

## RESEARCH

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# *How does Organizational Justice influence Job Satisfaction and Organizational Commitment? Explaining with Psychological Capital*

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### *Executive Summary*

'Looking fair' is the desired goal of individuals and organizations. Fairness perceptions of organizational actions, by employees, translate into various favourable work outcomes. For instance, perceptions of fairness, defined as organizational justice, significantly influences attitudinal variables as job satisfaction and organizational commitment. However, the existing literature does not offer complete picture of this influence. In other words, the 'underlying mechanism' governing the influence of organizational justice on job satisfaction and organizational commitment is not fully understood.

On the basis of extant literature review and arguments grounded in the social exchange theory, and 'broaden and build' theory of positive emotions, this study identifies psychological capital (PsyCap) as an explanatory mechanism for the influence of organizational justice on job satisfaction and organizational commitment.

The primary objective of this study was to test a theoretical and structural model that hypothesized mediation of PsyCap in the influence of organizational justice on job satisfaction and organizational commitment.

A survey-based methodology, with standardized scales was used. A pilot study was conducted to test the scale properties. A sample of 440 employees from the Indian service sector industry was drawn. A two-step process of analysis, with AMOS 16, was employed to test the structural model. The scales were assessed and found fit for reliability and validity criteria. Besides examining the significance of indirect effects using the bias-corrected confidence intervals with two-thousand bootstrap samples, the study also applied alternative/nested structural equation models to test the mediation hypotheses.

Results are found to be consistent with the stated hypotheses thus confirming the mediation of PsyCap in the influence of organizational justice on job satisfaction and organizational commitment. The findings of this study advance available knowledge on job satisfaction and organizational commitment; and provide impetus to research in this domain by identifying PsyCap as an intervening variable. The study thus extends the application of PsyCap as an organizational variable capable of translating the effect of justice on satisfaction and commitment. It also supports and extends the view of previous researchers that PsyCap is a significant positive organizational behaviour (POB) variable, as it is capable of performance improvement and is open to development.

From a managerial perspective, given the 'open to control' nature of PsyCap, it renders a significant tool in the hands of managers to control the satisfaction and commitment of their employees. Moreover, controlling PsyCap is much easier as compared to directly controlling justice perceptions.

#### KEY WORDS

Organizational Justice

Job Satisfaction

Organizational Commitment

Psychological Capital

Fairness Perception

Social Exchange Theory

There is substantial evidence to support the contention that fairness perceptions influence employees' attitudes and behaviours in the organizational context; however, researchers and practitioners do not seem to have an adequate understanding of the underlying mechanisms. The purpose of this study is to further the understanding of the influence of organizational justice on job satisfaction and organizational commitment.

Practitioners and organizational researchers have increasingly recognized the vital importance of human capital in a continually changing business environment. Parallel to this popular scene of organizational advancement, there is also an overall upgradation in the standard of human life. Broadly, the two phenomena of organizational advancement and standard of living go hand in hand. Therefore, organizations are increasingly focusing on the developmental needs of their organizational members.

At the macro level, successful organizations are the ones that provide their employees opportunities for the development of their individual psychological strengths, thereby facilitating reasonable avenues for the employees to be satisfied and committed to the organization. 'Looking fair' or having a reputation of being fair is a desired goal of any individual or organization (Greenberg, 1990). Such employee perception of fairness of the organization's actions translates into various favourable employee outcomes and predicts a number of attitudes and behaviours at work (Irving, Coleman, & Bobocel, 2005). However, varying degrees of fairness can have differing outcomes for individual employees (Skarlicki & Folger, 2003). Moreover, justice is a critical component in the study of organizations and is found to impact several other outcomes, either directly or through other mediating variables (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Cropanzano, Byrne, Bobocel, & Rupp, 2001; Irving, et al., 2005; Rego, Lopes, & Cunha, 2009a; Rego, Machado, Leal, & Cunha, 2009b).

It is apparent that individuals differ in the degree of their commitment to the organization (Gouldner, 1960). At both the extremes, variations in the degree of commitment have raised questions for practising managers; such variation is often influenced by employees' perception of justice (Korsgaard, Schweiger, & Sapienza, 1995; Loi, Hang-Yue,

& Foley, 2006; Lowe & Vondanovich, 1995). Similarly, perceptions of justice are also found to influence job satisfaction, another significant variable showcased in the organizational literature (Ambrose, Hess, & Ganesan, 2007; Elamin & Alomaim, 2011). Various forms of justice have been linked to different facets of job satisfaction (Irving, et al., 2005).

