IMPACT OF PSYCHOLOGICAL CAPITAL ON WORK-RELATED WELL-BEING WITH SPECIAL REFERENCE TO INDIAN PHARMACY SCIENTISTS

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ABSTRACT
The present research endeavour was undertaken to investigate the PsyCap as a predictor of the work-related well-being of pharmacy scientists in Indian Pharmaceutical companies. For the same, 150 scientists working in different pharmaceutical companies in India were asked to respond to questionnaires viz., the Psychological Capital (PsyCap) Questionnaire - Luthans, Youssef and Avolio (2007) and Index of Psychological Well-being at Work (IPWBW) by Sandilya and Shahnawaz (2018). The findings suggest psychological Capital and its facets as significant predictors of the work-related well-being of pharmacy scientists. It was found that Psychological Capital and its facets had a significant predictive influence on work-related well-being and outcomes.

Keywords: PsyCap, Work-related wellbeing, Pharmacists.

Pharmacists are the third-largest healthcare professionals in the world and the pharmacy profession is becoming more and more popular day by day across the world. In India too, it is evolving consistently. The changing work environment due to the rapid growth of technology has impacted pharmacists in an incredibly significant way. Their overall sense of well-being has also been impacted prominently due to work pressure and the routine work involved. Hence, it’s a dire necessity to be cautious about their well-being.

Well-being is of paramount importance for everyone, and work-related well-being is germane for pharmacists. Thus, it is more overriding to explore predictors of well-being and especially work-related well-being to make their life worth living by being good and achieving excellence. The landmark shift in focus of this discipline from negativity to positive aspects is quite cardinal and pertinent for developing psychological strength and making one psychologically strong and competent for dealing efficiently and effectively with all challenges of life. Gable & Haidt in 2005 well said that “Positive psychology is a strong contributor as far as flourishing of people, groups, and institutions are concerned.

Fewer studies about the work-related wellbeing of pharmacists in India made it obligatory to investigate psychological capital's role in optimizing one's competence and help employees to excel in their work. Thereby, PsyCap has been considered as a predictor variable in the present investigation and work-related well-being as a criterion variable.

WORK-RELATED WELL-BEING
Work-related well-being is a key for organizational effectiveness, flourishing and maintaining this long way. As effectiveness and flourishing are dependent on efficiency, efficacy, productivity, commitment etc. and all this depends on the well-being of employees, so, work-related well-being is a core aspect.

According to Mayo (1933), work-related well-being has been the centre of focus since the 1930s. Many definitions came into existence for defining work-related well-being which is dependent on a variety of factors, viz., culture, society, expectations, environment, climate, infrastructure, policies, working condition, facilities, safety & security. So, growing concern regarding employee’s health and well-being is imperative.

In 2005 Loretto, et al. explained work-related well-being with reference to work stress. Xanthopoulou, Bakker, Demerouti, Schaufeli in 2009 viewed that Work engagement is a positive transformation in order to approach the job perfectly with full enthusiasm, vigour, determination, dedication, and dynamism. Further, Utzainen, in 2011 suggested that work-related well-being is delineated with the notion of well-being at work, work engagement, work involvement, work commitment and job satisfaction.

Work-related well-being could be ascertained by providing the congenial environment, improving quality of work-life, securing safety, enhancing involvement and commitment, training them as and when required.
compensating appropriately, rewarding for better performance, and focusing on maintenance of all these, better facilitation at large and taking care of all needs and desires.

The organization must take care of organizational and individual targets and objectives so that high commitment leading to high performance and organizational effectiveness could be achieved.

**PSYCHOLOGICAL CAPITAL**

Human capital is one of the important and strongest in determining the success of the company. By having a qualified, talented, and high-performing employee, a company can estimate the achievement of goals well.

Psychological capital finds its connection with Seligman's (1998) positive psychology, and the positive organizational behaviour (POB) concept explained by Luthans in 2002 and Wright, 2003. Later in 2007 Luthans, Youssef, & Avolio defined PsyCap as the positive psychological state developed because of confidence to deal with all challenges effectively, being optimistic, persevering and redirecting paths to goals, sustaining beyond resilience. Further, Luthans et al. in 2007 suggested that people with high psychological capital could easily gauge all tough, demanding, challenging and taxing situations positively, effectively and efficiently rather intelligently in comparison to other "trait-like" psychological wealth whereas PsyCap is more "state-like," and is more pliable, flexible and lead to transformation.

