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Mental Health, Hope and Work Engagement: An Empirical Study in the Health Sector

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Abstract: *Drawing on COR (conservation of resources) theory, the current study investigates the impact of personal resources on mental health and hope on work engagement. The study assesses the mediation of hope on mental health and works on engagement relationship. Data was gathered in two waves with a gap of one month between T1 and T2 from 200 frontline healthcare workers employed in Pakistan's public and private sector hospitals. The findings reveal that hope establishes an essential role in explicating mental health and work engagement relationship, particularly during the challenging times of the COVID-19. Implications of the findings have also been discussed.*

Key Words: Mental Health, Hope, Work Engagement, Mediation

Introduction

The pandemic of COVID-19 bestows an extraordinary challenge on individuals and organizations (Chriscaden, 2020). Preliminary research reveals that the onset of the global health crisis has dropped employees' productivity by 35% (van Hoof, 2020), creating an uncertain environment and putting a considerable burden on an individual's inner resources to cope with the ensuing challenges. Furthermore, the pandemic has emphasized the need for more sustainable and resilient economies with an engaged workforce (Liu et al., 2021). The key objective of the current study is to investigate the effect of personal resources on mental health and hope that they may facilitate employee engagement in the challenging times of the COVID-19 pandemic.

Work engagement uncovers the level of employees' vigorous assignment of personal resources to complete tasks (Rich et al., 2010). Engagement refers to the association, concentration, and dedication in everyday meanings. It displays a state of mind that submerges an individual with enthusiasm and a full feel of energy in the performance of tasks (Kahn, 1990). According to Schaufeli (2002), engagement at the workplace is a work-associated mental state of positivity and fulfilment that is illustrated through vigour, dedication & absorption. Vigour implies elevated energy echelons and readiness to contribute to assignments; dedication characterizes enthusiasm and inspiration, whereas absorption signifies concentration (Schaufeli et al., 2002). Characteristics of engagement at the workplace

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may be achieved with better mental health and personal resource of hope. Mental health, as outlined by WHO, is a well-being status which allows individuals to recognize their abilities and assist them in managing routine stresses of life and contributing to society (Zheng et al., 2020). Lopez et al. (2020) define mental health as the capability to have pleasure from life and set up a balance between life activities and efforts to attain resilience (Lopez et al., 2020). Earlier studies address the association between physical health and work engagement, whereas a small number of studies take account of mental health's links with work engagement (Innstrand et al., 2012). The current research focuses on mental health's relation to engagement to uncover the ecology of work and health, specifically in the change workplace setting during and after COVID-19. The study also takes the role of hope in current challenging times. Hope is psychological capital's third recognized facet. Snyder et al. (1991) outlined hope as similar to positivity in motivation that establishes itself on the basis of two facets, i.e., agency and pathways, where energy provides direction towards goals and pathway ascertain planning for achievement of those goals. Individuals who are high in hope not only possess the capacity to ascertain pathways for the achievement of their objectives instead they are capable of generating multiple pathways to materialize their plans (Sweetman & Luthans, 2010). Even in the face of challenges, they uphold their hope for achieving goals, and hope makes them capable of framing their tasks. Optimism holds an expectancy of positive sequels, whereas hope carries the practical implementation towards a particular objective. Additionally, exalted hope may frame assignments by getting the internal motivation essential to accomplish the task (Avey et al., 2008; Yang, 2020).

The present study draws on the COR theory (Hobfoll, 1989) to assess how personal resources assist in conserving resources for work engagement by employing an empirical approach applied to public and private sector hospitals in Pakistan. The earlier researchers have highlighted the significance of work engagement, yet the assessment of personal resources in this process is still preliminary (de Chinelato et al., 2020). Consequently, our understanding of contextual and individual factors to enhance work engagement is limited. Sarwar et al. (2020) emphasized incorporating mediators that may help refine the work engagement model. The present study focuses on this gap and examines the impact of personal resources on mental health and hope on work engagement. Moreover, mental health's impact on productivity has not been covered in literature profusely (Kotera et al., 2020). This study addresses the significant relationships between mental health, hope, and work engagement by employing the COR theory.