An understanding of the psychological processes involved in fairness perception would contribute to organizational theory and application (Skarlicki & Folger, 2003). Recent literature identifies positive psychological capital (PsyCap) as a critical variable which correlates with many favourable employee outcomes (Avey, Luthans, & Youssef, 2010; Avey, Wernsing, & Luthans, 2008; Culbertson, Fullagar, & Mills, 2010; Larson & Luthans, 2006; Luthans, Norman, Avolio, & Avey, 2008; Luthans & Jensen, 2005). Researchers have called for studies to explain how justice perceptions affect and promote PsyCap (Rego, et al., 2009a). Likewise, in the context of the study of organizational justice, there is a call for shift and progress from the theoretical issues to assessment and implementation of the impact of the interventions designed to promote organizational justice (Greenberg, 2009). Taking a call from this view, PsyCap can be influenced by various organizational interventions, to further positively influence organizational justice outcomes (e.g. job satisfaction and organizational commitment).

As an identified gap in the literature, the question of "how fairness perceptions influence the level of satisfaction and the degree of commitment?" is not completely understood. Drawing support from the literature, and using classical (social exchange theory) and contemporary theories ('broaden and build' theory of positive emotions), it is proposed that the effect of justice on satisfaction and commitment can be better explained using PsyCap as the mediating variable.

Hence, the primary contribution of this study lies in explicitly testing a structural (equation) model that positions PsyCap as mediators for the influence of organizational justice on job satisfaction and organizational commitment. It is expected that the study will make a modest contribution to the existing research on commitment and satisfaction, and also provide insights to practising managers on how commitment and satisfaction of their organizational members can be enhanced.

## THEORETICAL FOUNDATION

The argument for proposing PsyCap as mediator is grounded in the social exchange theory. It posits that all human relationships are formed by the use of a subjective cost-benefit analysis and the comparison of alternatives (Blau, 1964; Emerson, 1976). It views social relations as an 'exchange process' (Blau, 1989) involving two-steps. First, the actor's behaviour is contingent upon the reward from the environment; and second, the environmental reward is contingent upon the actor's behaviour (Emerson, 1976; Homans, 1958). Based on this theory, it is contended that, positive organizational action (stimulus) that is perceived to be 'fair' is the starting point for the proposed model. Consequently, an employee would judge this action of 'perceived fairness' by comparing the received output with comparable others; this can be understood on the basis of equity theory, which says that employees seek to maintain equilibrium between the inputs and net outcomes that they receive from the job, against the perceived input to output ratio of the comparable others (Adams, 1966).

The role of PsyCap in the influence of justice on satisfaction and commitment can be understood in the light of 'broaden and build' theory of positive emotions. According to this theory, when positive emotional experiences occur, they frequently lead to positive cognition, which allows an individual to build personal resources (Fredrickson, 2001; 2004). The relation between an employee and an organization by its implicit nature is of social exchange. The employee enters this relation by taking organizational membership and the organization agrees to the same by giving such membership. At the most primary level, the employee would seek fair treatment in the organization; this assumption is in congruence with the view that justice is the most fundamental aspect of the workplace (Cosier & Dalton, 1983). Further, just as injustice elicits negative emotions (Greenberg, 1987), justice would elicit positive emotions. On the basis of the 'broaden and build' theory, it can be inferred that the perception of fairness that triggers positive emotions would result in broadening of the cognitive context. This in turn results in building up of the personal resources (Fredrickson, 2001; 2004). Following this, when an individual experiences building of personal resources because of perceived organizational justice, it is likely to cause an attitudinal or affective reaction to the job, and would also act as a cause for employee to identify with the organiza-

tion. This attitudinal or affective reaction to the different aspects of the job is referred to as job satisfaction (Spector, 1985); and the strength of an employee's identification and involvement with an organization is defined as organizational commitment (Curry, Wakefield, Price, & Mueller, 1986; Porter, Steers, Mowday, & Boulian, 1974). Thus, the perception of organizational justice that contributes to making up of an individual's PsyCap would essentially translate into job satisfaction and organizational commitment. Consistent with this reasoning, this paper develops and tests the mediation of PsyCap for the influence of organizational justice on job satisfaction and organizational commitment.

### Key Variables

Job satisfaction is a positive affective (Smith, Kendall, & Hulin, 1969) and attitudinal orientation towards a job (Spector, 1985); it is a primary outcome of work experiences (Igbaria, Parasuraman, & Badawy, 1994). It is both a global (overall satisfaction) and a facet-specific concept (satisfaction with various aspects of work) (Cook, Hepworth, Wall, & Warr, 1983). This paper uses the five-factor conceptualization of job satisfaction, namely, satisfaction with work itself, pay, promotion, supervision, and coworkers (Stanton, et al., 2001).

The second outcome variable, organizational commitment, is the strength of an individual's identification with and involvement in a particular organization (Curry, et al., 1986). As a psychological state, commitment characterizes employee's relationship with the organization and has implications for membership in the organization (Meyer & Allen, 1991). It has three components: affective attachment to the organization (affective commitment), perceived cost associated with leaving the organization (continuance commitment), and obligation to remain with the organization (normative commitment).

