

1.3 Psychological Capital and Mental Health

Since mental health affects absenteeism, productivity, and corporate culture overall, it has garnered more attention, especially in the workplace. PsyCap seems to be a barrier-preventing component for mental health issues. Studies show that those with greater PsyCap report less symptoms of anxiety and sadness and have superior coping mechanisms (Avey et al., 2010). One of PsyCap's most important components is resilience, which gives workers the capacity to overcome hardship and efficiently handle stress. Understanding PsyCap's function in alleviating mental health difficulties is crucial, especially as these challenges grow more common (Johnson, 2018).

1.4 Public Healthcare Professionals

The working environment for public health practitioners is characterized by high levels of stress, emotional turbulence, and rigorous workloads. Because of this, the research of PsyCap is very pertinent to this population. Research has demonstrated that healthcare workers with greater PsyCap levels report better job satisfaction, less burnout, and increased patient care quality (Siu, 2014). Strong psychological resources are essential for public healthcare personnel because of their particular set of problems, which include handling critically ill patients and overcoming bureaucratic obstacles. With its focus on effectiveness, optimism, resilience, and hope, PsyCap can act as a bulwark against the high levels of stress found in the healthcare sector (Shanafelt, 2017).

2. OBJECTIVES OF THE STUDY

- To investigate if basic, secondary, vs tertiary care platforms have an impact on the Psychological Capital of healthcare providers
- To determine if platforms for primary, secondary, and tertiary care have an impact on the level of work engagement among healthcare practitioners
- To investigate if primary, secondary, or tertiary care platforms have an impact on the mental health of the healthcare providers

3. HYPOTHESIS OF THE STUDY

H1: The total Psychological Capital of healthcare practitioners will be significantly impacted by primary and secondary care platforms as opposed to tertiary care platforms.

H2: The total work engagement of healthcare personnel will be greatly impacted by primary and secondary care platforms as opposed to tertiary care platforms.

H3: The general mental health of healthcare practitioners will be greatly impacted by primary and secondary care platforms as opposed to tertiary care platforms.

4. RESEARCH METHODOLOGY

The purpose of this research was to learn more about the mental health, job satisfaction, and levels of Psychological Capital held by healthcare workers in the public sector of Rajasthan's economy. The study relied on responses from 300 people. Professionals from the medical, nursing, and community health worker fields were all represented in the study population. Due in large part to the fact that many healthcare professionals were swamped with patients in need of both routine and emergency treatment, a practical sampling method was employed to collect enough data. Face-to-face (offline) or online data collection using Google Forms was therefore employed, with consideration given to factors such as accessibility, closeness, availability, and respondents' willingness to engage in the study. Two types of healthcare platforms and three types of healthcare providers were used in a 2x3 factorial design. N=50 participants were polled using a 2x3 factorial design. Table 1 provides a summary description of the sample size and a factorial matrix structure.

Table 1: Presentation of the 2x3 factorial matrix

Healthcare platforms	**Healthcare providers**		
	Doctors	Nurses	CHWs
Tertiary care	50	50	50
Primary and secondary care	50	50	50

Study Variables

Major demographical and Predictor variables:

- A person's age, gender, employment history, marital status, and Place of employment (main and subsidiary tracks, or third track and neighborhood), Education, Regular vs temporary employment.
- Primary care physicians, secondary care physicians, and tertiary care physicians make up the healthcare delivery system.

Criterion Variables:

- Health Care Professionals' Psychological Resources
- Providers' dedication to their jobs
- Providers' emotional wellbeing in the healthcare setting

Procedures and Data Collection

Officials from several health agencies gave their blessing, and data gathering began. District-level health officials and program coordinators were consulted before data collection began.

Online survey forms: To facilitate the online data collection, a Google Form was created. Before distributing the survey link to study participants, the researcher ensured that it was fully operational by testing its functionality, section organization, online data sheet accessibility, recorded replies, etc.