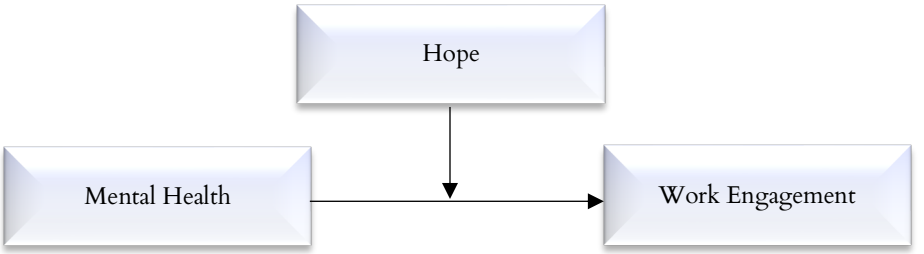

Figure 1: The Research Model

Theoretical Framework

Mental Health and Work Engagement

The literature identifies work engagement with an employee's vigour, dedication, and absorption while the performance of assigned tasks (Bakker, 2017). Portents of vigour reveal good health and proactive behaviour in employees (Shirom, 2010). In the same vein, Demerouti et al. (2001) contend that engagement, and specifical vigour lessens mental health illnesses. A study conducted by Schaufeli and Bakker (2004) on four Dutch firms also found that engagement at the workplace minimizes health-related anomalies. Engaged personnel showed less depression and anxiety

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(Demerouti et al., 2008). Shirom's standpoint also gets endorsement by Wefald (2008), who links engagement, particularly vigour, with health.

Moreover, the theory of conservation of resources contends that people endeavour to accumulate and guard their resources to cope with difficult situations. The theory explains the motivational drive of individuals for the maintenance of existing resources and the pursuit of new resources (Hobfoll, 1989). It affirms three instances that lead to psychological stress, i.e., fear of loss of a resource, actual net loss in resource gain and resource investment, and loss of resource after consumption. The theory posits two main principles regarding the protection of resources, i.e., losing a resource is more salient than acquiring a resource and investment of resources takes place to avoid resource loss and expand resources to safeguard the future (Halbesleben, 2014). Mental health is a resource that helps employees to invest in further resources and allows them to foster their level of engagement over time (Salanova et al., 2010). Earlier research associates engagement with better health and lesser deviances.

The above discussion is hypothesized as under:

Hypothesis 1

Mental Health has a positive relationship with Work Engagement.

Hope and Work Engagement

Psychological Capital's third recognized facet, hope, is based on the interaction between goal direction (agency) and goal planning (pathway), as outlined by Snyder et al. (1991). Those high in hope can ascertain a pathway for the achievement of their objectives while generating several paths and adapting plans as per need. Even in challenging times, they maintain their hope to accomplish goals (Madrid et al., 2018; Sweetman & Luthans, 2010). Hope and optimism are different. Optimism carries an expectancy for positive outcomes, whereas hope includes the rational implementation of attaining the desired objective. Moreover, individuals high in hope are capable of structuring assigned work that stipulates the internal motivation that is essential for task completion (Avey et al., 2008).

Hypothesis 2

Hope has a positive relationship with Work Engagement.

Mental Health and Hope

Contemporary theories of hope offer assertions on how human behaviour and positive expectancies are linked (Griggs, 2017). Existing literature unfolds multiple whys and wherefores that reinforce mental health. First, research implies that people with higher hope are better at coping with stressful life occurrences (Ciarrochi et al., 2015). Second, hope has been discovered to predict positive outcomes across various domains, i.e., hope envisages improved understanding and implementation of preventive approaches when facing high-risk situations (Irving et al., 1998). Hope's attribute of improved coping links it with mental well-being (Gallagher et al., 2020). Numerous studies establish the relevance of mental health with hope (Snyder, 2002, Gallagher & Lopez, 2018; Ritschel & Sheppard, 2018). According to Gallagher and Lopez (2009), multiple facets of mental health are associated with hope. Evidence shows that poor mental health and lower levels of hope are linked with anxiety and stress (Long & Gallagher, 2018). Hence, one-way mental health may contribute to establishing hope is by serving as a positive trait that facilitates coping.

By summing up the existing research that takes engagement in a relationship with better-reported health and a source of decreased deviances, this discussion is hypothesized as under:

Hypothesis 3

Mental Health has a positive relationship with hope.