PsyCap prowess to alter and transform all challenging situations leading to regulation of well-being as PsyCap refers to the psychological strength of an individual which drew our attention and changes our approach more positive rather than getting trapped in negativity.

**LITERATURE REVIEW**

According to Donaldson & Ko, 2010, Positive psychology provide a road for the development of employee's psychological capital and work-related outcomes viz., engagements and well-being. Further, Avey, Luthans, & Jensen, 2009 and Avey, Luthans, Smith, & Palmer, 2010, found PsyCap instrumental in improving the psychological well-being of organizational members and transforming pro-attitude and pro-behaviour towards work. A lot of research done by Bakker, Ha-kanen, Demerouti, & Xanthopoulou, in 2007 and Bakker & Schaufeli, in 2008 concluded a significant role of job wealth along with positive psychological capital, in changing the negative perception of workload and outcomes of employees. In 2010 Roux observed optimism and self-efficacy is significantly related to work engagement. Another study conducted by Tripathi in 2011 revealed PsyCap’s instrumentality well-being of employees, along with the predictive relationship of self-efficacy and resilience with employee's well-being.

In 2017 Joo & Lee recorded PsyCap as a significant predictor of high engagement, high satisfaction, and perception of high well-being at work. Kanengoni, Ngarambé, and Buitendach in 2017 also revealed that psychological capital had a predictive influence on work satisfaction, organizational commitment, and employee’s well-being and suggested to keep focused and enhance individual’s psychological strength for growth and thrive of individual’s and organization at large.

Verster in 2018 reported his findings that a PsyCap and work engagement was found to be significantly positively correlated and psychological capital also found to be a strong predictor of engagement at the work. More recently, in 2021 Sharma and Sharma reported psychological capital as a significantly strong predictor of workplace wellbeing which is aligned with earlier findings.

In the light of the review of literature, the research objective mentioned below researcher decided to formulate alternate hypotheses. Objective and hypotheses follow:

**RESEARCH OBJECTIVES**

- To examine the predictive influence of Psychological Capital and its dimensions on the work-related well-being of pharmacy scientists.

**RESEARCH HYPOTHESES**

H₀₁: Psychological capital will significantly predict the work-related well-being of pharmacy scientists.

H₀₂: Hope, resilience, optimism and self-efficacy- dimensions of psychological capital will significantly predict the interpersonal fit at the work-a dimension of work-related well-being of pharmacy scientists.

H₀₃: Hope, resilience, optimism and self-efficacy- dimensions of psychological capital will significantly predict the thriving at work- a dimension of work-related well-being of pharmacy scientists.

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H$_{A1}$: Hope, resilience, optimism and self-efficacy- dimensions of psychological capital will significantly predict the feeling of competency- a dimension of work-related well-being of pharmacy scientists.

H$_{A2}$: Hope, resilience, optimism and self-efficacy- dimensions of psychological capital will significantly predict the perceived recognition at work- a dimension of work-related well-being of pharmacy scientists.

H$_{A3}$: Hope, resilience, optimism and self-efficacy- dimensions of psychological capital will significantly predict the desire for involvement at work- a dimension of work-related well-being of pharmacy scientists.

METHOD:
The present investigation aims to predict the psychological capital and its dimensions as predictors of work-related well-being of Indian pharmacy scientists, hence, the sample chosen for the research was Indian pharmacy scientists working in pharmaceutical companies in India and the variables of the present investigation are Criterion Variable: Work-related well-being and Predictor Variable: Psychological Capital

Participants: The participants for the present study N=150 scientists working in pharmaceutical companies were randomly drawn from different pharmaceutical companies in India. All the participants were briefed about the nature of the study.

Tools: Two scales namely the Psychological Capital (PsyCap) Questionnaire and Index of Psychological Well-being at Work (IPWBW) were used.

Psychological Capital (PsyCap) Questionnaire (PCQ-24): Psychological Capital (PsyCap) Questionnaire developed by Luthans, Youssef and Avolio (2007) was used in this study. PsyCap was measured with the PCQ-24. The questionnaire comprises of subscales viz., Hope, Optimism, Self-efficacy, and resilience. Each subscale contains six items. Cronbach’s alpha was found 0.76 on the current sample.

Index of Psychological Well-being at Work (IPWBW): IPWBW was developed by Sandilya and Shahnavaz (2018), tool consisted of 17 items. This questionnaire is based on five dimensions—interpersonal fit at work, thriving at work, feeling of competency at work, perceived recognition at work and desire for involvement at work. Cronbach’s alpha was found 0.90 on the current sample

Data Analysis: Obtained data were analyzed by Statistical Packages for Social Sciences (SPSS, 16 versions). Multiple regression were used to understand the predictive relationship.