Offline data collection: The study's author went to the various public healthcare platforms in these areas, spoke with the people in charge, and got their verbal approval to speak with the staff there. The survey instrument was distributed to healthcare professionals who agreed to take part in the study.

Descriptive analysis

Descriptive statistics for demographic data and Cronbach's alpha for evaluating reliability were analyzed using IBM SPSS Statistics version 20.0.

5. RESULTS

Total sample size was 300, with 150 respondents from primary, secondary, and tertiary care platforms, each with 50 doctors, nurses, and CHWs. Descriptive, inferential, and multivariate statistics were employed to evaluate healthcare provider data.

Table 2 shows healthcare practitioners' education. The data showed that 82% of primary and secondary care doctors held MBBS degrees. 10% of doctors practiced homoeopathy or ayurveda, whereas 8% were

MD or MS-trained allopaths. Compared to 34% MBBS and 12% AYUSH physicians, 54% of tertiary care doctors were specialists. ANM diplomas were held by 34% of primary and secondary care CHWs, 36% and 30% of graduates and post-graduates in science, arts, and commerce, respectively. In contrast, 26% of tertiary care CHWs had an ANM diploma, 44% were graduates, and 30% were postgraduates.

Table 2: Education status of healthcare providers

Education status	Primary and Secondary care providers (N=150)			Tertiary care providers (N=150)		
	Doctors (N=50)	Nurses (N=50)	CHWs (N=50)	Doctors (N=50)	Nurses (N=50)	CHWs (N=50)
MBBS	82%			34%		
AYUSH (BHMS, BAMS)	10%			12%		
MBBS with Post graduate degree (MS, MD etc.)	8%			54%		
BSc –Nursing		32%			56%	
General Nursing Midwifery Diploma		68%			30%	
BSc–Nursing plus PG degree (M.Sc, M.A etc.)		0			14%	
ANM (diploma in Auxiliary Nurse Midwifery)			34%			26%
ANM diploma plus graduate degree (B.A, B.Com, BCA etc)			36%			44%
ANM diploma, graduate plus Post graduate degree (M.A, M.Com, MSW etc)			30%			30%

Doctors in primary and secondary care platforms were 76% regular and 24% contractual, respectively, according to Table 3. In contrast, 72% and 28% of tertiary care doctors were regular and contractual employees. On a regular and contractual basis, 86% and 14% of nurses worked on tertiary care platforms, while 66% and 34% worked in primary and secondary care platforms. In basic and secondary care platforms, 40% and 60% of CHWs were regular and contractual, but in tertiary care platforms, it was equal.

Table 3: Employment status of healthcare providers

Employment type	Primary and Secondary care providers (N=150)			Tertiary care providers (N=150)		
	Doctors (N=50)	Nurses (N=50)	CHWs (N=50)	Doctors (N=50)	Nurses (N=50)	CHWs (N=50)
Regular	76%	66%	40%	72%	86%	50%
Contractual	24%	34%	60%	28%	14%	50%

Gender breakdown of study participants is shown in Table 4. Primary and secondary care doctors were 76% and 24% male and female, respectively. Tertiary care had 60% male doctors and 40% female doctors. The fact that all tertiary CHWs were women is noteworthy. The primary and secondary care platforms

have 98% CHWs, same to the tertiary care platforms. Male and female nurses made up 6% and 94% of primary and secondary care nurses, respectively, and 4% and 94% of tertiary care nurses.

Table 4: Gender-wise distribution of healthcare providers

Gender	Primary and Secondary care providers (N=150)			Tertiary care providers (N=150)		
	Doctors (N=50)	Nurses (N=50)	CHWs (N=50)	Doctors (N=50)	Nurses (N=50)	CHWs (N=50)
Male	76%	6%	2%	60%	4%	0
Female	24%	94%	98%	40%	96%	100%
Others	0	0	0	0	0	0

Table 5 shows how healthcare platforms affect all Psychological Capital aspects of individuals. One of Psychological Capital's four components, hope, was substantial across healthcare platforms' providers. However, tertiary care platform users expressed much more hope than primary and secondary platform participants.