The structural model hypothesized organizational justice as the predictor variable. Organizational justice influences both job satisfaction and organizational commitment (Loi, et al., 2006). It is defined as the degree of perceived fairness in an organization (Colquitt, 2001; Colquitt, et al., 2001; Greenberg & Colquitt, 2005). The concept is germane to an organization, primarily because employees feel positive about their affiliation (with the organization) to the extent that they perceive the organization to be fair (Simpson & Kaminski, 2007). Organiza-

tional justice is a four-factor construct: distributive (quality of decision outcomes), procedural (fairness of the processes that lead to decision outcomes), interpersonal (treatment of employees by authorities when procedures are enacted), and informational justice (explanations about how and why outcomes are distributed in a particular manner) (Colquitt, 2001; Greenberg, 1993; Thibaut & Walker, 1975).

PsyCap is a construct label given to the best-fit POB (positive organizational behaviour) capacities. The criteria for such capacity is its uniqueness, a valid measure, openness to development (being 'state-like'), and capability of performance improvement (Luthans, 2002a; 2002b). PsyCap is characterized by four factors/components; hope (perseverance towards a goal and creating paths in its direction), optimism (making positive attributions about success), self-efficacy (confidence in one's ability to succeed), and resiliency (to bounce back from extreme situations). These four are the core concepts of POB and PsyCap as a higher-order core concept (Avey et al., 2008).

## HYPOTHESES

Evidence from literature presents job satisfaction as a relative stable state (Steel & Rentsch, 1997); still a number of other researchers have found that there can be variability in levels of satisfaction due to organizational level variables (Arnold & Spell, 2006; Bowling, Beehr, Wagner, & Libkuman, 2005; Levin & Stokes, 1989). Job attitudes, like job satisfaction, have both affective and cognitive components (Cialdini, Petty, & Cacioppo, 1981; Petty, Wegener, & Fabrigar, 1997). A strong body of evidence suggests that, justice perception affects the levels of experienced job satisfaction (Masterson, Lewis, Goldman, & Taylor, 2000; Moorman, 1991).

Both distributive and procedural justice play a central role in determining job satisfaction (Dailey & Kirk, 1992). A multilevel investigation study (Loi, Yang, & Diefendorff, 2009) reports that interpersonal and informational justice are positively related to job satisfaction. Another study asserts that procedural justice is a better predictor of 'benefits' satisfaction than distributive justice (Arnold & Spell, 2006).

*Hypothesis 1:* The perception of organizational justice positively affects employees' job satisfaction.

Researchers have studied the relation between individual

differences to work attitudes (Curry, et al., 1986; Jerdee, 1966; Martins & Parsons, 2007; Steers, 1977); organizational commitment is one such variable. Personal attributes, job characteristics, and work experience are categorized as three determinants of commitment (Steers, 1977). Organizational justice as a component of organizational structure affects the employees' levels of commitment (Curry et al., 1986). One study reports that distributive justice is a better predictor of commitment than procedural justice (Lowe & Vondanovich, 1995); another set of studies report that, commitment is mainly related with procedural justice and substantially with other forms of justice (Cohen-Charash & Spector, 2001; Tremblay, Cloutier, Simard, Chenevert, & Vandenberghe, 2010).

*Hypothesis 2:* The perception of organizational justice positively affects employees' organizational commitment.

## Organizational Justice and Job Satisfaction: Mediation of PsyCap

The relationship between justice perceptions and PsyCap seems intuitively acceptable, since both concepts at their outset are positive in nature. It is recognized that much of the early (e.g. the theories of motivation, emotion) as well as contemporary (e.g. satisfaction, commitment, positive affect, citizenship, justice, etc.) literature in OB had an inherent positive orientation (Luthans, Avolio, Avey, & Norman, 2007a).

Based on the equity theory, Greenberg (1987) noted that whenever employees were either overpaid or underpaid in comparison to another employee with equal contributions, it triggered an unpleasant state, which led changes in the level of experienced job satisfaction. Since injustice causes an unpleasant or negative affect, justice would cause positive affect. In this direction, the 'broaden and build' theory maintains that, positive affect provides a broad cognitive context, which in turn builds an individual's personal resources as intellectual, social, and psychological resources (Fredrickson, 2004). Drawing support from this theory, it is argued that, perceived justice will elicit positive emotions. The condition of positive emotions would broaden an employee's cognitive context and build personal and psychological resources (Fredrickson, 1998; 2001; 2004). Further, PsyCap is a construct label given to the best fit capacities of an individual

that comprises four core capacities of hope, optimism, resilience, and self-efficacy (Luthans, Avey, Avolio, Norman, & Combs, 2006; Luthans, et al., 2007a). Therefore, a link between justice and PsyCap can be observed as the presence of organizational justice would create positive emotion, which helps to build an individual's PsyCap, qualifying as a psychological resource.