Results: Before analysis, the data were checked for missing values and outliers. No missing value and outlier were present in the data. Multiple Linear Regression Analysis (MLRA) was used to identify psychological capital and its dimensions i.e., self-efficacy, hope, resilience, and optimism as significant predictors for work-related well-being- a criterion variable. Variables were examined for the fulfilment of the assumptions of multiple linear regression e.g., linearity, heteroscedasticity, multicollinearity, normality, and independence which are shown in Table 4.1.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Predictors</th>
<th>$R^2$</th>
<th>Linear Residual Plots</th>
<th>Heteroscedasticity Breusch-Pagan Test (Range: $p &lt; 0.05$)</th>
<th>Multicollinearity Tolerance &amp; VIF (Range: Tol – 0-1, VIF- 1-9)</th>
<th>Normality PP Plots</th>
<th>Independence Durbin – Watson (Range: DW&lt;3)</th>
<th>Whethe ro robustness verified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y$_1$</td>
<td>X$_1$</td>
<td>.292</td>
<td>Satisfied</td>
<td>Satisfied</td>
<td>Tol : .100</td>
<td>Satisfied</td>
<td>1.768</td>
<td>All Satisfied</td>
</tr>
<tr>
<td>Y$_2$</td>
<td>X$_3$</td>
<td>.140</td>
<td>Satisfied</td>
<td>Satisfied</td>
<td>Tol : 1.00</td>
<td>Satisfied</td>
<td>1.697</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X$_4$</td>
<td>.185</td>
<td>Satisfied</td>
<td>Satisfied</td>
<td>Tol : .887</td>
<td>Satisfied</td>
<td>1.697</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X$_2$</td>
<td>.207</td>
<td>Satisfied</td>
<td>Satisfied</td>
<td>Tol : .735</td>
<td>Satisfied</td>
<td>1.697</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1.: Robustness checks for Multiple Regression Analysis
Satisfied  
Satisfied  
Satisfied  
Satisfied  
Satisfied  
Satisfied  

Table 4.2: Showing the variable predicting Work-Related well-being of pharmacy scientists

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>Unstand. β</th>
<th>Multiple R</th>
<th>R²</th>
<th>R² Change</th>
<th>Cohen’s f²</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>PsyCap</td>
<td>.311</td>
<td>.540</td>
<td>.292</td>
<td>.292</td>
<td>.412</td>
<td>60.393</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Criterion Variable**: Work-Related Well Being  
**Predictor Variable**: Psychological Capital  
Psychological Capital (PsyCap) was examined as a predictor and Work-related well-being (WRWB) as a criterion variable. Table 4.2 shows that PsyCap emerged as predictor and significant amount of variance in WRWB was accounted by it, R² = 0.292, F (148) = 60.939, p < 0.000 for overall PsyCap. It can be inferred that psychological capital accounted for 29.2% variance in the Work-related well-being of pharmacy scientists. Further, a large strength of association between psychological Capital and work-related well-being is evident from f² = 0.41. Thus, hypothesis H₁₁: Psychological capital will significantly predict the work-related well-being of pharmacy scientists stands partially supported. Results are aligned with ground realities and are justifiable as work-related well-being is highly dependent on one’s satisfaction and happiness at work and these are much dependent on one’s positiveness, reverser, buoyancy, confidence, trust and who do not believe in distrust, scepticism, dubiety etc., hence, psychological capital is quite an important source in improving and maintaining work-related well-being.

Table 4.3: Showing the variable predicting Interpersonal Fit at Work – a dimension of Work-Related well-being of pharmacy scientists

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>Unstand. β</th>
<th>Multiple R</th>
<th>R²</th>
<th>R² Change</th>
<th>Cohen’s f²</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope</td>
<td>.310</td>
<td>.374</td>
<td>.140</td>
<td>.140</td>
<td>.163</td>
<td>24.136</td>
<td>.000</td>
</tr>
<tr>
<td>Resilience</td>
<td>.172</td>
<td>.430</td>
<td>.185</td>
<td>.045</td>
<td>.227</td>
<td>16.711</td>
<td>.000</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>.128</td>
<td>.455</td>
<td>.207</td>
<td>.021</td>
<td>.261</td>
<td>12.683</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Criterion**: Interpersonal Fit at Work  
**Predictor**: Self-efficacy, Hope, Resilience & Optimism

