

The Interaction effect of Psychological Contract Breach on the relation between Psychological Capital, Work Engagement and Burnout

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Abstract:

This study investigates the impact of psychological capital on employee work engagement & burnout, and the interaction effect of psychological contract breach in between the relationships. Data for the study were collected from doctors (N=306), working in health care units operating in different cities of Pakistan, by using random sampling technique. All of the study hypotheses were tested through structural regression (SR) model by using AMOS. Moreover, Orthogonalization was used to test the interaction effect. As per results, all of the hypothesized relationships were supported.

Keywords: Psychological capital; psychological contract breach; Work engagement; Burnout.

1. Introduction

In today's contemporary environment, success and competitive advantage of organizations' depends on the recognition of and investment in human capital. Consequently, organizations today realizing the worth of human capital & require their employees to be accountable towards organization and with its values (Bakker,

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Schaufeli, Leiter, and Taris (2008); Luthans, Luthans, and Luthans (2004); Minervini, Meyer, and Rourke (2003)). For that reason, these days' organizations are looking for highly energetic and dedicated employees, who are capable enough to deal well with the job demands and enthusiastically takes positive actions to enhance the organization's reputation and interests.

The conception of work engagement has actually been appeared from burnout research Maslach, Schaufeli, and Leiter (2001) and both are considered as polar opposites on the continuum (Demerouti, Mostert, and Bakker (2010); Maslach and Leiter (1997)). Engagement and burnout opposite to each other: As high level of employees' engagement towards their work leads to low level of burnouts among employees and vice versa (Rothmann, Steyn, and Mostert (2005); Wilmar B Schaufeli, Salanova, González-Romá, and Bakker (2002); Wilmar B Schaufeli, Taris, and Van Rhenen (2008)). Work engagement is positive state of mind comprises of energy, involvement, and professional efficacy (Restubog, Bordia, and Tang (2006); Wilmar B Schaufeli and Bakker (2004)). Whereas, Burnout is viewed as a type of job strain consists of emotional exhaustion, Cynicism & inefficacy (Hobfoll and Shirom (2001); Maslach (1993); Maslach and Jackson (1981)).

However, today almost each and every organization think about positive as well as negative effects of these two opposite work-related outcomes (work engagement & Burnout) on the overall productivity of the organization (Bakker, Demerouti, and Sanz-Vergel (2014); Bakker and Oerlemans (2016); Leiter and Maslach (2008); Trépanier, Fernet, Austin, and Ménard (2015)), which may be the result of direct and indirect work and non-work pressures, like individual psychological strengths differences on the basis of their personality, emotional intelligence or personal attributes Alarcon, Eschleman, and Bowling (2009). A positive psychological perspective of an employees' is a source of controlling negativities of the work environment (that leads an individual towards exhaustion or burnout) and exerting their focus in a successful way towards work engagement. Likewise, employees with more positive attributes are better able to make use of their positive strengths and thus found to be more engaged with their work. (Bakker and Demerouti (2007); Malinowski and Lim (2015); Paek, Schuckert, Kim, and Lee (2015)). This positive psychological state of development of an individual is called Psychological Capital or simply refer as PsyCap, and explained by four main constructs, such as, self-efficacy, hope, resiliency and optimism Luthans, Youssef, and Avolio (2007).

Psychological contract breach is used in this study as moderator on the basis on some profuse evidences. As this important study variable has attracted numerous attentions in the field of research and considered as an inevitable feature because of its high frequency in employment relationships and important role in explaining subsequent workplace attitudes and behaviours rather than contract fulfilment. (Conway, Guest, and Trenberth (2011); Kraak, Lunardo, Herrbach, and Durrieu (2017); Zhao, Wayne,