**Hypothesis 3a:** Organizational justice positively influences employees' PsyCap.

Job satisfaction is defined as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences (Locke, 1976; Locke, Smith, Kendall, Hulin, & Miller, 1964). It consists of an affective (Locke, 1976) and a cognitive component (Organ & Near, 1985). There is a general expectancy that success is derived from optimism and the belief in one's own abilities is derived from efficacy. Based on this linkage, literature suggests that employees who are high on PsyCap report being more satisfied with their job (Luthans, et al., 2007a). Studies have found a significant positive relationship between PsyCap and satisfaction (Avey, et al., 2010; Avey, et al., 2008). Besides this, PsyCap is reported to be a better predictor of satisfaction than the personality traits such as conscientiousness and extraversion (Luthans, et al., 2007a). Positivity contributes to increased satisfaction, greater work happiness, and higher organizational commitment (Luthans, et al., 2008); further, the core-constructs of PsyCap, like hope and resilience, independently cause job satisfaction (Youssef & Luthans, 2007). Thus, on the basis of evidences from literature, it is hypothesized that,

**Hypothesis 3b:** Employees' PsyCap positively influences their job satisfaction.

The authors do not differ from the views of the existing researchers that justice leads to satisfaction (Arnold & Spell, 2006; Dailey & Kirk, 1992). However, it is contended that such satisfaction is more at the surface level and relatively short-lived. Hence, it is proposed that, perception of organizational justice influences PsyCap, which in turn influences job satisfaction. In this mediation relation, when an employee feels satisfied primarily because of his/her PsyCap (Avey, et al., 2010; Avey, et al., 2008; Luthans, et al., 2007a), which is caused by a job/organizational characteristic, then such satisfaction would be more deep-rooted and lasting, as it arises out of his/her strengths (referred here as PsyCap).

The mediation of PsyCap in the influence of organizational justice and job satisfaction can be explained using the conservation of resource theory, which suggests that individuals strive to obtain, build, and conserve valued resources (Hobfoll, 1988; 1989). Using this theory, it is argued that, availability of organizational justice would provide an individual employee with an additional source of enhancing or adding up to their psychological resource, where PsyCap is a valued psychological resource. In different studies, the core constructs of PsyCap, namely, hope, optimism, resilience, and self-efficacy have been categorically described as psychological and personal resources (Avey, Luthans, & Jensen, 2009; Bandura, 1997; Hobfoll, 2001). Thus, organizational justice would function as a source of enhancing one's PsyCap, which in turn would translate into higher levels of perceived job satisfaction.

**Hypothesis 3c:** Employees' PsyCap mediates the relationship between organizational justice and job satisfaction.

### Organizational Justice and Organizational Commitment: Mediation of PsyCap

The relationship of commitment has been studied with many of its antecedent variables such as organizational support, professionalism, workplace spirituality, and human resource management practices (Bartol, 1979; Curry, et al., 1986; Panaccio & Vandenberghe, 2009; Savaneviciene & Stankeviciute, 2011; Vandenberghe, 2011); but there are limited studies identifying the influence of employees' PsyCap on their levels of organizational commitment. Similar to the case with satisfaction, employees who score high on PsyCap are the ones who are more committed towards their organization; this relationship is inferred out of the general expectancy theory which says that, success is derived from optimism and the belief in one's own abilities is derived from efficacy (Luthans, et al., 2008). Further, PsyCap is also argued to be related to commitment because the organization fulfils an individual employee's needs for efficacy and accomplishment for those who are high on PsyCap (Avey, Reichard, Luthans, & Mhatre, 2011).

The positivity of an individual is likely to contribute to higher organizational commitment (Youssef & Luthans, 2007). A study in the healthcare industry reports a linkage between self-reported PsyCap and supervisors' ratings of their commitment to the organizational mission, specifically indicating a significant positive relationship

between PsyCap and commitment (Luthans & Jensen, 2005). Another study on manufacturing employees has also found a significant influence of PsyCap and organization commitment (Larson & Luthans, 2006). In a cross-sectional sample of employees, hope and resilience have been found to be related to organizational commitment (Youssef & Luthans, 2007). In a comparison with other predictor variables, PsyCap has been found to be more strongly related to affective organizational commitment than core self-evaluations, conscientiousness, and extraversion (Youssef & Luthans, 2007), indicating once again that PsyCap is the greatest contributor to predicting organizational commitment. Utilizing a set of three diverse samples, the influence of PsyCap on organizational commitment is reaffirmed (Luthans, et al., 2008). A study on the soldiers of US Army reports that hope and optimism correlate with affective commitment but not with continuance commitment (Bressler, 2010). More importantly, a recent meta-analysis has projected that PsyCap is significantly and positively related to organizational commitment (Avey, et al., 2011). Given strong evidences from literature, it is hypothesized that,