Table 4.3 depicts that hope, resilience, and self-efficacy - dimensions of psychological capital predict interpersonal fit at work- a dimension of work-related well-being. R² depicts 14% variance of hope, 4.5% variance of resilience and 2.1% variance of self-efficacy and all three jointly account for 20.7% of the variance. The value of f² shows medium strength among variables with the values of .163, .227, & .261 respectively. Considering F value of dimensions of psychological capital, hope F = 24.136, resilience F = 16.711 and self-efficacy F = 12.683 at p > .000 which is not greater than 0.01 level of significance reveals
the significant contribution on Interpersonal fit at work- a dimension of work-related well-being, therefore hypothesis HA2: Hope, resilience, optimism and self-efficacy- dimensions of psychological capital will significantly predict the interpersonal fit at the work- a dimension of work-related well-being of pharmacy scientists was partially supported.

The results found are in conjunction with real-life as one’s well-being is dependent on his/her fulfilment of needs and desire, psychological environment, life-satisfaction etc., and so work-related well-being is also dependent on life-satisfaction, happiness and being satisfied at work. And this all is possible only when one’s approach towards life and work both will be positive and one believes in trust, potentiality, honesty, endurance, hence, the emergence of hope, resilience, and self-efficacy as a predictor of Interpersonal fit at work – a dimension work-related well-being is logical.

**Table 4.4 Showing the variable predicting Thriving at Work – a dimension of Work-Related well-being of pharmacy scientists**

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>Unstand. β</th>
<th>Multiple R</th>
<th>R²</th>
<th>R² Change</th>
<th>Cohen’s f²</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope</td>
<td>.437</td>
<td>.431</td>
<td>.186</td>
<td>.186</td>
<td>.228</td>
<td>33.760</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Criterion: Thriving at Work.**
**Predictor: Self-efficacy, Hope, Resilience & Optimism.**

It is evident from table 4.4 that only hope- a dimension of psychological capital appeared as an indicator for the predictive influence of thriving at work- a dimension of work-related well-being of Indian pharmacy scientists. It is clear from the R² value that 18.6% variance is due to hope, further of f² = .228 reflects medium strength. The F value, F=33.760, p>.000 further confirms a significant contribution of hope. Hence, hypothesis H4: Hope, resilience, optimism and self-efficacy- dimensions of psychological capital will significantly predict the thriving at work- a dimension of work-related well-being of pharmacy scientists stands partially supported. Table 4.4 depicts that hope is an important source of work-related well-being which is quite legitimate as without hope one cannot succeed in his /her endeavour. It is important that one must be hopeful and confident about himself /herself and must foresee and believe in the circumstances and facilities at work which ultimately help in achieving set targets and developing happiness and being satisfied ultimately leading to better well-being rather than feeling thrived at work.

**Table 4.5 Showing the variable predicting Competency at Work – a dimension of Work-Related well-being of pharmacy scientists**

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>Unstand. β</th>
<th>Multiple R</th>
<th>R²</th>
<th>R² Change</th>
<th>Cohen’s f²</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope</td>
<td>.318</td>
<td>.482</td>
<td>.232</td>
<td>.232</td>
<td>.302</td>
<td>44.830</td>
<td>.000</td>
</tr>
<tr>
<td>Resilience</td>
<td>.143</td>
<td>.531</td>
<td>.282</td>
<td>.049</td>
<td>.393</td>
<td>28.813</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Criterion: Competency at Work.**
**Predictor: Self-efficacy, Hope, Resilience & Optimism.**

Table 4.5 reveals that hope and resilience- dimensions of psychological capital predict work-related psychological well-being of Indian pharmacy scientists. R² values for hope and resilience R²=.232 and R²=.049 respectively depict that hope account for 23.2% variance and resilience account for only 4.9% of the variance, whereas hope and resilience jointly contribute for 28.2% variance. The f² values for hope are .30 refers to medium strength whereas the f² value for resilience reflects large strength. Further F values, F=44.830 and F= 28.813, p>.000 reveals significant contribution. So, hypothesis H4: Hope, resilience, optimism and self-efficacy- dimensions of psychological capital that will significantly predict the feeling of competency- a dimension of work-related well-being of pharmacy scientists was partially supported.