Glibkowski, and Bravo (2007)). For instance, in today's demanding work place, managing employees' psychological contracts is an unavoidable feature that needs to begin in every employment relationship and even before the hiring of an employee that affects not only the employees, but the organization as a whole Guest (2016). Also, recent trends such as outsourcing, downsizing, and contingent work arrangements etc., have changed the traditional beliefs of employees to be in lifetime employment relationship but, instead, are responsible for increasing their own employability (Bains (2015); Herriot and Pemberton (1995)). Especially in the country like Pakistan, where health care system is too inadequate & expensive, this troubling situation needs continuous and utmost commitment and engagement of Pakistani doctors towards their line of work. As this highly demanding profession puts pressure on health institutions and organizations to attract, motivate and retain their employees by fulfilling certain contracts at their end. In other words, by adding psychological contract breach as a moderator in this study, this is to be investigated that whether the Pakistani doctor's level of temperament and commitment towards their work would be affected up to some or great extent when their certain psychological contracts remained unfulfilled by their organizations where they are working. Therefore, the present study attempts to investigate this widespread relation of PsyCap with work engagement and burnout from the perspective of psychological contract breach, to have a look at, how much of the outcome variables of this study are affected because of its moderating effect.

2. Theoretical Framework and Hypothesis

In recent times, a number of studies have analysed the impact of personal resources on employee work engagement (Xanthopoulou, Bakker, Demerouti, and Schaufeli (2007), 2009)). Such positive or personal resources are coming under the realm of PsyCap (Luthans (2002); Luthans et al. (2004); Luthans et al. (2007)). Besides, numerous researches have suggested a direct effect of PsyCap with employee work engagement too (Hodges (2010); Mauno, Kinnunen, and Ruokolainen (2007); Ouweneel, Le Blanc, Schaufeli, and van Wijhe (2012); Sweetman & Luthans, 2010). Wilmar B Schaufeli and Bakker (2004), have observed that, in spite of long working hours and high job demands, some individuals do not show exhaustion. Instead, they found that individuals feel pleasure to work for long hours so as to deal with their high job demands. As per Seligman & Coyle-Shapiro and Kessler (2000), from perspective of Positive Psychology, those particular individuals are depicted as engaged in their work. In addition to these, numerous studies have also focused on positive psychological strengths or personal resources as antecedents of work engagement (Stajkovic and Luthans (1998); Sweetman and Luthans (2010); Xanthopoulou et al. (2009); Youssef and Luthans (2007)).

H1: *Psychological Capital is positively related to work engagement.*

Burnout is defined by different research scholars as "a common emotional fatigue and a psychological syndrome of cynicism, exhaustion, and inefficacy that emits from

endured work stress” (Maslach (1993); Maslach and Jackson (1981); Maslach et al. (2001)). Burnout leads to many negative outcomes like low performance towards job, high turnover, and high health care costs (Halbesleben and Buckley (2004); Shirom (2003); Wang, Hall, and Rahimi (2015)). A number of studies (Ding et al. (2015); Luthans, Avolio, Walumbwa, and Li (2005); Peng et al. (2013)) have looked into the relationship between the PsyCap and burnout. Researchers opine that the certain positive psychological factors effectively reduce the chances of burnout (Ding et al. (2015); Luthans et al. (2004); Wilmar B Schaufeli and Bakker (2004)). Moreover, as per (Kan and Yu (2016); Laschinger and Fida (2014); Liu, Hu, Wang, Sui, and Ma (2013); Rego, Sousa, Marques, and e Cunha (2012)) PsyCap may perhaps reduce the occurrences of work related stressors, anxiety, burnout and turnover among employees. Besides, higher levels of PsyCap attributes among employees endow them with the ability to deal well with the workplace stressors and reduce the chances of burnout Avey, Luthans, and Jensen (2009). Moreover, at one hand, where higher level of PsyCap attributes of individuals’ promotes their engagement towards their jobs Hodges (2010), on the other hand, this may also help decrease prevalence of burnout inside them (Tong, Wang, and Peng (2015); Wan, Herui, and Ke (2014)).