**Hypothesis 4a:** Employees' PsyCap positively influences organizational commitment.

It may be noted that perceptions of justice are spread across a continuum. There is nothing called as "no justice"; rather it is the degree of fairness/justice that an employee perceives. So, even if such a perception is low or high for an employee, it would not directly get translated into commitment or no commitment. It is argued here that, such a causal effect of justice on commitment would be directed through an employees' PsyCap. Higher the employees' PsyCap, higher is the probability that they would remain committed to the organization, despite modest levels of perceived fairness, because: (1) they are hopeful that the fairness situations would improve in the organization; (2) they are optimistic about such a situation and about the overall organizational canvas; (3) they are confident of their own abilities and therefore are less affected by any fairness contingencies in the organization; (4) they are resilient enough to bounce back – in case there are any contingencies arising out of unfair situations. Based on this argument, it is hypothesized that,

**Hypothesis 4b:** Employees' PsyCap mediates the relationship between organizational justice and organizational commitment.

## RESEARCH DESIGN

### Pilot Study

The proposed mediation was tested on a sample of employees from the Indian industry. Prior to the main study, a pilot study was conducted across 53 employees from two organizations specifically to assess the scale properties. The measures used included (a) the twenty-item, four-factor organizational justice scale (distributive, procedural, interpersonal, and informational justice) (Colquitt, 2001), (b) the abridged version of Job Descriptive Index (JDI), which is a 25-item, five-factor scale for job satisfaction (work itself, pay, promotion, supervision, and coworkers) (Smith, et al., 1969; Stanton, et al., 2001), (c) a 24-item scale as a measure of organizational commitment (Allen & Meyer, 1990) having three factors of commitment (affective, normative, and continuance), and (d) the popular 24-item scale for PsyCap (Luthans, Youssef, & Avolio, 2007b) wherein the items are distributed across four components of hope, optimism, self-efficacy, and resilience.

The measures reported adequate reliability estimates. The scales were also found to have face validity and the items did not seem confounding to the respondents. The scales for construct reliability were tested. Convergent and discriminant validity were the two facets (Campbell & Fiske, 1959). AVE (Average Variance Extracted) greater than 0.5 (Fornell & Larcker, 1981) and CR (Construct Reliability) greater than 0.7 signified convergent validity (Hair, Jr., Black, Babin, Anderson, & Tatham, 2006). For discriminant validity, AVE of the latent variable should be greater than its SV (shared variance) with other latent variables (Fornell & Larcker, 1981). As a result of the pilot study, validity of the scales was established.

### Main Study

#### Sampling and Data Collection

On the basis of the two methods of sample size estimation (Black, 2004; Hinkin, 1995; 2005; Rea & Parker, 1997) and argument on sample size (Cohen, 1996; Hair, Jr., et al., 2006), it was decided to collect data from approximately 400 respondents.

The questionnaire was prepared in printed and online versions. For both formats, the questionnaire was split into two parts; the first part contained 44 items of the

predictor and mediator variable; the second part contained 49 items of the two criterion variables. The respondents were requested to observe a minimum time gap of one hour between their response to the two parts. The questionnaire contained a cover letter which provided brief instructions to the respondents and informed them of the purpose of the study. Two methods of controlling common method bias was used: first, temporal separation of the criterion and predictor variables (MacKenzie & Podsakoff, 2012; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003); second, psychological separation by labeling the questionnaire differently, which made it appear that the measurement was not related to the actual measurement of the criterion or the predictor variable (Podsakoff, et al., 2003). In almost all cases, questionnaires were personally distributed to the respondents and a brief verbal introduction about the purpose of the study was given. For the online version, emails were sent personally; it contained an introduction and hyperlinks to the two parts of the questionnaire.

A total of 627 printed versions of the questionnaires were distributed; of these, 393 were returned by the respondents (62% gross response rate), which included 39 incomplete responses. Hence, 354 were found to be complete and usable for analysis (56% net response rate). The online version of the questionnaire was e-mailed to 109 respondents; 86 responded to both parts (78% net response rate). Thus the final sample available for analysis was that of 440 respondents with an aggregate response rate of nearly 60 percent.

## ANALYSIS AND RESULTS

### Preliminary Data Analysis and Descriptive Statistics

The data were tested for linearity and normality and were found to satisfy the assumptions of Multivariate Data Analysis (Hair, Jr., et al., 2006). Since, there was only one independent variable, multicollinearity estimates were not necessary.