The results are quite logical as better work-related well-being could be ascertained with special reference to the development of feeling competitive at work just by being hopeful, resilient, positive, and confident about his/her aptitude. One’s belief in his/her potential, efficiency, efficacy, and his style of working or approach towards work is quite important for being competitive ultimately leading to successful completion of all
responsibilities allocated. Thus, hope and resilience are important predictors of competency at the work-a facet of work-related well-being.

Table- 4.6 Showing the variable predicting Perceived Recognition at Work – a facet of Work-Related well-being of pharmacy scientists

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>Unstand. $\beta$</th>
<th>Multiple R</th>
<th>$R^2$</th>
<th>$R^2$ Change</th>
<th>Cohen’s $f^2$</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope</td>
<td>.395</td>
<td>.461</td>
<td>.213</td>
<td>.213</td>
<td>.271</td>
<td>39.948</td>
<td>.000</td>
</tr>
</tbody>
</table>

Criterion: Perceived Recognition at Work

Predictor: Self-efficacy, Hope, Resilience & Optimism.

Table 4.6 delineates that only one of the dimensions of psychological capital predict one of the dimension perceived recognition at work of work-related well-being. $R^2$ illustrates only 21.3 % variance and the $f^2$ value also confirms medium strength. Fvalue $F= 39.948$, $p> .000$ which is not greater than .01 level of significance highlight the significant contribution of predictor viz., hope. Further unstandardized beta values suggest a significant impact on perceived recognition at work – a dimension of work-related well-being as $\beta=.395$. Thus, $H_{A6}$:Hope, resilience, optimism and self-efficacy- dimensions of psychological capital that will significantly predict the perceived recognition at work- a dimension of work-related well-being of pharmacy scientists stands partially supported.

The above findings are pertinent as one’s belief and expectation are quite necessary for perceived recognition at work and hope is the next ladder towards this development. Hence, the perception of getting recognition at work is predictable by hope is plausible.

Table-4.7 Showing the variable predicting Desire for Involvement at Work – a dimension of Work-Related well-being of pharmacy scientists

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>Unstand. $\beta$</th>
<th>Multiple R</th>
<th>$R^2$</th>
<th>$R^2$ Change</th>
<th>Cohen’s $f^2$</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope</td>
<td>.257</td>
<td>.397</td>
<td>.157</td>
<td>.157</td>
<td>.186</td>
<td>27.645</td>
<td>.000</td>
</tr>
<tr>
<td>Resilience</td>
<td>.125</td>
<td>.438</td>
<td>.192</td>
<td>.035</td>
<td>.238</td>
<td>17.481</td>
<td>.000</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>.100</td>
<td>.465</td>
<td>.216</td>
<td>.024</td>
<td>.276</td>
<td>13.432</td>
<td>.000</td>
</tr>
</tbody>
</table>

Criterion: Desire for Involvement at Work

Predictor: Self-efficacy, Hope, Resilience & Optimism.

As table 4.7 illustrates that hope, resilience and self-efficacy significantly predict desire for involvement at work- one of the important dimensions of work-related well-being. The values of $R^2$report for 15.7 % of variance accounted by hope, then resilience accounted for .03% and self-efficacy accounted for .02 % of the variance, but overall hope, resilience, and self-efficacy jointly account for 21.6% of the variance. F values for hope, resilience and self-efficacy are 27.645, 17.481 and 13.432 respectively are significant at .01 level of significance. Hence, $H_{A6}$:Hope, resilience, optimism and self-efficacy- dimensions of psychological capital that will significantly predict the desire for involvement at work- a dimension of work-related well-being of pharmacy scientists stands partially supported.

Findings presented in Table 4.7 are coherent with real-life as the desire for involvement at work- a dimension of work-related well-being could be expected only when one has the firm belief in his/her efficacy, and one is quite sure that he/she would handle all situation intelligently. So, emerged predictors viz., hope, resilience and self-efficacy are well-founded and logical.

Apart from the above logics, in 2007, Luthans, Avolio, Avey, & Norman, and Luthans, Youssef, & Avolio, presented a strong association ofPsyCap with psychological well-being and work-related outcomes. In another study by Tripathi in 2011 concluded similar predictive influence.Sharma and Sharma in 2017 also presented a similar predictive influence.Further, Haleem, Masood, Aziz, and Jami (2017) findings also supported the above results.
At length, it is suggestive that being psychologically strong with all positivity towards life is quite important and helpful for better mental health as well as health in total. Psychologically strengthened people could easily deal with all challenges of life and remain fit as far as their mental health is concerned.

REFERENCES