H2: *Psychological Capital is negatively related to Burnout.*

Psychological contracts have been shown to influence key organizational outcomes. For instance, sometimes organizations have fully met expectations of their employees or sometimes they fail to provide them with promised returns, thus it may influence differently on significance of outcomes (Robinson (1996)). Numerous researchers have analysed the detrimental impact of psychological contract breach on workplace relationships (Conway and Briner (2002); Parzefall and Hakanen (2010)). When employees having positive psychological strengths perceived un-fulfilment of certain obligations or promises in their employment contract implied by their employers then this particular situation becomes the source of creating perceptions of breach among them (Coyle-Shapiro and Kessler (2000); Morrison and Robinson (1997); Restubog et al. (2006); Robinson (1996); Rousseau (1995)), that ultimately leads to feelings of betrayal (Robinson (1996); Robinson and Rousseau (1994)), and that negative attitude & behaviour eventually results in disloyalty & unfaithfulness, lack of trust and commitment, poor performance, high turnover Robinson and Rousseau (1994); cut back on constructive behaviours, for example, low citizenship behaviour and in-role performance (Robinson (1996); Robinson and Morrison (1995)); as well as lower engagement and higher burnout towards their work Chambel and Oliveira-Cruz (2010). While on experiencing breach, employees see themselves in a condition of inequity & they reinstate equity by an emotionally strong response in the form of lower work engagement, Parzefall and Hakanen (2010) & higher burnout Jamil, Raja, and Darr (2013). Some researchers have revealed that contract breach threatens sense of control from their environment & that ultimately becomes source of their burnout (Gakovic and Tetrick (2003); Topa and Morales (2005)). On the other hand, employees

having positive psychological strengths & whose all promises are fulfilled & expectations are met by their employer are found to be more engaged and less exhausted toward their work Bal, Kooij, and De Jong (2013).

H3a: *The positive relation between psychological capital and work engagement will be moderated by psychological contract breach, such as the positive relationship between psychological capital & work engagement will be stronger when psychological contract breach is low and weaker when psychological contract breach is high.*

H3b: *The negative relation between psychological capital and burnout will be moderated by psychological contract breach, such as the negative relationship between psychological capital & burnout will be stronger when psychological contract breach is low and weaker when psychological contract breach is high.*

Research Model

The research model shown in figure 1 exhibits the predictor variable i.e., political interference that predicts organizational performance through moderating role of organizational support.

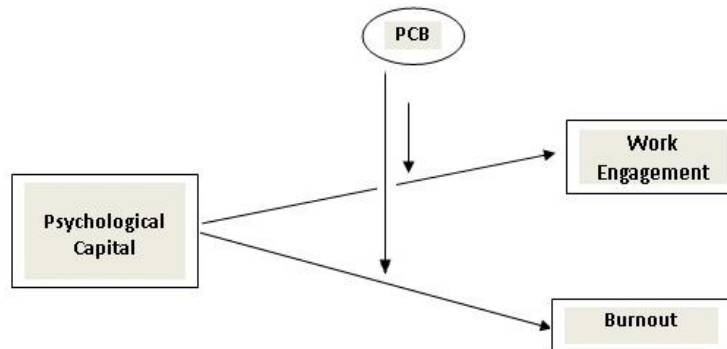


Figure: 1 - Hypothesized Model

3. Methodology

3.1. Sample

Data were collected through survey method from more than 300 doctors working in different health care units (hospitals, medical colleges, etc.) operating in different cities of Sindh such as, Khairpur Sukkur, Larkana, Hyderabad and Karachi, by using random sampling technique. The reason behind choosing this sample is that, this profession requires more interpersonal as well as emotional demands than any other profession. Participants varied in their level of gender, qualification, age and years of experience. Both, male and female doctors were participated in the study with a response rate of 72% & 28%. Around 37% of the participants involved in the study were between the ages of

36 - 45 and 47% of the participants had been working experience between 5 - 15 years.