Table 5: Mean Differences between Components of Psychological Capital across Two Healthcare Platforms

Variables	Primary and Secondary care		Tertiary care		F
Psychological Capital	Health care providers (N=150)		Health care providers (N=150)		
	Mean	SD	Mean	SD	
Hope (Score range: 6-36)	29.61	6.07	31.52	4.01	11.09***
Self-Efficacy (Score range: 6-36)	29.62	6.24	30.09	4.61	.60
Resilience (Score range- 6-36)	27.10	5.08	27.61	5.07	.79
Optimism (Score range: 6-36)	25.81	5.25	25.98	4.88	.08
Overall Psychological Capital (Total score) (Score range: 24- 144)	112.14	18.11	115.21	15.10	2.77

P<.001***(Six points Likert scale: 1–6, higher score indicates higher Psychological Capital)

Healthcare platforms affect work engagement (vigor, devotion, and absorption) for participants, as seen in Table 6. Further analysis shows those healthcare practitioners' mean differences in vigor, devotion, absorption, and work engagement were not significant. It is clear that healthcare platforms do not affect practitioners' energy, devotion, absorption, or work engagement.

Table 6: Mean Differences between Components of Job Engagement across Two Healthcare Platforms

Variable	Primary and Secondary care		Tertiary care		F
Job Engagement	Healthcare providers (N=150)		Healthcare providers (N=150)		
	Mean	SD	Mean	SD	
Vigor (Score range- 6-36)	27.11	6.13	26.31	6.73	1.31
Dedication (Score range- 5-30)	23.85	4.97	23.13	5.02	1.73

Absorption (Score range- 6-36)	24.31	6.56	23.84	6.18	.40
Overall job engagement (Total score) (Score range- 17-102)	75.27	14.90	73.28	15.46	1.40

(Six points Likert scale: 1–6, a higher score indicates higher engagement)

ANOVA results in Table 7 demonstrate that the mean scores of two mental health dimensions—anxiety and depression—were not significantly different among platforms. ANOVA showed significant differences across both care systems on mental health components including loss of control, positive affect, emotional connections, life satisfaction, psychological discomfort, and well-being. In other words, tertiary care professionals reported somewhat greater levels of emotional and behavioral control loss and psychological distress than primary and secondary care providers. Compared to tertiary care platforms, primary and secondary care participants performed better on the four aspects of mental health, specifically positive affect, emotional bonds, life satisfaction, well-being, and overall mental health.

Table 7: Mean Differences between Components of Mental health Across Two Healthcare Platforms

Variable	**Primary and Secondary care**		**Tertiary care**		**F**
Mental Health	**Healthcare providers (N=150)**		**Healthcare providers (N=150)**		
Sub-Scales	**Mean**	**SD**	**Mean**	**SD**	
Anxiety (Score range: 9-54)	17.40	7.83	18.30	7.87	1.10
Depression (Score range: 4-24)	8.40	3.84	9.17	4.03	3.03
Loss of Behavioural and Emotional Control (Score range: 9-54)	17.70	7.14	19.59	7.03	5.42*
General Positive Affect (Score range: 10-60)	41.16	10.79	36.41	10.45	14.98***
Emotional Ties (Score range: 2-12)	7.56	2.42	6.65	2.00	12.29***
Life Satisfaction (Score range: 1-6)	4.19	1.53	3.80	1.44	5.02*
Global Scale-1 Psychological Distress (Score range: 24-144)	45.31	19.93	51.35	21.27	6.80**
Global Scale-2 Psychological Wellbeing (Score range: 14-84)	56.52	14.27	49.66	13.21	18.55***
Mental Health Index (Score range: 38-228)	171.81	30.13	163.21	27.07	6.93***

P<.001***, P<.01**, P<05*

Table 8 shows correlations between Psychological Capital's four dimensions and mental health's eight aspects. Psychological Capital optimism is adversely correlated with anxiety, lack of behavioral and emotional control, and psychological suffering. The link between Psychological Capital characteristics and emotional relationships was not significant. Hope, self-efficacy, and resilience were negatively correlated with Psychological Capital, anxiety, sadness, loss of behavioral and emotional control, and psychological distress. This reveals that healthcare workers with high hope, self-efficacy, and resilience avoid psychological discomfort, severe anxiety, and depression and manage their behavior and emotions.

