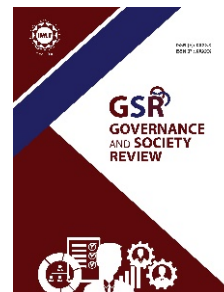


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Employee Creativity during COVID-19: Role of Psychological Capital and Employee Empowerment

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Abstract

Employee creativity remains an essential aspect of employee work engagement since the inception of COVID-19. Due to the ramifications of the impending lockdown, physical workplaces have been transformed into virtual setting. Thereby, the prevailing situation emphasizes self-initiated actions which employees must undertake by utilizing their own creativity during COVID-19 to achieve their assigned tasks. Considering the job demands and available resources, this study investigates the link between psychological capital and employee creativity with the mediation of employee empowerment. On the basis of the data collected from university staff and faculty in Lahore, Pakistan, a quantitative research approach has been employed that uses the Hayes process model for analysis to obtain the results. The results demonstrate that psychological capital positively relates to employee creativity, while employee empowerment mediates this relationship. Furthermore, this study suggests that employee empowerment would positively explain the relationship, thus making it more suitable for employees to adopt creative ways to do their work. This research further probes the organizational design work that liberates employs to use their creative behavior to give better work related performance which impacts and modifies certain aspects of their work. Thus, enabling them to perform in unprecedented challenging situations.

Keywords: COVID-19, employee creativity, employee empowerment, psychological capital, virtual settings

Introduction

COVID-19 posed unique challenges to organizations including but not limited to the achievement of organizational objectives without compromising employee performance. The need to empower employees was reinforced. While employees had to think of novel ways to do their

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jobs. The situation was much more delicate for the education sector such as universities where face-to-face teaching and learning was the predominant model. It was the creativity of employees that kept the education system keep going during the pandemic. Their positive psychological strengths played a vital role in helping them to adapt to remote teaching. Due to these strengths they were able to adjust to new working conditions and cope with the stress associated with the online mode while balancing their work life (Hascher & Waber, 2021; Lau et al., 2022). Another facet of this challenge was the exponential increase in the incessant requests for non-teaching administrative reports at any hour of the day.

Organizations must provide a conducive work environment for employees to remain engaged, resourceful, and healthy (Stansfeld & Candy, 2006). The creative behaviour of employees remains at the heart of any performance initiative. It includes generating novel solutions to the emerging problems as well as exploring unique ways to improve routine tasks. Hence, it would be valuable to know how Psychological capital (PsyCap) works through the empowerment of employees to enhance their creative behaviour.

The unique ways in which employees handle their assigned jobs and the variety in performing their jobs have always had a profound effect on organizations, managers, and employees. It not only highlighted the unique aspects of human behaviour but also influenced productivity, therefore, the examination of creative behaviour through such individual factors holds interest for both scholars and practitioners. Based on a research, to study the challenges faced by educational institutes across four countries, Khamis et al. (2021) posed that the system, processes, and day-to-day teaching and learning continued during COVID-19.

In line with the call for research on employee creativity under various settings and factors (Ahmed et al., (2020); Tang et al., (2020), this study intends to specifically understand the influence of PsyCap on employee creativity (EC) through employee empowerment (EE).

Literature Review

Employee creativity is the generation of novel and useful ideas by employees (Amabile, 1988) which is a proactive individual approach to generate and evaluate alternative ideas and solutions (Reiter-Palmon & Illies, 2004). Furthermore, scholars argued that decreasing job demands

may enable employees to use saved energy for creative purposes (Afsar et al., [2019](#); Dash & Vohra, [2020](#)).

Creativity is thinking about new ideas (Erez & Nouri, [2010](#); Leung et al., [2008](#)). Whereas, novel ideas have to be different and their implementation must result in positive outcomes for individuals and organizations (Amabile, [1988](#); Amabile & Pratt, [2016](#); Godart et al., 2015). It is an outcome of individual personal resources to improve work conditions (Al-Hawari et al., [2019](#); Tang, Chen et al., [2020](#)). Creativity played a significant role in teaching and learning during COVID-19 (Anderson et al., [2021](#)).