In the main sample of 440 respondents, 80 per cent were males; 60 per cent were in the age group of 25-35 years, 25 per cent in the age group of 36-45 years, and the remaining were above 46 years. All respondents were based in Tier I and Tier II cities. Table 1 presents the means, standard deviations, reliability (Cronbach's  $\alpha$ ), and zero-order correlations.

### Assessment of Internal Consistency

All scales except for organizational commitment ( $\alpha=0.71$ ) reported good alpha coefficient. Therefore, items with total correlation less than 0.3 were eliminated from the scale to improve the corresponding alpha values (Everitt & Skrondal, 2010; Field, 2005). As such items adversely influence results in the SEM analysis. Thus, four items of organizational commitment scale (e.g. OC9. "I am not afraid of what might happen if I quit my job without having another one lined up"), were eliminated from further analysis. The eliminated items were also the ones which were negatively worded, and thus the elimination limited the possibility of having negative correlation with other items (Hackett, 2007). After the required modification, all the scales obtained an acceptable coefficient alpha ( $>0.80$ , see Table 1). Subsequently, CFA (confirmatory factor analysis) was performed using Maximum Likelihood Estimation method (ML) as a method of validation and examination of dimensionality of the measurement scales (Byrne, 2010; Hair, Jr., et al., 2006).

### Data Analysis

A two-step process of analysis (Anderson & Gerbing, 1988; Medsker, Williams, & Holahan, 1994) with AMOS 16 (Byrne, 2010) was employed to test the hypotheses. Two tests were used to verify the hypotheses. In Test 1, the significance of the indirect effects was examined using the bias-corrected confidence intervals (CIs) (Greenglass & Fiksenbaum, 2009; MacKinnon, Lockwood, & Williams, 2004) with two thousand bootstrap samples generated at 95 percent bias-corrected CIs. In Test 2, alternative model

**Table 1: Means, SDs, Reliability and Zero-order Correlation Coefficients**

Scale	Items	Mean	SD	$\alpha$	OJ	PsyCap	S	C
OJ	20	3.579	0.64	0.93	1			
PsyCap	24	3.653	0.466	0.88	0.520**	1		
Satisfaction (S)	25	3.525	0.542	0.89	0.586**	0.571**	1	
Commitment (C)	21	3.225	0.393	0.8	0.224**	0.299**	0.428**	1

\*\*  $p < 0.01$

comparison procedure was used to evaluate the structural model (Joreskog, 1993).

### Confirmatory Factor Analysis

CFA was conducted for all five scales with the main sample. All constructs achieved acceptable level of fit, with some model respecification. This respecification was done on the basis of three criteria: large modification indices ( $\leq 4$ ) (Dabholkar & Bagozzi, 2002), high standardized residual covariance ( $>4.0$ ) (Hair, Jr., et al., 2006), and low standardized factor loading ( $<0.35$ ) (Hatcher, 1994). Following these three suggestions/criteria, items were eliminated to achieve acceptable level of fit for the measurement models.

For organizational justice scale (Colquitt, 2001), fit was achieved ( $\chi^2/df = 2.67$ , GFI = 0.917, IFI = 0.951, TLI = 0.94, CFI = 0.951, RMSEA = 0.062), and no item was required to be eliminated. For job satisfaction scale (Stanton, et al., 2001), eight items and for organizational commitment scale (Allen & Meyer, 1990), twelve items were eliminated. Fit measures for the two scales were  $\chi^2/df = 2.950$ , GFI = 0.928, IFI = 0.926, TLI = 0.905, CFI = 0.925, RMSEA = 0.067, and  $\chi^2/df = 2.886$ , GFI = 0.953, IFI = 0.953, TLI = 0.931, CFI = 0.952, RMSEA = 0.066, respectively. PsyCap scale (Luthans, Youssef, & Avolio, 2007c) ( $\chi^2/df = 2.765$ , GFI = 0.913, IFI = 0.924, TLI = 0.911, CFI = 0.924, RMSEA = 0.063) was also subjected to item elimination in order to achieve fit; hence for further analysis, this scale contains 18 items.

### Construct Validity

Convergent validity was assessed using two measures; first, by determining whether each indicator's estimated path coefficient on its underlying construct was significant with a minimum loading of 0.5 (Anderson & Gerbing, 1988; Byrne, 2010; Hair, Jr., et al., 2006); second, by using squared multiple correlations (item reliability) (Hair, Jr., et al., 2006).

CFA results of each indicator showed significant factor loadings greater or nearer to the recommended level of 0.50, providing evidence for convergent validity. In addition, the squared multiple correlations of the indicators in the measurement model reached the criteria of 0.40 (Taylor & Todd, 1995). However, two items which did not meet the criteria were eliminated; these were, one each from job satisfaction (item no. S22 "my coworkers are bor-

ing") and organizational commitment (item no. C13 "right now, staying with my organization is a matter of necessity as much as desire"). The assessment of convergent validity also includes the measure of construct reliability (Table 2); it should be greater than 0.70 (Nunnally & Bernstein, 1994). The respecified scales displayed adequate reliability. Thus, taken together, the measurement models have sufficient convergent validity.

