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Predictive role of psychological capital and perceived organizational support on innovative work behavior among higher education teachers of Pakistan

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Abstract: The current study aimed to determine the predictive role of Psychological Capital (PsyCap) and Perceived Organizational Support (POS) on Innovative Work Behavior (IWB) among higher education teachers of Pakistan. A sample of 200 higher education teachers was recruited from various private and public sector institutes across Pakistan. The analysis revealed significant relationship between psychological capital and innovative work behavior ($r = .700$); and; perceived organizational support and innovative work behavior ($r = .305$). Also, psychological capital and perceived organizational support were found to be strong predictors of innovative work behavior ($R = .700$). In conclusion, when teachers

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possess psychological capital as their personal resource and perceived organizational support as social resource at workplace; they are more likely to demonstrate innovation into their work behavior.

Keywords: Psychological capital; perceived organizational support; innovative work behavior; higher education teachers.

I. Introduction

Positive Psychology emerged in the field of psychology as an exclusive approach towards human wellbeing and enhancement in quality of life by emphasizing on positive subjective experiences and traits, self-potential, growth and development of individuals (Seligman and Csikszentmihalyi 2000). The approach of positive psychology was introduced into the organizational world with concept of applying the human positive traits, potentials and strengths at workplace for improving the employee’s performance and organization’s effectiveness (Luthens and Youseff 2004, 14-15). Psychological Capital (PsyCap) as a core construct of positive psychology in an organizational world has now enabled the researchers and practitioners to imply the importance of self-growth and progressive organizational behavior. It integrates the four HERO resources namely Hope, (Self)-Efficacy, Resilience and Optimism to support the goals pursuing attitude and predictability of success (Luthans & Youseff, 2017, 343). Psychological Capital (PsyCap) works under an integrated resource model where the psychological stability and desired outcome are more likely to be influenced by a broad focus on the overall resources rather than any one significant resource, which serves as a key operator during the challenging times and assists in human wellbeing promotion (Hoofball 2002, 311). According to the Broaden-and-Build Theory, the experience of positive emotional state is an outcome of developed psychological state which ultimately results in individual’s socio emotional growth, enhanced functioning and thought-action repertoires (Fredrickson 2001, 219-220). The generated positive mood through psychological capital facilitates the self-regulation and goal-oriented behavior by broadening consideration, attention and cognition processes suggested that through the experience of positivity, the individuals are able to transform themselves by becoming more focused, explorative, resilient, socially organized and integrated in their lives. When individuals constantly put emphasis on the positivity of experiences, the array of consciousness reaches to the extent that they become more attentive, flexible and creative in coping with the life circumstances (Aspinwall 1998, 6-8; Fredrikson 2004).
Along with the personal positive resource, a supportive social environment is prerequisite to acknowledge employees as valuable and trustable resource for boosting their performances and achieving favorable outcomes at workplace. Perceived Organizational Support (POS) allows the employees to perceive their importance, worth and value in the organization where their contribution, care and wellbeing are considered as the top priorities by the employers (Eisenberger et al. 2016). It revolves around the social exchange ideology as the employees are expected to assist the organization in its goal attainment process for receiving an exchange social outcome/benefits in the form of rewards, appraisals, organizational membership and status (Eisenberger et al. 1986, 503-504). Social Exchange Theory anticipates that in reply to the positive instigating action a more favorable reciprocating response is likely to be generated by the targeted individual. A chain of effective reciprocal exchanges tends to convert an economic exchange relationship into a sufficient social exchange relationship; employees seem to develop affective commitment with organizations (Cropanzano et al. 2017, 480). Individuals’ self-interest and motivation are flourished in social settings where rewards are greater than the costs, ultimately leading towards satisfaction and commitment in a social relationship (Kim 2016, 3-4).

The psychological stability and a strong sense of social support appears to play crucial role for service providing profession where direct dealing and managing simultaneous duties are the essential requirements of a job.) The teachers of higher educational institutions possess a general aim of making progress in thinking and acting pattern of their students and influencing their approach in a field of study and practice; the common goal is to enrich students’ career development in their respective fields (Dall’Alba 1994, 301). As the teaching profession carries a significant expectation to educate and empower the next generation; so these two factors tend to become the utmost necessity in the educational sector.