Hope as a Mediator between Mental Health and Work Engagement

With two components of hope, willpower (motivation) and way power (ability to ascertain multiple alternatives for goal achievement),

expectations for incorporation of numerous pathways are established in the mental strategy, hence enhancing individuals' capability to take proper outlook (Ye et al., 2020). The willpower and way power both elements complement one another and establish a mounting spiral (Madrid et al., 2018; Luthans et al., 2007). With willpower, one move in the direction of one's goals, way power generates multiple pathways for the pursuit of these goals (Rego et al., 2012) while opting for proactivity of behaviours (Madrid et al., 2018). Sweetman & Luthans (2010) also asserts that hope while building the capability for agency and pathways to achieve goals further develops resilience, efficacy, and optimism. Bakker & Leiter (2010) propose hope as an antecedent specifically for the vigour component in engagement. Notably, according to them, hope is the capability that leads to energy for strong dedication towards a goal. Bakker& Leiter (2010) further take hope as a positive support to work engagement. Instead, they consider it an essential requirement to engage in work. Lacking hope is linked with burnout as without hope will, power also fades away, reducing the capacity to accept new challenges (Sweetman & Luthans (2010).

Halbesleban et al. (2014) established that anything that helps an individual to achieve his

goals are considered to be a resource. COR theory contends that individuals pursue obtaining, retaining, and building valuable resources (Hobfoll, 1989, 2001). Hope can be an additional resource used for coping with the challenges related to goal achievement, yet, in the long run, this consumption of resources by hope positively impacts employee attitudes and behaviours by affecting future goals and resource attainment (Jordan et al., 2018). COR theory maintains that individuals work hard to obtain, retain, accumulate and increase resources. Hope is one such resource that helps enhance behaviours and attitudes supporting work engagement (Ozyilmaz et al., 2020).

Given the above discussion, we postulate that hope capability mediates the association between mental health and work engagement, as positive reframing allows employees to pursue their goals vigorously. By keeping hope alive, employees' ability to get engaged in their work gets better (Ozyilmaz et al., 2020). To summarize, we hypothesize:

Hypothesis 4

Hope mediates the link between mental health and work engagement.

Methodology

Participants and Procedures

A cross-sectional survey design was used during the outbreak of COVID 19. Responses were collected from healthcare professionals working in Pakistan's private and public sector hospitals. For data gathering, we opted the split-questionnaire technique (Farooqi et al., 2017; Ahmed et al., 2015) to relieve the burden on frontline workers. The study used a two-wave time-lagged design (Podsakoff et al., 2003) to minimize the common methods variance. A gap of one month was maintained between the collection of variables at Time 1 (T1) and Time 2 (T2). Demographics information and questions related to mental health were asked at Time 1. One month later, questions related to hope and work engagement were invited from the same respondents.

Initially, 350 respondents were provided with questionnaires. Out of these, 280 responses were received with a response rate of 80%. One month later, the collection of data from the same respondents was performed. Complete responses of 220 respondents were received, having a response rate of 79%. After comparing and compiling the data received at T1 and T2, the final sample for the study consisted of 200 questionnaires. The respondents comprised 66 (33%) males and 134 (67%) females between 20-55 years of age. Single individuals hold a share of 28%, while 69% take the place of married couples, and the residual 3% take the category of divorced/ widowed. The association with public hospitals stands at 71%, keeping the working relationship with private hospitals at 29%.

Survey and Measures

Mental Health

We employed a 4-item measure adapted by Han et al. (2020) to assess the mental health of a worker at Time 1

(1= "strongly disagree" to 5 = "strongly agree"). The scale revealed a Cronbach's alpha of 0.96. One of the sample items from the measure is "Association with this hospital makes me think that I am a valuable and important person."

Work Engagement

Schaufeli et al. (2019) scale of 3-items is used to assess work engagement at Time 2 (1= "almost never" to 5 = "very often"). One of the sample items from the measure is "At my work, I feel bursting with energy". The scale shows Cronbach's alpha of 0.73

Hope

We incorporated the 6-items scale of Synder et al. (1996) to assess health workers' hope (1= never True to and 7= Always True). A sample item is "If I should find myself in a jam, I could think of many ways to get out of it." Cronbach's alpha is 0.80.

Control Variables

Earlier research carried out by Eby et al. (2003) and Schaufeli et al. (2006) suggested that age and gender may impact employee engagement. Hence, in this study, we have controlled these variables. Age, gender, and association with a public or private setup are associated with dependent variables, i.e., work engagement. Hence, we added these variables to the control variables.