3.2. Measure

For data collection, 5-point Likert scale, starting from never (1) to always (5) was used. Psychological Capital (PsyCap) was accessed using 24-items scale Luthans et al. (2007). Sample items were, “I feel confident contributing to discussions about the company’s strategy” & “I always look on the bright side of things regarding my job”. Robinson and Morrison (2000) 5-item global scale was used to measure Psychological contract breach (PCB). One of the example item was, “I have not received everything promised to me in exchange for my contributions”. Work engagement (WE) was assessed with the Utrecht Work Engagement Scale (UWES), by Wilmar B Schaufeli et al. (2002). Sample item was “When I get up in the morning, I feel like going to work”. Burnout was measured using the Maslach Burnout Inventory MBI Maslachi, Jackson, and Leiter (1996). The total scale consists of 16 items. Sample item was: “I feel emotionally drained from my work”. Control Variables used in the study were Sex, qualification, age & experience.

4. Data Analysis

Statistical Package for the Social Sciences (SPSS) and Analysis of Moment Structures (AMOS) version 18 were used for screening of data and testing of hypothesis respectively. Initially data screening such as missing values, aberrant values, multivariate outliers’ detection and normality test were performed before calculating the reliability and validity of the scale and further statistical analysis such as structural regression and orthogonalization. Descriptive statistics and correlation of the all variables studied in this study are given in table 1.

Table 1: Descriptive Statistics and correlations Summary

	<u>Mean</u>	<u>SD</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
1.Sex	NA	NA								
2.Edu	NA	NA	-							
			.264**							
3.Age	2.43	.824	-							
			.120*	.107						
4.Exp	2.24	.736	-							
			.139*	.071	.672**					
5.PsyCap	2.6042	.70532	-.052	-.035	-.027	-.010				
6.PCB	2.9322	.99697	.006	.033	.074	.087	-.370**			
7.WE	2.7636	.78304	-.012	-.073	-.046	-.074	.629**	-		
								.475**		
8.BO	3.1098	.85129	-.013	.008	.099	.032	-.140*	-.023	-.087	

*. Correlation is significant at the 0.05 level (2-tailed).**. Correlation is significant at the 0.01 level (2-tailed).

NA= Not Applicable; Edu = Education; Exp = Experience; PsyCap = Psychological Capital ; PCB = psychological contract breach; WE = Work engagement; BO = Burnout

Confirmatory Factor Analysis (CFA) was used to check the validity of measures and for model adequacy various Fit indices (Byrne, 2001) were used (Such as, CMIN/df, Root-Mean Square Error of Approximation (RMSEA), Tucker Lewis Index (TLI) and Comparative Fit Index (CFI)). Initially, the model fit was relatively poor (CMIN/df = 2.12; CFI = 0.72; TLI = 0.71, RMSEA = 0.05). After removing the low factor loadings items (< 0.5), the second model was tested, where model fit statistics were considerably improved (CMIN/df = 1.478, CFI = 0.943; TLI = 0.939, RMSEA = 0.040). The suitability of the proposed measurement model was analysed by two alternative measurement models Bentler and Bonett (1980). Both alternative models showed poor fit to data. Therefore, actual model was preferred instead of any alternative model because of its superior fit. Moreover, validities (convergent and discriminant) for all the scales were calculated (Hair et al., (2010)). The results (Table 2) established that the statistical criteria (CR > .70; AVE > .50; AVE > MSV & AVE > ASV) of all the measures were fulfilled.

Table 2: Convergent and Discriminant Validities

	<u>CR</u>	<u>AVE</u>	<u>MSV</u>	<u>ASV</u>
WE	0.816	0.51	0.082	0.019
BO	0.917	0.616	0.025	0.009
PCB	0.702	0.53	0.065	0.019
PsyCap	0.845	0.579	0.022	0.012

PsyCap = Psychological Capital ; PCB = psychological contract breach; WE = Work engagement; BO = Burnout

Most of the studies conducted on PCB have used SEM only for CFA and tested hypothesis by using multiple regression (Kiewitz, Restubog, Zagencyk, and Hochwarter (2009); Zagencyk, Gibney, Few, and Scott (2011)), but this study tested hypothesis through structural regression by using AMOS 18. The main advantage of using structural regression through SEM by using AMOS is that it has the capability to discourse the presence of measurement error with in the statistical model which others approached does not consider.