Psychological capital (PsyCap) helps people to focus, proactively take charge, and do the right things that have a positive influence on their work-related performance. Each individual is gifted with a different proportion of its four dimensions including self-efficacy, optimism, hope, and resilience. PsyCap enables the employees to make improvements in the given right environment and support.

Furthermore, the key role of psychological capital in studying employee behaviour has been explored in literature (Chen & Peng, [2018](#); Luthans et al., [2007](#); Luthans et al., [2013](#); Slatten et al., [2022](#)), whereas Baig et al. ([2019](#)) have urged the development of PsyCap in employees for optimal performance.

H1: PsyCap has positive and direct relationship with employee's creativity.

Scholars have investigated the role of PsyCap as a mediator in recent studies (Kim, [2018](#); Li et al., [2015](#); Tan et al., [2021](#)). In his comprehensive review of PsyCap, Nolzen ([2018](#)) called for the study of PsyCap as a predictor to positive outcomes.

H2: PsyCap has positive and direct relationship with employee's empowerment.

When employees at all levels are given authority to make day to day job related decisions (Bowen & Lawler, [2006](#)), it influences work attitude and enhances individuals performance (Bordin et al., [2007](#); Kirkman & Rosen, [1999](#); Seibert et al., [2004](#)). Delegation of authority increases employee's self-efficacy which they can control and use to perform assigned tasks.

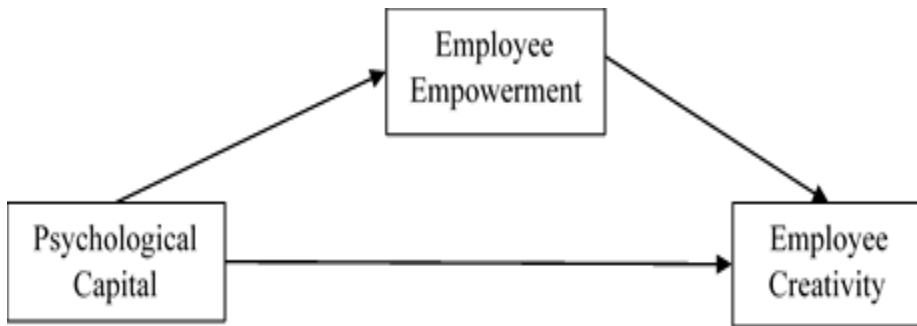
Therefore, EE plays a significant role in individual and organizational performance (Hartline & Ferrell, 1996; Seibert et al., 2004).

Neves et al. (2021), while exploring the organizational boundary conditions argued that empowerment is a vital factor that predicts employee behavioural intentions, while support and psychological capital play a pivotal role in introducing behaviours that encourage employees to practice new ideas. In this regard, the influence of psychological capital is very interesting because it boosts personal strengths, giving ownership to the employee for their actions.

H3: Employee empowerment mediates the relation between PsyCap and employee creativity.

Figure 1

Hypothesized Model



Job resources and job demands are among vital aspects of job characteristics (Schaufeli & Bakker, 2004). The JD-R model (Demerouti et al., 2001) argued that particular job demands adversely affect health and energy whereas certain job resources are specific to work performance. Based on JD-R model, employees may self-initiate expand their job resources and shrink hindering job demands (Bakker & Demerouti, 2017). This may be particularly true when studied in the stressed situation of COVID-19. Faculty had to deliver course content as well as complete administrative duties in the e-learning conditions. This study argues that employees' creativity may increase if employees proactively decrease hindering job demands. Under the tenets of Conservation of Resources theory (COR), it is also argued that by decreasing hindering job demands employees try to save resources that may ultimately help them to perform better.

Research Methodology

This study investigated the factors influencing employee creativity. The research was conducted in the universities in Pakistan because faculty and staff was engaged in creative behaviour to perform their duties in online learning mode during COVID-19. A deductive approach is adopted under the positivism paradigm. Quantitative analysis will be conducted to test the hypotheses for this empirical research project.