Analysis and Results

CFA-Confirmatory Factor Analysis

A series of CFA was performed using AMOS (see table 1). The measurement model comprised of three factors; mental health, hope and work engagement shows a good fit, for both sets A and B, according to CFA (χ^2/df = 3.52, RMSEA = 0.11, TLI = 0.94, CFI = 0.96, GFI= 0.92). An alternate two-factor model with a combination of mental health and hope was also conducted. The two-factor model significantly depicted poor results than three-factor model (χ^2/df = 20.26, RMSEA = 0.31, TLI = 0.52, CFI= 0.66, GFI = 0.63). The further one-factor model was also assessed by combining mental health, hope, and work engagement in one construct. The one factor model significantly revealed poor fit (χ^2/df = 25.02, RMSEA = 0.35, TLI = 0.41, CFI= 0.55, GFI = 0.56), hence justifying examining of three separate constructs.

Table 1. CFA Results

SET A					
Factor	**χ^2/df**	**GFI**	**CFI**	**TLI**	**RMSEA**
Three factors hypothesized model	3.52	0.92	0.96	0.94	0.11
Two-factor model *	20.26	0.63	0.66	0.52	0.31
One factor model **	25.02	0.56	0.55	0.41	0.35
SET B					
Three factor hypothesized model	3.52	0.92	0.96	0.94	0.11
Two factor model *	20.26	0.63	0.66	0.52	0.31
One factor model **	25.02	0.56	0.55	0.41	0.35

Note: n= 200
** Two-factor model: mental health and hope were combined*
*** One-factor model: mental health, hope, and work engagement were combined*

Finally, we checked convergent and discriminant validity. The results, as outlined in Table 2 shows composite reliability (CR) and average variance extracted (AVE) within an acceptable range, i.e., CR>0.7 and AVE>0.5, as recommended by Fornell and Larcker (1981).

Table 2. Convergent and Discriminant Validity

Set A							
	CR	AVE	MSV	ASV	HOPE	MH	WE
HOPE	0.921	0.796	0.229	0.172	0.892		
MH	0.939	0.839	0.215	0.165	0.339	0.916	
WE	0.818	0.602	0.229	0.222	0.479	0.464	0.776
Set B							
HOPE	0.921	0.796	0.229	0.172	0.892		
MH	0.939	0.839	0.215	0.165	0.339	0.916	
WE	0.818	0.602	0.229	0.222	0.479	0.464	0.776

MH – Mental Health; WE- Work engagement

Descriptive Statistics

Mean standard deviations, inter-correlations, and reliability estimates (Cronbach Alpha) among the study variables are depicted in Table 3.

Table 3. Matrix of Correlation and Descriptive Statistics

S. No	Variables	Mean	SD	1	2	3	4	5	6	7
1	MH	3.81	0.80	(0.96)						
2	Hope	4.59	1.54	0.43**	(0.80)					
3	WE	3.63	0.76	0.51**	0.47**	(0.73)				
4	Gender	1.68	0.47	0.05	0.02	0.14	1			
5	Age	2.44	0.93	-0.09	-0.08	-0.18*	0.39**	1		
6	Marital Status	1.76	0.53	-0.11	0.00	-0.06	-0.06	0.36**	1	
7	Hospital Type	1.30	0.46	-0.02	-0.01	-0.07	-0.13	-0.11	-0.55**	1

Note: n = 200, Cronbach's Alpha is on the diagonal in the parentheses;
MH-Mental health; WE-Work engagement

Hypotheses Testing

Mediation analysis was performed using PROCESS Macro by Hayes, model 4, to assess the indirect effect of mental health on work engagement through hope (i.e., Hypothesis 4).To reduce the small sample size limitation, we incorporated the 5000 re-sample bootstrapping methods (Preacher & Hayes, 2008). Table 4 displays the results of the mediation model.

Hypothesis 1 proposes that mental health in employees leads to work engagement. The postulation of hypothesis 1 is supported by results (β = 0.358, SE = 0.060, p < .01). For Hypothesis 2, we proposed that hope predicts an employee's tendency to get engage at the workplace (β = 0.148, SE = 0.031, p < .01). The results validate our hypothesis 2. In the same vein, we proposed a positive relationship between mental health and hope. As indicated in Table 4, mental health positively predicts hope (β = 0.825, SE = 0.122, p < .01). Subsequently, we examined the indirect effect of mental health on work engagement through hope (90% CI = 0.074, 0.178), providing support to our Hypothesis 4 as the upper and lower limits exclude zero.