The main disadvantage of some software other than AMOS is not accommodating the measurement errors in determining the causal relationships such as direct, indirect and interaction effects. It is troublesome for testing the interaction effects in the regression

models Little, Bovaird, and Widaman (2006). Therefore, it is more reliable statistically to test the interaction effect through latest structural model rather than doing it through regression models. In one study, Little et al. (2006) used orthogonalization approach and found that results of latent variable interaction in SEM is better fit to the data. Thus, researcher used orthogonalization approach and created orthogonalized indicators for the latent interaction terms $Psycap \times PCB$ (PsyCap was independent variable and PCB was moderator).

Hypothesis 1 of the current study states that Psychological Capital is positively related to work engagement. The results in table 3 show that independent variable psychological capital has positive significant effect on dependent variable work engagement (unstandardized $\beta = 0.438$; S.E = 0.055; $p = 0.000$). Therefore, Hypothesis 1 is supported. Hypothesis 2 states that positive Psychological capital is negatively related to burnout. The results in table 03 indicate that psychological capital has negative significant effect on dependent variable burnout (unstandardized $\beta = -0.201$; S.E = 0.072; $p = 0.005$). Therefore, Hypothesis 2 is supported.

Table 3: SR Model Results

Paths	Path coefficients	Standard Deviation	T-Statistics	P-Value
PI -> OP	-0.155	0.055	2.821	0.002
PI*OS->OP	0.111	0.056	1.964	0.025

CI = Confidence Intervals (for 5000 bootstrap samples); P.E = Point of Estimate; S.E = Standard Error; PsyCap = Psychological Capital; PCB = psychological contract breach; WE = Work engagement; BO = Burnout

Hypothesis 3a of the study states that the relation between Positive Psychological Capital and work engagement (WE) will be moderated by PCB, such as the relationship between positive psychological capital & WE will be stronger when PCB is low and weaker when PCB is high.

The results presented in table 3 show that the latent interaction term of Psychological Capital (independent variable) and PCB (moderator) had significant negative effects on work engagement (unstandardized $\beta = -0.123$; S.E = 0.046; $p = 0.007$). Thus, the H3a, moderating effect of the PCB on the relationship between Psychological Capital and work engagement was supported.

Figure 2 presented graphical evidence in support of H3a. The slope for the relationship between Psychological Capital and work engagement moderated by PCB shows that work engagement is at its high level at the point when Psychological Capital is at high level and the moderator variable PCB is also at the low level as compared to when the independent variable is at the same position and moderator variable PCB is at the high level.

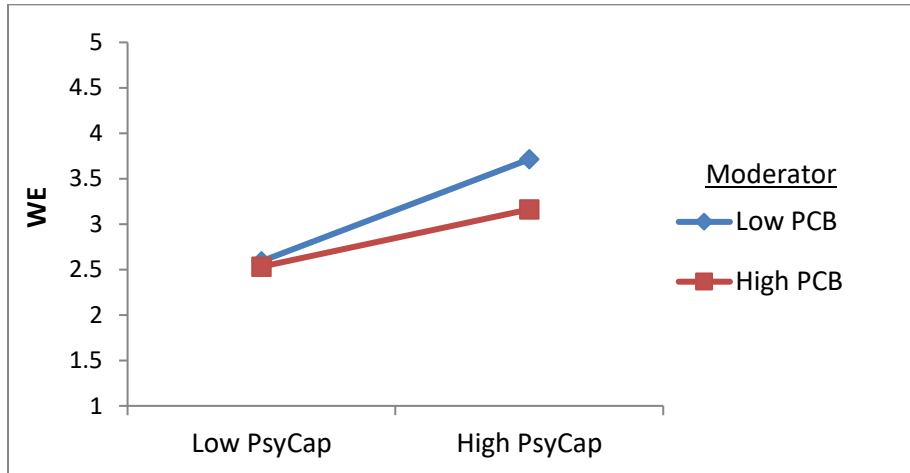


Figure: 2 Interaction effects of PCB on WE

Hypothesis 3b of the study states that The Positive relation between Positive Psychological Capital constructs and Burnout (BO) will be moderated by PCB, such as the negative relationship between positive psychological capital & BO will be stronger when PCB is low and weaker when PCB is high