Sample, Size, and Data collection

The target population was the staff and faculty members working in various private universities in Pakistan. The purposive sampling technique was adopted because the study was specific to university employees. Self-administered survey questionnaires were used to collect data through the online tool as well as in person to overcome accessibility issues during COVID-19. Cross-sectional data was collected and as a result, there were 426 complete and usable responses for subsequent analysis. There was no problem with the language of the questionnaire because university employees were well-versed in the English language. Respondents belonged to various age groups, education levels, and experiences.

Sample

Of the 426 respondents, 162 (38.0%) were male and 264 (62.0%) were females. According to descriptive results, 292 (68.5%) of the respondents were in 21-30 years age group, 70 (16.4%) of the respondents were in the 31-40 years age group, and only 64 (15.0%) respondents were more than 50 years of age. Most of the respondents (40.6%) had between 6-10 years of job experience while 31.9% had between 11-15 years of job experience. Around half of them (49.5%) were MS/MPhil degree holders while 23 % were Ph.D. holders.

Measures

The scales used for measures in this study were from several sources. Cronbach's Alpha was greater than .70 for all constructs.

Psychological Capital Questionnaire

PCQ-24 base scale was developed by Luthans (2002) and Luthans et al. (2004), however, this study uses the reduced version PCQ-12 (Avey et al.,

2011). PCQ-12 has twelve items measured on a six-point Likert scale (1 = *Strongly Disagree* to 6 = *Strongly Agree*).

Employee Empowerment Questionnaire

Employee empowerment (EE) was measured with Employee Empowerment Questionnaire (EEQ) (Hayes, 1994; Hayes, 2014) with eight items. An example item is “I am allowed to do almost anything to do a high-quality job”. The items were evaluated on five points Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*).

Employee Creativity Scale

Employee creativity (EC) scale consisted of 13 items adopted from Zhou and George (2001). Example item include “I am good at proposing creative ideas”. The items were evaluated on five points Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*).

Control Variables

Age, gender, education level, and work experience were used as control variables.

Statistical Analysis and Hypothesis Testing

This study used SPSS 21 and Hayes Process Macro 3.5, model 4 to test the proposed hypotheses. After conducting the analysis of the missing values and replacing the acceptable level of missing values, there were 426 valid entries for the further analysis. Higher correlation among independent variables may cause multi-collinearity in the model. Higher multi-collinearity may affect the statistical significance of that variable (Allen, 1997). The threshold value of the variation inflation factor (VIF) should be less than 4 and tolerance value should be greater than 0.10. However, in this model multi-collinearity is not an issue because the values were within acceptable range (Table 2).

Table 2

Variation Inflation Factor (VIF)

	Tolerance	VIF
Psychological Capital (PsyCap)	.32	3.13
Employee Empowerment (EE)	.32	3.13

Common Method Bias

During data collection respondent's bias may come into play when a survey questionnaire is filled by the respondents for independent and dependent variables at the same time may result in Common Method Bias (CMB) (Podsakoff et al., 2003). Harman's single-factor test was applied to extract a single factor from all the variables. The single-factor result explained 49% variation, which is within the acceptable limit of 50%. The results showed that there was no serious concern for the CMB model.

The coefficient of determination or R-square (0.79) is given in Table 3. It is the variation in dependent variable that is explained in the model. The threshold values range less 0.5 are weak effect size, while 0.5-0.7 as moderate effect size, and R-square greater than 0.7 is considered as strong effect size which shows that variation in dependent variable in this model is explained with strong effect size.

Table 3

R-square

R^2 Statistic	F	Significance
0.79	708.80	0.000

Table 4 provides the means, standard deviations, and correlation matrix of variables used in the current study. The Cronbach alpha ranged from 0.89-0.94 gave the reliability of all the items relevant to the study (Nunnally, 2010). Average variance extracted (AVE) and factor loadings were examined to determine convergent validity. The factor loadings for all items on respective variables were within the threshold value of 0.50 (Kline, 2011).