Innovative Work Behavior (IWB) enables the personnel to explore various opportunities, generate unique ideas and implement those in work process for bringing progressive change at individual and organizational level (De Jong 2008, 5). The central focus of innovation is on the result-oriented behavior demonstrated by the employee through a multistage process; cognitive ability to recognize the problem and generate ideas, to establish coalition for bringing them to reality, and then implementing them by improving the current strategies or evolving the new ones into the work system for benefiting individual and organizational development (Scott and Bruce 1994, 581-582). As suggested by J-D-R model, work innovation tends to depend on a controlled balance between job demands and resources;
imbalanced job demands could lead towards burnout which seems to act as an inhibitor for wellbeing and innovation, whereas balanced job resources could lead towards employee engagement which serves as a booster for the wellbeing and innovation among employees (Huhtala and Parzefall 2007, 302-303).

In a developing country like Pakistan, work innovation significantly in seems to be required for nurturing the youth and the progress of the country, however, the university teachers would only be able to deliver positive outcome with adequate satisfaction of their psycho-social needs. Work stress was reported to be caused by several factors among the academic personnel in Pakistan including; excessive workload, insecure job, insufficient training, limited resources and extreme job demand (Khan et al. 2014, 28-29). When teachers implement innovation in their teaching methods, they are more likely to address the diverse need of students and increase their performance by engaging majority of students. The study indicated that student-focused approach of teaching seem to be potentially beneficial in comparison to the subject-focused approach for shaping the future of students (Naz and Murad 2017, 5-7). In the last few decades, with rapid technological developments, the creativity has become crucial for the organizations’ effective functioning and progressive competition in the market. Predominantly, it is observed to be more essential in the higher educational institutes of the country. The creativity of university faculty was found to be effected by authentic leadership in academia where the Head of Departments with their trustworthy behavior encourages the faculty in dealings with work, fosters the view of faculty regarding the ethics, authenticity and provision for open communication with their leaders. They seem to be intrinsically motivated, secured, relaxed and thus show work performance in a more proficient and creative way. This behavior of leaders is further likely to satisfy the faculty leading towards their positive mood at work. Consequently, as the results suggests both the intrinsic motivation and positive mood have an impact on the creativity of faculty at workplace (Ahmad, Zafar and Shahzad 2015, 14-15).

In order to bring productive advantage in educational sector, the Higher Education Commission (HEC) of Pakistan is focused towards the progressive change in the areas of teaching and research in the Higher Educational Institutions. The policy handbook formulation by Higher Education Commission of Pakistan in 2017 highlighted the major role of universities in bringing research and innovation to the market, it was decided to promote and flourish the innovation process in order to enhance the organizational competitiveness and support the economic development in the country.
Considering the prominent role of these two factors on work innovation of university teachers, the study aimed:

a. To determine the relationship between Psychological Capital, Perceived Organizational Support and Innovative Work Behavior among higher education teachers of Pakistan.

b. To evaluate the predictive role of Psychological Capital and Perceived Organizational Support on Innovative Work Behavior among higher education teachers of Pakistan.

II. Literature review

II.1. Psychological Capital

The concept of Psychological Capital (PsyCap) is drawn from an umbrella term, “positive psychological behavior” which allows the examination and application of an individual’s positive state-characteristics such as strengths and psychological capabilities for performance management and development at workplace (Luthens 2002, 698).

Several empirical investigations have been conducted by scholars on the concept of PsyCap since its introduction into the organizational system. An individual’s emotional state, wellbeing and attitude tend to be associated with PsyCap; positive emotions seemed to have significant positive relationship with PsyCap however, employees’ wellbeing at workplace served as moderator in an association between PsyCap and turnover intention. PsyCap is likely to enhance the work satisfaction and lead towards an increased overall wellbeing of employees at workplace. The overall wellbeing and psychological stability than further uplift the employees to pursue the challenging paths and accomplish the set goals. (Luthans et al. 2013, 128; Siu et al. 2015, 2-3). PsyCap is considered to be one of the main determinants for bringing innovation at workplace as those employees who possess positive attitude and are confident in their capabilities are more likely to involve in work-related innovative behavior for the organizational development (Ratnaningsih, Prihatsanti and Prasetyo 2016, 87).

In teaching profession, teachers usually get stressed, anxious and burnt out under pressurized work challenges, but PsyCap is proven to be the vital factor in decreasing their stress, anxiety and burn out; moreover, helps in elevating work satisfaction and involvement during difficulties (Demir 2018, 145). Those teachers with higher level of PsyCap are more likely to be committed towards their work. Increased level of PsyCap was associated
with decreased level of stress and increased level of wellbeing among teachers where job demands were reported to be perceived as challenges handled with effective coping strategies; and teachers are more committed towards their organization due to the positive influence of psychological capital (Soykan, Gardner and Edwards 2019, 5-6; Yalcin 2016, 79). For university teachers, the PsyCap serves as the key factor in reducing the negative influence of burnout by paving a way to tackle the stressful circumstances and perform well (Rehman et al. 2017, 463). Psychological Capital as personal resource is likely to mediate the link between job demands and outcomes, and to support the performance and inhibit the stress process among the university teachers in Pakistan (Adil and Kamal 2019, 15). The role of PsyCap on innovation at individual employee level was examined; it was concluded that PsyCap helps in psychological empowerment of employees and has a positive impact on the Individual Innovative Behavior of employees in higher educational sector (Mutonyi 2021).