The results presented in table 3 show that the latent interaction term of Psychological Capital (independent variable) and PCB (moderator) had significant negative effects on burnout (unstandardized $\beta = 0.72$; S.E = 0.042; $p = 0.001$). Thus, the H3b, moderating effect of the PCB on the relationship between Psychological Capital and burnout was supported.

Figure 3 presents the graphical evidence in support of H3b. The slope for the relationship between Psychological Capital and burnout moderated by PCB shows that relationship between Psychological Capital and burnout is strong when PCB is at the lowest level as compared to when PCB is at the highest level.

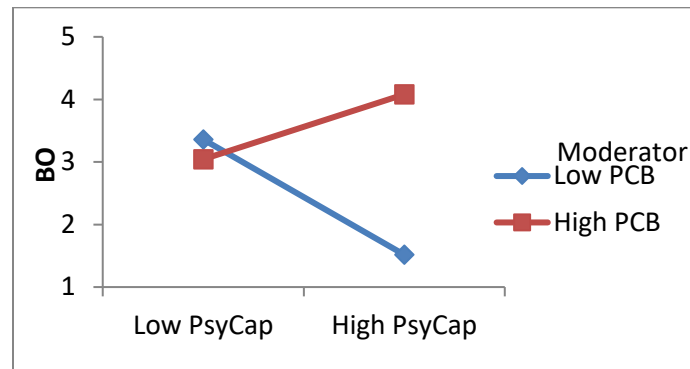


Figure: 3 Interaction effects of PCB on BO

5. Discussion of Results

This study investigated the impact of PsyCap on work engagement and burnout directly, as well as indirectly by using psychological contract breach as a moderator. Several researches hypothesize that PsyCap is positively related to work engagement Avey, Wernsing, and Luthans (2008), and negatively to burnout W Bakker Schaufeli and Bakker (2001). Also, as per results of this study, hypothesis 1 is supported, that is, psychological capital (PsyCap) is positively related with work engagement (WE). So far, number of studies have analysed the positive effect of PsyCap with work engagement (Hodges (2010); Wilmar B Schaufeli and Bakker (2004); Sweetman and Luthans (2010)) and found that in spite of long working hours and high job demands, employees with positive strengths and attributes do not show exhaustion. Instead, they shows high level of commitment and feel pleasure to work for long hours, and that results in the form of improved individual and organizational performance. As in the current study, the predictive role of PsyCap with doctors' engagement towards their work was investigated & it was found that PsyCap can make a significant positive effect on their work engagement (See Table 3). PsyCap may increase doctors' positive strengths and capacities in terms of their self-efficacy or confidence, hope, optimism and resiliency which ultimately results in the form of their increased level of motivation and commitment in spite of their long working hours and high job demands, and hence, they found to be more engaged towards their work. Hypothesis 2, that is, PsyCap has negative association with burnout is also supported (See Table 3). Also various studies have analysed this relationship (Ding et al. (2015); Luthans et al. (2005); Tong et al. (2015)) and found that individuals' psychological strengths reduces the chances of burnout. Burnout may leads to many negative outcomes like, negative work attitude, low job performance, satisfaction, and high turnover intentions (Halbesleben and Buckley (2004); Maslach and Leiter (1997); Shirom (2003); Wang et al. (2015)), but because of having PsyCap capacities, especially in the case of doctors, the prevalence of these negative outcomes decline to a great extent.