Table 4

Correlation Matrix

	Mean	SD	AVE	1	2	3	α
Psychological Capital	3.33	0.85	0.52	1			0.92
Employee Empowerment	3.62	0.82	0.52	.83**	1		0.89
Employee Creativity	3.57	0.82	0.55	.83**	.86**	1	0.94

Note. ** $p < 0.01$.

This study establishes that PsyCap has significant positive relationship with EC (0.36, 95CI:0.29-0.44). PsyCap has a significant positive relationship with EE (0.79, 95CI: 0.75-0.85). Furthermore, the mediation of EE in the relationship of PsyCap and EC was also significant (0.044, 95CI: 0.35-0.54). Therefore, all the three hypotheses were accepted and the results also showed that there is partial mediation effect in this model as indicated in Table 5.

Table 5
Partial Mediation Effect

Independent Variables	Direct effects		Indirect effect
	EE (95% CI)	EC (95% CI)	EC (95% CI)
PsyCap	0.79 (0.75-0.85)	0.36 (0.29-0.44)	--
PsyCap	--	--	0.44 (0.35-0.54)

Note. Percentile bootstrap CI based on 10000 bootstrap samples. Significance is proved by ULCI and LLCI values

Discussion

To address the research gap on the role of PsyCap on employee creativity during COVID-19, a theoretical model was proposed which also tested the mediation of employee empowerment in relation of PsyCap on EC (Cai et al., 2019). The results showed that PsyCap has direct, positive, and significant influence on EE and EC. Mediation of EE between PsyCap and EC was also significant. In line with previous studies, PsyCap has a significant effect on both EC and EE (Tang, Chen et al., 2020).

Theoretical and Managerial Implications

It is impossible to expect employees to perform their jobs in complicated and stressful situations such as COVID-19 without utilizing their human capacity to be creative. It is up to the organizations to provide them with the right tools and environment that fosters their psychological capital in order to be able to come up with new ideas for completing their tasks in challenging situations.

The current study adds to positive organizational scholarship by studying the interrelationships among variables from different perspectives.

The creativity of employees is supported in the JD-R model through the results of this study while advancing the research on psychological capital.

This study forwards some recommendations for organizations to encourage employees' specific aspects of positive organizational behaviours. Creativity remains a key factor to perform in the challenging situations. Encouraging employees to reduce or eliminate the hindering aspects of work or in other terms adjusting resources at their disposal may be the key to creative behaviour. Moreover, empowering employees in their work has positive psychological results while giving them opportunities to modify work for better performance.

Limitations and Future Research Directions

Even though this study has highlighted theoretical and practical implications but there remain a few limitations that might be addressed in future studies. The data was collected from one particular setting during the adverse pandemic situation and was somewhat limited which may reduce the generalizability of the findings. The current study used cross-sectional design. It would be interesting to investigate, what influences PsyCap may have on the creativity of employees in other industries. Therefore, future studies may benefit from the data collected from other sources as well as adopting a longitudinal design.

Conclusion

The current study revealed that the positive strengths were instrumental in providing adequate individual resources to employees to adjust to new realities of work life. To remain focused on teaching and learning through too many hurdles such as online administrative meetings, large number of emails, technical problems, and balance competing priorities required unconventional solutions. Safeguarding psychological capital and nurturing employee engagement ensured that the employees can find ways to overcome challenges so that their performance remained uncompromised (Wegman et al., 2018).

This study is in line with the research which support PsyCap as predictor of positive behaviour (Tims et al., [2012](#); Tian et al., [2021](#); Uen et al., [2021](#)) such as the balance created by employees in their job demands and resources through personal strengths and requirements (Fong et al., [2021](#)). Like other countries, university employees in Pakistan came up with many practical, productive, and creative solutions as a counter to the pandemic

(Johnson et al., 2021). Hence, the results demonstrated that enhancing the productive relationship to their work may result in positive organizational behaviours where the novel ways of completing work would also increase if employees are encouraged to take self-initiatives in such situations. This is particularly evident with employee initiatives to find new and creative ways to do their jobs in complex unprecedented conditions.

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