II.2. Perceived Organizational Support

Perceived Organizational Support (POS) relies on the perceptive of norm of reciprocity which demands that as part of universal value system, people are obliged to favor others in return and not to hurt them in response of their favors (Gouldner 1960, 171). This means that it seems a social responsibility of people to reciprocate the favors of others in the most meaningful and effective way.

The perception of supportive work environment is considered as a key factor for the physical and psychological wellbeing of the personnel. The employees are more likely to experience positive emotions at workplace in response of POS which in turn has a positive impact on their physical health; the more levels of POS and organizational justice is likely to be associated with reduced risk factors of developing cardiovascular diseases among the workers (Arnold and Dupré 2012, 147; Rineer et al. 2017, 9). An establishment of positive work commitment is an outcome of favorable organizational culture, where employees’ ties with their leaders are strengthened and they are motivated to show innovative behavior with constant perceived organizational support (Nazir et al. 2018, 11). The innovative work capability depends on the transformational leadership, perceived organizational support and knowledge sharing attitude at workplace (Le and Lei 2019, 15). Perceived Organizational Support is a strong predictor of recognition and implementation of new work ideas as significantly correlated with IWB, where boosted person-organization fit facilitates the relationship (Afsar and Badir 2017,
The higher the POS, the higher will be the IWB, supportive work environment will raise the predictability of knowledge sharing behavior which increases the IWB among the employees (Mustika, Rahardjo and Prasetya 2020, 63).

Previous studies found out the positive outcomes of POS among teachers indicating: lesser possibility of developing burnout; reduced work-related stress and enhanced emotional wellbeing; increased job and then life satisfaction; have significant positive association with self-efficacy which further, assists to overcome occupational challenges in order to boost their work engagement (Anomneze et al. 2016, 18; Bernartio et al. 2020, 5500; Malik and Noreen 2015, 871; Musenze et al. 2020, 17). A conductive work climate with sufficient support from supervisors and co-workers seems to empower individuals in their jobs and enhance the organizational commitment of academicians in higher educational institutions of Pakistan (Ahmad, Bilal and Bibi 2020, 229). Empirical data on the higher education academician has revealed that POS enhances the job satisfaction and exploration to accomplish the set goals of university teachers (Thevanes and Saranraj 2018, 5).

II.3. Innovative Work Behavior

Work Innovation which allows continuous growth in an organization with the generation and implementation of unique ideas, has remained an investigative concept for researchers because of its multiple benefits. Creativity and innovation appear as corresponding constructs where creativity refers to the emergence of different and beneficial ideas by employees for organizational welfare, while innovation as a comprehensive concept allows the careful integration and transfer of these ideas into advantageous outcomes for bringing positive change at individual and organizational level. This innovative process seems to be flourished through a pattern of interaction between personnel, organizational internal climate and external environment. Innovation effectively occurs in a work setting with both emergence of individuals’ creative efforts and organizational boosters. (Bharadwaj and Menon 2000, 425; Martins and Terblanche 2003, 67).

The empirical demonstration stated the Innovative Work Behavior (IWB) as an effective resource for employees to deal with the higher level of job demands by controlling their effort-rewards interaction at work. In an organizational setting, employees’ decision for IWB depends on their commitment to bring novelty, autonomy in designing and controlling work performance (Janssen 2000, 297; Ramamoorthy et al. 2005). The present perspective on innovative behavior at individual level stated that the self-
efficacy, competency, motivation and commitment are main influencers for bringing occupational novelty (Siregar et al. 2019, 324-325). The results of a study revealed that how the personal values of employees influence their innovative behavior, those who prioritized the conservative values were more resilient to change and less likely to innovate at work whereas those who prioritized the self-enhancement values were more willing to expand learning and accept change which enhanced their innovative behavior at work (Purc and Lagun 2019, 28).