Table 8: Correlations between components of Psychological Capital and mental health among healthcare providers (N=300)

Variables	Psychological Capital				Overall Psychological Capital
Mental Health	Hope	Self-Efficacy	Resilience	Optimism	
Anxiety	-.12*	-.18*	-.15*	-.08**	-.09
Depression	-.12**	-.28**	-.16**	-.02	-.17**
Loss of Behavioral and Emotional Control	-.25**	-.29**	-.24**	-.04**	-.25**
General Positive Affect	.09	.17**	.14*	.04	.13*
Emotional Ties	.03	.02	.017	.09	.050
Life Satisfaction	.19**	.22**	.16**	.077	.21**
Global scale 1: Psychological Distress	-.16**	-.20**	-.17**	-.22**	-.17**
Global scale 2: Psychological Wellbeing	.11	.18**	.17 **	.07	16**
Mental health Index (Overall mental health)	.18**	.23**	.25**	.06	.23**

P<.01**, P<05* (two tailed)

Table 9 shows the relationships between all Psychological Capital characteristics and work engagement. All Psychological Capital components and the overall Psychological Capital were favorably connected with the three work engagement aspects and total job engagement. According to the research, Psychological Capital helps healthcare workers engage in their work.

Table 9: Correlations between components of Psychological Capital and job engagement among healthcare providers (N=300)

Variables	Psychological Capital				Overall Psychological Capital
Job engagement	Hope	Self-efficacy	Resilience	Optimism	
Vigor	.38**	.42**	.40**	.33**	.48**
Dedication	.35**	.34**	.29**	.28**	.40**
Absorption	.24**	.20**	.27**	.27**	.31**
Overall job engagement	.38**	.39**	.38**	.34**	.46**

P<.01**, P<05* (two-tailed)

Table 10 shows mental health associations with work engagement aspects. Anxiety, despair, behavioural control, and discomfort are negatively correlated with vigor and devotion and total job engagement. Dedication, absorption, and job engagement both positively and substantially associated with mental health index and the four characteristics of mental health: positive effect, emotional attachments, life satisfaction, and well-being. Vigor is negatively connected with life satisfaction but favorably correlated with positive impacts, emotional bonds, well-being, and mental health index. Only lack of behavioral and emotional control was negatively associated with absorption. A comprehensive analysis indicated no correlation between absorption, anxiety, sadness, or psychological distress.

Table 10: Correlations between Job engagement and mental health on public healthcare providers (N-300)

Variables	Job engagement	

Mental Health	Vigor	Dedication	Absorption	Overall job engagement
Anxiety	-.15**	-.17**	.02	-.11**
Depression	-.16**	-.22**	-.03	-.15**
Loss of behavior/emotional control	-.30**	-.33**	-.14*	-.30**
General positive affect	.42**	.38**	.34**	.45**
Emotional Ties	.20**	.23**	.18**	.24**
Life satisfaction	-.35**	.29**	.30**	.37**
Psychological distress	-.21**	-.25**	-.05	-.19**
Psychological well-being	.42**	.38**	.36**	.46**
Mental health index	.36**	.33**	.19**	.34**

P<.01**, P<05* (two tailed)