Hypothesis 3a & 3b explicates the relation between PsyCap with work engagement &

burnout and the interacting effect of psychological contract breach in between the relationships. As per the Hypothesis 3a, the positive relationship between PsyCap with work engagement is stronger when psychological contract breach is low and weaker when psychological contract breach is high, and in the same way the negative relation between PsyCap and burnout is stronger when psychological contract breach is low and weaker when psychological contract breach is high. The results of this study provides evidence that more the doctors' perceive breaches in their contracts, more they perceive feelings of burnout (anxiety, depression, frustration, etc.) and less they engage with their work. Moreover, Kozlowski, Chao, Smith, and Hedlund (1993) and Zeitlin (1995) argued that psychological contract breaches or violations have negative effects on employees. Individuals who are experiencing continuous breaches in their contracts (when their certain implicit and explicit promises made by their employer remain unfulfilled) more likely to perceive feelings of burnout and less likely to be engaged in their work (Chambel and Oliveira-Cruz (2010); Parzefall and Hakanen (2010); Topa and Morales (2005)), as they see themselves in a state of inequity. But when organizations have fully met expectations of their employees, thus it may influence differently on significance of outcomes. For instance, doctors having psychological strengths when perceive fulfilment of certain obligations or promises implied by their employers then this particular situation reduces development of breach perceptions among them, and their engagement and commitment towards their work would be high and feelings of burnout would be less Bal et al. (2013).

6. Managerial Implications

These days, psychological capital has found to be an imperative feature of the organizations and organizations consecutively find ways to make use of this developmental nature of PsyCap to enhance positive strengths and capacities of their employees in terms of self-efficacy or confidence, hope, optimism and resiliency. Nevertheless, employees' plays greater role in building their positive image, profitability. Also, since last many years, matter of employee work engagement has remained inevitable, that has captured not the interest of academicians and practitioners only, but its importance is also recognized by employers under their business domain too. Employees with positive strengths and attributes are better able to make use of their positive strengths and thus found to be more engaged with their work that results in the form of improved individual and organizational performance, increase organizational productivity, high employee retention and low turnover etc. Burnout on the other hand has become one of the serious concerns in various professional fields in relation to its negative & harmful consequences on the personal and professional life of employee and on the organization, simultaneously. These negative consequences may result in lower employee morale; increased absenteeism and turnover and lower quality and quantity of job performance. PsyCap, because of its positive influence on mind of employee, can better help them to deal with the perceptions of anxiety and depression to a great extent, that are the causes of burnout. Apart from these, Managers must take care of the

psychological contracts of employment relationships, if any. Undoubtedly, every employment relationship begins with some type of contracts (explicit and implicit) between the employer and employee and sometimes even before the hiring of an employee that affects not only the employees, but the organization as a whole. Unfulfilling of any of these explicit or implicit contracts made with employee, resulting in development of contract breach perceptions among employees. Like burnout, psychological contract breach again has negative consequences on the employment relationship from the side of employee in the form of lack of commitment, withdrawal, turnover and burnout etc. In fact, Managers should constantly engage in the activities connected with development of employees' PsyCap attributes by assisting organizations in developing such practices that work best for the development of employees' Such as, by arranging appropriate trainings, workshops, and other career development programme, by empowering them with decision making abilities, etc., and that also enhance their level of confidence and positive view towards organization. Besides, these positive initiatives may also facilitate more engagement and less incidences of burnout among employees.

7. Limitations & Future Directions

This study encompasses several limitations which can provide room for future researchers to work on. At the outset, cross-sectional research design is used instead of longitudinal. In addition, the sample size used for this study is limited, as data is collected from few cities of Pakistan only. Hence, researchers in future can also investigate the same model through a longitudinal study and with the larger samples by including different cultures & contexts such as, nurses, academicians, and other service organizations etc. Apart from these, other imperative limitation of the study is that the impact of PsyCap through its different dimensions (Self efficacy, hope, resiliency and optimism) has not been investigated separately. Besides, the different dimensions of work engagement (vigour, dedication & absorption) and burnout (emotional exhaustion, cynicism & Inefficacy) were not investigated separately. Therefore, future researchers can check the effect overall PsyCap or through its various constructs, with different dimensions of work engagement & burnout separately.

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