Prior investigation on teachers of higher educational institutions of Pakistan showed that personality characteristics of an individual are related to their attempt of demonstrating job-related innovation; openness to change allows exploration of new ideas and opportunities, and extraversion lead towards being more energetic and enthusiastic for novelty at workplace (Qaiser et al. 2019, 82). The organizations that promotes creativity and healthy learning environment for teachers result in enhancing their work engagement and Innovative Work Behavior (Hosseini and Shirazi 2021, 13). An interesting investigation on university faculty revealed that the individual capacity for knowledge absorption positively predict the individual knowledge acquisition and individual innovative behavior, making the faculty members more knowledgeable and innovative in academic world (Fakhrorazi, Hartini and Islam 2019, 235).

There is unfortunately lack of innovative working strategies used by higher education teachers of Pakistan where they still seemed to practice the traditional methods of teaching without implementing any innovative tools into the learning process of students (Zaman 2012). An analysis suggested that though the innovation system in Pakistan has evolved over time but it has a long way to go, there is still need to formulate and implement a diversified policy structure in country which supports the effective innovation process in both public and private sectors (Ul-Haq et al. 2014, 134). Therefore, this study aimed to discover the concerned determinants, their relation and impact on Innovative Work Behavior, support the HEC decision and its future implications mainly in Pakistani society.

The current study revolves around the concept that PsyCap and POS are associated as determinants of IWB. When an employee experiences psychological stability with sense of hope, efficacy, resilience and optimism; perceives the supportive environment in organization where he/she is being encouraged and treated fairly (all of these combined determine the perception of IWB) then he/she would be able to explore opportunities through various perspectives, develops new strategies and implement them in work process for profitable result-orientation. Hence, the positivity from psychological
stability and perception of supportive work environment would influence the employees’ work as innovative and solution-oriented. (See fig. 1).

In the light of abovementioned literature, following hypotheses have been proposed:

a. Psychological Capital and Perceived Organizational Support will have relationship with Innovative Work Behavior among higher education teachers of Pakistan.

b. Psychological Capital and Perceived Organizational Support will have an impact on Innovative Work Behavior among higher education teachers of Pakistan.

III. Methodology

III.1. Research design

A research design is a comprehensive and strategic framework that guides the researcher to explore the objectives, answers the research questions, collect and analyze the data with respect to the main purpose of the study (Durrheim 2006, 34). There are several ways of conducting a study such as a quantitative research can be conducted in descriptive, experimental and causal comparative ways. The variety of research designs mainly include correlational, observational, survey method, case study and ethnography study.
This is a descriptive research wherein quantitative approach has been used to examine the influence of psychological capital and perceived organizational support on innovative work behavior. In quantitative approach, survey method has been applied in the current research which facilitated the evaluation of the concerned variable by collecting responses from representative sample of targeted population through questionnaires.

III.2. Sample

The sample of the study was 200 faculty teaching in universities from private and public sector in Pakistan with 95% confidence level and +5% error of margin. Non-probability, convenient sampling method was used for recruitment of participants in the study.

Following the results based on demographics, equal responses were collected from male and female participants with age ranged from 25 to above 50 years, however, more responses belonged to faculty from private sector as compared to the public sector. According to the demographic data, the male participants were 100 (50%) and female were also 100 (50%). As the age groups of participants ranged from 25 to above 50 years; 50 (25%) belonged to the age group of 25-30 years, 51 (25.5%) were of 30-35 years, 39 (19.5%) were of 36-40 years, 31 (15.5%) were of 41-45 years, 15 (7.5%) were of 46-50 years and 14 (7%) were aged above 50 years.

Among them, the marital status of 53 (26.5%) was single, 146 (73%) were married and only 1 (0.5%) was divorced. The family structure of 108 (54%) was nuclear and 92 (46%) belonged to the joint family structure. Qualification status showed that 102 (51%) were holders of Masters’ (post-graduation) degree while 98 (49%) were holders of Doctoral (PhD) degree. Out of 200 participants, 91 (45.5%) were teaching faculty in public sector whereas, 109 (54.5%) were providing their services in the private sector of Pakistan. Majority of participants i.e. 174 (87%) were working as permanent faculty while only 26 (13%) were working as the visiting faculty in their respective universities.

III.3. Instruments

Along with demographic form, three questionnaires were also administered on the participants.

III.3.1. Demographic Form

It was comprised of questions like gender, age, marital status, socioeconomic class, family structure, qualification, job sector and working time.
III.3.2. Psychological Capital Questionnaire

The Psychological Capital Questionnaire (Luthans et al. 2007) was originally a 24-item measure which was modified into a shorter 12-item version in 2011 to determine the level of positive psychological development by assessing the four respective HERO resources. Hope is measured by 4 items, Efficacy is examined by 3 items, Resilience is evaluated by 3 items and Optimism is determined by 2 items. Responses are recorded on a 6-point Likert scale where 1 = Strongly Disagree and 6 = Strongly Agree. The overall PsyCap score is obtained by taking average score of all items. The Cronbach Alpha value for the scale was .886.