Table 4. Regression Results for Indirect and Direct Effects

Direct Effect						
	B	SE	T	p	LLCI	ULCI
H1: MH→WE	0.358	0.060	5.942	0.00	0.258	0.457
H2: Hope→WE	0.148	0.031	4.705	0.00	0.096	0.200
H3: MH→Hope	0.825	0.122	6.735	0.00	0.622	1.027
Indirect Effect						
	Effect		Boot SE	BootLLCI	BootULCI	
H4: MH→Hope →WE	0.122		0.032	0.074	0.178	

Discussion and Implications

The current study used a mediated moderation model to assess the effect of perceived organizational support on work engagement. Our study contributes to the body of knowledge about organizational behaviour and engagement literature in various ways.

Despite a surge in a study on work engagement over the last two to three decades (Lesener et al., 2020), there is a dearth of studies on the underlying factors and mechanisms that contribute to that process (Schaufeli & Salanova, 2011). The prior research on work engagement has concentrated on the organizational characteristics of a job that contribute to work engagement, although engagement differs according to how people see their resources (de Chinelato et al., 2020). We expanded on the personal and organizational effectiveness of resources by providing empirical support for how organizational support affects workers' engagement and subjective well-being, therefore boosting their personal resources of resilience. While various organizational and personal resources have been identified as positive predictors of work engagement (Côté et al., 2021; Salanova et al., 2006; Garg et al., 2021), little is known about how and why this is the case. The present study addresses this gap by examining how having a valued personal resilience resource affects an individual's capacity to engage in their work, particularly during the COVID's current challenging circumstances.

Lastly, the current work contributes to theory by expanding knowledge of the conservation of resources theory. According to empirical data, personal resources at work aids in resource conservation for job engagement. This study identifies novel antecedents of workplace engagement, specifically in an Asian environment.

Practical Implications

The pandemic of COVID-19 has uncovered the need for a transition towards more sustainable and resilient systems. The current study offers meaningful contributions to positive psychology and its effects on organizational behaviour. The findings will provide valuable insinuations for hospital management to establish procedures that foster positive values and emotions, such as mental health and hope to upsurge work engagement. According to our knowledge, this study provides a novel empirical assessment of the relationship of personal resources in a non-Western health domain. An integrated model is proposed to investigate the intervening mechanism that assesses work engagement probability. Moreover, broadening the literature on conservation of resources theory has also made a theoretical contribution concerning an Asian context.

Limitations and Future Research

The study contains a few limitations that need consideration while interpreting results. Due to the use of self-reported measures, the study may have common method biases (Podsakoff et al., 2003). However, to reduce common method biases, we have used a time-lagged (two-wave) design with an interval of one month between T1 and T2 variables (Podsakoff et al., 2003). Further, the confidentiality of the identities was assured to respondents to dispel doubts regarding social appropriateness. Future

studies, however, can use data gathering techniques that may reduce the impact of common method biases (Abid & Butt, 2017). Secondly, we have opted for a correlational study design that cannot imply causal relationships. Impending studies may use longitudinal study design to examine the cause-and-effect relationship among study variables. Thirdly, the generalization of this study has limitations due to its conduction solely in an Asian setting. Asia's unique cultural attributes may possess different interpretations than Western settings (Ashfaq et al., 2021). Lastly, we have opted simple mediation model due to limitations of time. Yet, future studies may investigate mediated moderation or sequential mediation of job resources and organizational resources to examine the underlying mechanism that can boost engagement at the workplace.

Conclusion

The study offers a mediated model that examines the association between mental health and works engagement via hope as a mediator. Drawing on COR theory by Hobfoll (1989), this study ascertains that mental health leads to engagement at the workplace, whereas the hope of a worker serves as the connecting mechanism between mental health and engagement at the workplace. The study appends to the engagement literature by investigating the personal factors since engagement differs as per the resources people have themselves. We foresee that impending research in this field will allow administrators to comprehend how individual resources like gratitude and resilience may upsurge the capacity of engagement at the workplace.

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