**Table 2: Construct Reliability**

Construct	Number of Items	Item Loadings	Construct Reliability
Organizational Justice	20	0.884 - 1.456	0.931
PsyCap	18	0.673 - 1.788	0.907
Job Satisfaction	15	0.559 - 1.79	0.856
Organizational Commitment	11	0.302 - 1.533	0.812

### Discriminant Validity

Two tests were conducted for assessing discriminant validity of the constructs. First, chi-square difference test for each of the two measurement models, constrained and unconstrained, was conducted. In the constrained model, covariance between the two constructs was fixed at 1.0, whereas in unconstrained model, the two constructs freely correlated. The significant chi-square difference between the constrained and unconstrained models thus provides evidence of discriminant validity (Anderson & Gerbing, 1988; Bagozzi, 1980; Bagozzi & Phillips, 1982) (see Table 3). In addition, a significantly lower chi-square value for the unconstrained model indicates goodness-of-fit, providing evidence that discriminant validity is achieved (Bagozzi & Phillips, 1982; Klein, Ettenson, & Morris, 1998).

As a second method, chi-square discriminant validity test (Dabholkar & Bagozzi, 2002) was used. All constructs in pairs of two were tested for their distinctiveness ( $p < 0.001$ ) and then compared with the individual scale CFAs of the respective constructs. Subsequently, the discriminant validity of all the five constructs was also established with the chi-square discriminant validity test method.

### Hypotheses Testing

The tenable mediator model examines the mediating role of PsyCap in the influence of organizational justice on job satisfaction and organizational commitment. There are five direct and two indirect/mediation hypotheses. An indirect effect/hypothesis connotes a causal path whereby a predictor variable causes a mediating vari-

**Table 3: Chi-square Difference Test (Discriminant Validity)**

Links	Freely Estimated (unconstrained)			Fixed (constrained)			
	df	$\chi^2$	r	df	$\chi^2$	$\Delta\chi^2$	$\Delta df$
OJ-PsyCap	656	1610.05	0.638	657	1762.91	152.86	1
OJ-S	584	1782.79	0.795	585	2026.29	243.50	1
OJ-C	459	1855.72	0.451	460	1925.05	69.33	1
PsyCap-S	517	1508.17	0.787	518	1743.93	235.77	1
PsyCap-C	400	1652.14	0.628	401	1797.46	145.31	1
S-C	344	1910.23	0.738	345	2100.79	190.56	1

able, which in turn causes the criterion variable (Sobel, 1990).

The direct model here refers to the structural model with the causal effect of organizational justice on job satisfaction and organizational commitment. The fit measure of the direct path model indicated an overall good fit ( $\chi^2/df = 2.237$ , GFI = 0.84, IFI = 0.90, TLI = 0.88, CFI = 0.90, RMSEA = 0.053). Further, examination of the regression weights of the hypothesized causal paths demonstrated that organizational justice influenced job satisfaction (H1,  $\beta = 0.865$ ,  $p < 0.001$ ) and organizational commitment (H2,  $\beta = 0.59$ ,  $p < 0.001$ ). This supported the first two hypotheses.

The mediation of PsyCap was examined through the structural model with causal path influence of organizational justice on job satisfaction and organizational commitment, in the presence of PsyCap as a mediator. The observed fit indices showed a good fit ( $\chi^2/df = 1.982$ , GFI = 0.82, IFI = 0.90, TLI = 0.88, CFI = 0.90, RMSEA = 0.047). Organizational justice had a significant influence on PsyCap (H3a,  $\beta = 0.633$ ,  $p < 0.001$ ); the influence of PsyCap on job satisfaction was also found significant (H3b,  $\beta = 0.553$ ,  $p < 0.01$ ). The inspection of the indirect causal paths, using the bias-corrected CIs with 2,000 bootstrap sample generated at 95 percent CIs, highlighted the indirect significant influence of organizational justice on job satisfaction (H3c,  $\beta = 0.35$ ,  $p < 0.001$ ), confirming the mediation of PsyCap.

The effect of PsyCap on organizational commitment was found to be significant (H4a,  $\beta = 0.593$ ,  $p < 0.001$ ). Review of the indirect effect of organizational justice on organizational commitment, via PsyCap, confirmed the mediation effect as significant in this relationship (H4b,  $\beta = 0.375$ ,  $p < 0.001$ ).