III.3.3. Survey of Perceived Organizational Support

Survey of Perceived Organizational Support (SPOS; Eisenberger et al. 1986) was originally proposed with objective to evaluate the employees’ perception about social support at workplace. This study used the 8-items scale (Eisenberger et al. 2002) which is a shorter version of 36-items scale and was recommended by authors as it is unidimensional and highly consistent, the responses will be given on 7-point scale which ranged from “Strongly Disagree” (0) to “Strongly Agree” (6). The minimum score could be 0 and maximum could be 48. The higher the score, the higher will be the POS experienced by an individual. The Cronbach Alpha value for the scale was .724.

III.3.4. Individual innovative behavior scale

This is a 14-item self-report measure developed by Kleysen and Street in 2001 for evaluating individual’s perception about innovation on five respective factors including; opportunity exploration, generativity, formative analysis, championing and application. Participants will be required to answer according to the behavioral frequency using a 6-point Likert Scale where 1 = Never and 6 = Always. The minimum score could be 14 and maximum could be 84. The higher the score, the higher will be the innovative behavior experienced by an individual. The Cronbach Alpha value for the scale was .935.

III.4. Ethical considerations

The current study considered the following ethical guidelines to ensure that the participants’ ethical norms are maintained in the study:
• Informed consent from the participants was taken by making them understand their right to either participate or not in the study. They also had the right to withdraw at any time during the study.

• The participants were notified that no harm and risks would be associated with their participation in the study. Moreover, the participants were also informed about the researcher’s right to publish the study in any research journal without disclosing their identity.

• The main objective and purpose of the study was briefly communicated to them and they were assured about the non-disclosure of their identity or personal information. The gathered data of participants was kept confidential throughout the study and used only for the research purpose.

• The teachers were given sufficient time duration to fill the questionnaires as per their availability, convenience and feasibility.

• Researcher’s email address was also provided in order to communicate for their any concern or query related to the study.

III.5. Procedure

At the beginning of the study, permission was taken from the authors of respective scales through email enlightening the purpose of research and assurance of ethical principles while using the scales. The online method was opted for the data collection by posting the online link via Google forms on various social media apps including Facebook and WhatsApp in order to reach the target population. The respective faculties of various universities in Pakistan were also approached by personally emailing them with the help of their email addresses available on official universities’ websites, and requesting them to participate in the study. The online form was consisted of four sections in which the informed consent appeared at first following the demographic information form, PCQ-12, SPOS-8 and IIBS. The average duration to complete the survey was 8-10 minutes and collected data was further progressed for the analysis.

III.6. Analysis

The collected responses were organized on Statistical Package for Social Scientists (SPSS 20) in order to carry out the respective analysis.
Demographic data was statistically analyzed through descriptive statistics. Correlation Analysis was carried out on the data to explore the relationship between variables. Moreover, Regression Analysis was undertaken on the gathered data to examine the impact of independent variables on dependent variable.

IV. Results

According to the correlational analysis for hypothesis 1, Psychological Capital has a significant positive correlation $p \leq .000$ (less than .05) with Innovative Work Behavior ($r = .700$) of university teachers in Pakistan. Moreover, it was depicted that Perceived Organizational Support also has a significant positive relationship $p \leq .000$ (less than .05) with Innovative Work Behavior ($r = .305$) among university teachers of Pakistan. (As shown in Table 1)

<table>
<thead>
<tr>
<th>Psychological Capital</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.700**</td>
<td>.000</td>
<td>200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perceived Organizational Support</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.305**</td>
<td>.000</td>
<td>200</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

In order to test the hypothesis 2, result of linear regression revealed that Psychological Capital and Perceived Organizational Support are significant predictors of Innovative Work Behavior in university teachers. The significant equation shows, $p \leq .000$ (less than .05) indicating determinants as good predictors of dependent variable. The $R$ value is .700, which elaborates a strong relationship between independent and dependent variables. The value of $R^2$ points out that how much dependent variable i.e. Innovative Work Behavior can be explained by the independent variables i.e. Psychological Capital and Perceived Organizational Support. In this case, it is .489 (48%) which means good. (Tables 2-4)
Table 2
Summary of Linear Regression with Psychological Capital and Perceived Organizational Support as predictors on Innovative Work Behavior of Higher Education Teachers of Pakistan

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.700a</td>
<td>.489</td>
<td>.484</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Psychological Capital and Perceived Organizational Support.