6. DISCUSSION

The demographic data showed that more tertiary doctors had post-graduate degrees than primary and secondary care doctors. Education distribution of doctors follows IPHS (2011–2012) recommendations. Superspeciality hospitals and medical colleges should have more modern facilities and competent employees than basic and secondary care platforms, according to the rules. AYUSH doctors were underrepresented on platforms compared to allopathic doctors. AYUSH physicians were the least prevalent since the public dislikes them, resulting in fewer openings in hospitals than for allopathic doctors. No comparison could be made since the nurses possessed degrees or diplomas, which are equal to nursing practice. Compared to primary and secondary care CHWs, most in tertiary care platforms have graduation or post-graduate and an ANM diploma. CHWs are at the bottom of the health system hierarchy and may pursue higher education for professional advancement and social recognition. The education levels of primary and secondary care platforms may differ since they are mostly in rural locations with fewer colleges and other educational resources and facilities for higher education. Personal drive, need for accomplishment, and other familial, societal, and institutional variables may amplify this.Most physicians and nurses on both platforms had regular work, whereas CHWs had almost equal regular and contractual roles. Doctors and nurses are vital to the medical service delivery team, thus their recruitment is prioritized above CHWs, who operate as allied providers and manage community processes. To meet the increased demand for field-level healthcare personnel, the public health department hires them on a contractual basis, which is straightforward to do and saves money. Compared to doctors, most nurses and CHWs were women. Families in local communities get family planning, prenatal, and postnatal care from nurses and CHWs. Social expectations and the caregiving nature of these jobs have traditionally made them more suited for women. Evaluation of mental health should go beyond identified illnesses and disorders. Life pleasure is vital to subjective mental health. This study found that care platforms significantly affect life happiness, indicating that healthcare workers evaluate their lives based on their own criteria and their employment. Care platforms also affected caregivers' mental health. The findings showed that care platforms caused care providers psychological discomfort. This is shown by more absenteeism, worse self-esteem, lack of enthusiasm in work, poor physical health, and subpar service. The platforms significantly improved mental health and well-being. Platforms may harm mental health because to severe workloads, emotional drain, poor incentives, rotating duty allocations, and system expectations. Care providers' capacity to make daily decisions, build and maintain relationships, and handle daily life issues and productivity affects their workplace.Doctors, nurses, and CHWs had reasonably high levels of total Physical capital, indicating that they could manage work and personal life and protect themselves from harsh situations. Frontline healthcare practitioners may face intervention from local media, legislators, and social activists, as well as patient wrath in the case of a problem. Physical capital can assist people handle professional obstacles. Healthcare providers labored under difficult conditions during the COVID-19 epidemic and got support from their families, the government, and society, which boosted their physical capital.Out of eight mental health variables, anxiety, depression, and psychological distress differed significantly between individuals. The data show that doctors and nurses

had more anxiety than CHWs. We found similar results to other investigations. The research participants experienced anxiousness, restlessness, weariness, sweating, shaking, and attention issues. Studies outside India also reveal minor anxiety among healthcare professionals. The data also showed that doctors and nurses had more depressive symptoms than CHWs. Several Indian research found comparable depression symptoms in nurses and other healthcare professionals. Compared to CHWs, physicians and nurses showed higher psychological suffering, such anxiety and sadness. After a long time, they returned to routines, including in-person interactions with loved ones. This may explain this study's low stress, sadness, and psychological discomfort. Overall, healthcare practitioners' mental health has improved since the epidemic was contained.

7. CONCLUSION

The study examined how physical capital affects job engagement and mental health in primary, secondary, and tertiary public health care providers. The study also examined the effects of providers' service delivery platforms on physical capital, work engagement, and mental health and the relationships between study variables. People with more physical capital have better job engagement, mental health, and workplace behavior. The study found that physical capital predicts occupational engagement and mental wellness. Thus, promoting physical capital-based treatments to improve employee well-being and organizational and health system goals seems promising. Primary, secondary, and tertiary care delivery platforms affect mental health but not work engagement or physical capital. This study provides evidence on the mental health requirements of public health service workers and opens the door to future investigations with care providers in other resource-constrained situations. The study findings may also affect health system strengthening strategies and initiatives by delivering care to national and global care providers. Other scholars might use the study's unknown areas to enhance conceptual understanding.

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