Table 3
Analysis of Variance for Linear Regression with Psychological Capital and Perceived Organizational Support as predictors on Innovative Work Behavior of Higher Education Teachers of Pakistan

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>f</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>9680.992</td>
<td>2</td>
<td>4840.496</td>
<td>94.222</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>10120.528</td>
<td>197</td>
<td>51.373</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19801.520</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Predictors: (Constant), Psychological Capital and Perceived Organizational Support.

Table 4
Coefficients for Linear Regression with Psychological Capital and Perceived Organizational Support as predictors on Innovative Work Behavior of Higher Education Teachers of Pakistan

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>19.165</td>
<td>3.498</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Psychological Capital</td>
<td>.777</td>
<td>.063</td>
<td>.658</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>.115</td>
<td>.055</td>
<td>.112</td>
<td>.037</td>
</tr>
</tbody>
</table>

V. Discussion

The aim of this study was to explore the predictive role of Psychological Capital as a personal resource and Perceived Organizational Support as a social resource in cultivating the Innovative Work Behavior of higher education (university) teachers in Pakistan.

The findings for testing hypothesis 1 indicate significant positive correlations between Psychological Capital and Innovative Work Behavior; and Perceived Organizational Support and Innovative Work Behavior. Through correlation analysis, it was revealed that indeed significant correlation is present between the concerned variables. The significance for Psychological Capital and Innovative Work Behavior is determined through the following values: \( \text{sig} = .000 \), \( r = .700 \), \( n = 200 \) (See Table 1).

The result suggests a significant strong correlation between the two variables which means that among the fraction of sample that responded were likely to report a boosted Innovative Work Behavior with an increased psychological capital. HERO (Hope, Efficacy, Resilience and Optimism) resources of PsyCap though individually generate positivity but as a whole construct is worthwhile of producing greater outcomes. Empirical researches conducted on each individual resource of PsyCap support the link with Innovative Work Behavior of employees. Hope seems to nurture the IWB through work and organizational engagement, knowledge sharing behavior enabling the employees to become hopeful for bringing pioneering change in organization. Self-Efficacy promotes confidence in one’s capabilities and influences the IWB of employees. Resilient employees are more likely to demonstrate IWB by adapting changes in career and availing various opportunities. Optimism was found to be one of the significant determinants of IWB as it allows to expect positive outcomes and direct energy on goals attainment (Fatima and Khan 2017, 202; Hsiao et al. 2011, 34; Abukhait, Melhem and Shamsudin 2020; Okeke 2019, 5).

This indicates that each resource of PsyCap contributes effectively for the Innovative Work Behavior. The collaboration of all four dimension of PsyCap enables the psychological stability which is associated with the creation and implementation of novel ideas (IWB) (Wojtczuk-Turek 2012, 83-84). This shows that with an enhanced PsyCap, employees become psychologically stable for considering and applying new solution-oriented ways in work so, the IWB also increases among them. When they are involved in IWB they are more likely to view and report their work as innovative. It can be further elaborated by exploring the aspects promotion approach which stems from Higgins self-regulatory theory and its connection with the current finding.
Individuals have two basic regulatory systems; Prevention and Promotion which influence motivation and goals pursuing behavior (Higgins 1998, 27). The finding of analysis focuses on the latter highlighting that Promotion-Focused Approach allows the individuals to use their exclusive characteristics and generate many diverse alternatives when possible because the mind is focused on the goals achievement and continuous growth. Employees with PsyCap uses its all dimensions to become psychologically stable, focus on the promotion regulatory system with balanced mindset to avail opportunities, and are motivated to show innovative performance for beneficial change and growth. The university faculty was found to be potentially strong and solution-oriented (IWB) when they were more likely to experience effective PsyCap (Supriyadi et al. 2020, 390).

Furthermore, the correlational analysis indicated a significant but weak relationship between the concerned variables. The significance for relationship between Perceived Organizational Support and Innovative Work Behavior can be determined from the following values: sig=.000, r=.305, n=200 (See Table 1).

These findings show that POS is one of the main factors in stimulating the employees with novel ideas to bring beneficial change at individual and at organizational levels. Employees who perceive that adequate support exists in their organizations, they seem motivated and enthusiastic to gain coalition and deliver their unique opinions in front of others for solution-oriented implementation. Perceived organizational support nurtures the feeling of obligation for university teachers to work for the welfare of their students and institute, due to the mutual trust and respect they ultimately become more committed towards their organizations (Lew 2009, 12). It made easier to suggest that when individuals’ (university teachers; in case of current study) socio-emotional needs are fulfilled through caring and fair treatment at the organization, they tend wholeheartedly trust their organization and put their immense efforts for successful goals attainment. Moreover, they tend to view and report themselves as being innovative when they are more likely to involve in bringing constructive modification through implementing their solution-oriented novel ideas. The employees would be focused in consideration of pioneering strategies and encouraged to take new challenges with for growth and welfare at personal and organizational level. POS was found to be as significant booster for enhancing performance and bringing positive change through IWB of employees at the organization (Susilo 2019, 103-104).

However, the weak relationship amongst the two variables in this study can be supported by the previous findings suggesting that supportive
environment may not fully permit all the employees to take risky challenges and voluntarily participation for being innovative, risk-taking tendency of individuals allows to establish networks when POS is insufficient at workplace. They appeared more prone towards attempting the routinely tasks in supportive environment instead of instead of proposing newness intentionally; which means that employees with proactive personality and when psychologically empowered are more strongly related to IWB than the POS (Yildiz et al. 2015, 1412; Yildiz, Uzun and Coşkun 2017, 355).

Moreover, both independent variables i.e. Psychological Capital and Perceived Organizational Support are found to have significant impact on the dependent variable i.e. Innovative Work Behavior. The regression analysis revealed that PsyCap and POS significantly predicts the dependent variable. The significance of Psychological Capital and Perceived Organizational Support for predicting Innovative Work Behavior (dependent variable) can be determined through the following values: \( \text{sig} = .000, R = .700, R^2 = .489. \)

These findings suggest the impact of Psychological Capital as personal and Perceived Organizational Support as social resource on participants’ view and reporting of Innovative Work Behavior. These two resources serve as motivating factors to influence the work behavior that brings constructive newness in the organizational setting. The findings are aligning with the conservations resource theory which proposed that the maintenance of resources depicting the human evolutionary behavior for survival. Individuals conserve both personal strength and social connections which are worthwhile for their own advantage and need in future when face stressful or challenging circumstances. The resources caravan stated these resources are usually available in collective form to generate profitability for individual employee and organization. Developed organizations are in favor of providing combined resources to enhance the work productivity. Personal resources are likely to arise from fostering or supportive social conditions, linked with supportive family and organizational environment so that the combined effect can be used in times of need (Hobfall 2011, 19). Hence, it can be related with the current findings showcasing the combined effect of personal and social resources on the demanding need of innovation in today’s time.

Moreover, the linkage of job demands-resources model with the university faculty suggested that job resources motivate for work engagement and satisfaction whereas the work overload enhances demands and lead towards job stress. When the teachers have availability of adequate job resources (e.g., as supportive work environment and high work influence), they tend to be primarily satisfied with the academic job nevertheless of the developing work demands. Sufficient resources could then result in positive outcomes though
excessive demands could cause psychological exhaustion (Mudrak et al. 2018, 16-18). In this case, the sufficient job resources such as psychological capital at individual level and perceived organizational support at social level facilitated the higher education (university) teachers in effectively managing the work demands of being innovative in stressful circumstances of the pandemic in order to continue and improve their work processes.

Moreover, it is significant to note that the organizational support impacts the work innovation of employees and produce favorable outcome in a systematic way. On the basis of empirical evidence, it can be suggested that the workforce which values the innovation was reported as being supportive for each other at workplace. The mutual support encourages employees to showcase their opinions, experiences and capabilities; improves their organizational learning and enhances collective work innovation in the organization (Hsiao, Chang and Chen 2014, 7). On the other hand, an individual’s Innovative Work Behavior was revealed to be influenced when the employees incorporate both personal and organizational factors in the job behavior; individual creativity establishes the foundation of innovation, psychological capital boosts the wellbeing and leadership autonomous support paves a way to independently initiate the Innovative Work Behavior by individual employee and contribute his/her part in the welfare of an organization (Slåtten et al. 2020, 12-13).

VI. Study implications, limitations, and recommendations

In accordance with the study aim, the strengths lie in highlighting the importance of psycho-social needs fulfilment among the university faculty in bringing profitable newness in academic system by not only raising awareness for the individual employee but also for the higher educational institutions to develop frameworks that cater the psychological wellbeing for growing demands of innovation in current times. It could facilitate the higher educational intuitions and policy makers in Pakistan and across world to lift the psychological capital and perceived organizational support of university teachers by providing effective trainings, promoting such work strategies and policies which manage the psychological stability and instill the perception of supportive work environment for the teachers in order to withstand in todays’ competitive organizational environment. Furthermore, organizations can modify their organizational structure and work environment in such a manner that encourages innovation and allows employees to think out of the box and produce better outcomes.
Despite these strengths, there are some limitations to the generalizability of present study such as; sample of the study was limited to the university teachers only and the sample size was limited to 200 participants only, hence the results can neither be generalized to school/college teachers nor to other employees belonging to different occupations. The study applied quantitative research method for testing the concerned hypotheses. It comprised of structured questionnaires with close ended questions which lack the detailed answers. It may lead to limit the responses of respondents and not represent the in-depth opinions of the participants. This study only evaluated two of the predictive determinants of IWB, there might be several other factors influencing the innovation among the teachers in higher educational setups.

Few suggestions for taking the research forward in future include; the replication of the in different settings to enhance the generalizability and better representation of the current findings, collection of data through different ways other than the online survey method which would ensure better understanding of research, researcher-participant effective communication and clarification where needed, incorporation of qualitative research design for detailed insight and better in-depth analysis of the concerned variables, and integration of other factors such as knowledge sharing behavior, organizational climate and organizational citizenship behavior into the conceptual framework of future researches to examine the influence on innovative work behavior.

VII. Conclusion

The proposed hypotheses were confirmed by the current study; as it indicated that relationship exists between psychological capital, perceived organizational support and innovative work behavior; and that the PsyCap and POS serve as significant determinants of IWB among higher education teachers of Pakistan. It shows that psychological wellbeing developed through hope, self-efficacy, optimism and resilience can produce work innovation among the university teachers. Moreover, it demonstrated that the perception of being valuable, encouraged and treated fairly can promote innovation through work behavior of the teachers in higher educational institutions of Pakistan.

This study further highlights that the concept psychological capital and perceived organizational support need to be introduced in organizations as these concepts hold the ability to transform the innovative work dynamics of an organization. As this investigation emphasized on selected variables, it is
relatively significant to explore them extensively by incorporating other related variables so that this can facilitate in bringing out the best in every employee.

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Annexes

A. PSYCHOLOGICAL CAPITAL QUESTIONNAIRE (PCQ-12)

Directions. Below are statements about you with which you may agree or disagree. Using the following Likert scale, indicate your level of agreement or disagreement with each statement.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel confident in representing my work area in meetings with management.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>I feel confident contributing to discussions about the company's strategy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>I feel confident presenting information to a group of colleagues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>If I find myself in a jam at work, I could think of many ways to get out of it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Right now I see myself as being pretty successful at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>I can think of many ways to reach my current work goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>At this time, I am meeting the work goals that I have set for myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>I can be “on my own” so to speak at work if I have to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>I usually take stressful things at work in stride.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>I can get past difficult times at work because I’ve experienced difficulty before</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>I always look on the bright side of things regarding my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>I’m optimistic about what will happen to me in the future as it pertains to work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
B. SURVEY OF PERCEIVED ORGANIZATIONAL SUPPORT-8 ITEMS

Listed below are statements that represent possible opinions that YOU may have about working at your workplace. Please indicate the degree of your agreement or disagreement with each statement that best represents your point of view about your workplace.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization values my contribution to its well-being</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>The organization fails to appreciate any extra effort from me</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>The organization would ignore any complaint from me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>The organization really cares about my well-being</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Even if I did the best job possible, the organization would fail to notice.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>The organization cares about my general satisfaction at work</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>The organization shows very little concern for me</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>The organization takes pride in my accomplishments at work</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
C. INDIVIDUAL INNOVATIVE BEHAVIOR SCALE

**Directions:** Considering the uncertain situation during Covid-19, rate the behavioral frequency in your current job indicating how often you do behave in the certain way.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Never</th>
<th>Almost Never</th>
<th>Sometimes</th>
<th>Fairly Often</th>
<th>Very Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look for opportunities to improve an existing process, technology, product, service or work relationship?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Recognize opportunities to make a positive difference in your work, department, organization, or with customers?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Pay attention to non-routing issues in your work, department, organization or the market place?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Generate ideas of solutions to address problems?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Define problems more broadly in order to gain greater insight into them?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Experiment with new ideas and solutions?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Test-out ideas or solutions to address unmet needs?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Evaluate the strengths and weaknesses of new ideas?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Try to persuade others of the importance of a new idea or solution?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Push ideas forward so that they have a chance to become implemented?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Take the risk to support new ideas?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Implement changes that seem to be beneficial?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Work the bugs out of new approaches when applying them to an existing process, technology, product or service?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Incorporate new ideas for improving an existing process, technology, product or service into daily routines?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>