### Comparing Alternative Models for Mediation Test

Against the baseline model (structural model for mediation of PsyCap), the fit indices of four alternative models (Joreskog, 1993; Wang, Law, Hackett, Duanxu, & Zhen, 2005) were compared (Table 4). These alternative models respecified the causal paths for the arrangements of the mediator and the criterion variables. Model 1 was the baseline model that represented the mediating model for PsyCap. Model 2 contained an additional direct path from OJ to job satisfaction and organizational commitment; it showed a relatively poor fit as compared to the baseline model. Model 3 accounted for fit in presence of a correlation between the two criterion variables (job satisfaction and organizational commitment). Models 4 and 5 tested for a structural model by assuming job satisfaction and organizational commitment as antecedents of one another, respectively. However, all the three models (3, 4, and 5) reflected a relatively poor fit as compared to the baseline model. These models were compared because some studies contend that job satisfaction is a determinant of organizational commitment (Angle & Perry, 1981; Buchanan, 1974; Koch & Steers, 1978; Reichers, 1985; Steers, 1977); others suggest a reverse ordering (Bateman & Strasser, 1984), whereas a third possible view suggests that commitment and satisfaction are not linked to each other as antecedent or determinant to one another (Curry, et al., 1986).

Model 1 (i.e., the baseline model) was thus nested within models 2-5; where Model 1 showed a fairly acceptable levels of fit (compared to other alternative models). Hence under the principle of parsimony, the results suggested that the baseline models best fitted the data. Therefore, it is concluded that, PsyCap mediates the influence of organizational justice on job satisfaction and organizational

**Table 4: Comparison of Structural Equation Models**

Model & Structure	$\chi^2/df$	GFI	IFI	TLI	CFI	RMSEA
1. J → P → S, C <sub>Baseline</sub>	1.982	0.820	0.90	0.89	0.90	0.047
2. J → P → S, C <sup>(J→S,C)</sup>	2.233	0.768	0.845	0.829	0.843	0.053
3. J → P → (S, C) <sup>(DVs correlated)</sup>	2.201	0.770	0.849	0.833	0.847	0.052
4. J → P → S → C	2.235	0.767	0.845	0.829	0.843	0.053
5. J → P → C → S	2.312	0.757	0.835	0.818	0.833	0.055

commitment. Further, it should be noted that the alternative models tested for fit indices were part of the post-hoc analyses; and the construct ordering was not derived from the data, rather it is grounded in the theoretical explanations. Similar idea was also noted by Joreskog (1993, p. 298) that, “if the model fits the data, it does not mean that it is the ‘best’ model; direction of causation and causal ordering of the constructs cannot be determined by the data, it must be based on logical grounds”.

## DISCUSSION

This study is an endeavour, at the junction of two domains of OB and POB, to explore the extended and specific applications of PsyCap as a tool for organizational enhancement. The need for the study was particularly seen as a response to the existing state of literature on the relationship between fairness, satisfaction, and commitment. The existing literature has not fully explained the probable causes for the influence of organizational justice on job satisfaction and organizational commitment. Hence, the contribution of this study lies explicitly in testing a theoretical and structural model that positions PsyCap as a mediator in the influence of organizational justice on job satisfaction and organizational commitment.

Besides testing for the two mediation hypothesis, five direct relationships were also examined, which established, (1) justice as an antecedent of job satisfaction, organizational commitment, and PsyCap; (2) PsyCap as an antecedent of job satisfaction and organizational commitment. These findings are consistent with the existing literature. Further, the hypothesized mediation effects found support, thus reaffirming the arguments drawn from the social exchange theory and the ‘broaden and build’ theory of positive emotions.

Conclusively, it would be relevant to present reasons as to why this particular study was needed, with implicit logic for what could have been the reasons for absence of

such a study in the organizational literature. Evidence for this argument can be traced in a meta-analytic review (Colquitt et al., 2001) of 25-years of organizational justice research. This review contains almost no mention of the underlying influence of the organizational justice mechanism, although it talks significantly of the influence of organizational justice on various work outcomes, particularly job satisfaction and organizational commitment. Further, there is scant availability of research in the organizational domain that has studied such an underlying influence. For instance, the only study available is by Aryee, Budhwar, and Zhen Xiong (2002), which studied trust as a mediator. Another meta-analysis used 190 studies on organizational justice, pertaining only to three factors – distributive, procedural, and interactional (Cohen-Charash & Spector, 2001). It concluded in favour of the need for a separate operationalization of organizational justice; this would thus require that all new four factors of justice be simultaneously examined for their influence on work outcomes. They also found as a result of their meta-analysis that, satisfaction and commitment were predicted by all types of justice. Further, as a conclusion, this meta-analysis proposed for a future research on causal relations among fairness perceptions, emotions, and work attitudes. Hence it can be said that the present study is an answer in the direction highlighted by Cohen-Charash & Spector’s (2001) meta-analysis, as it has particularly used a more recent and advanced structure of organizational justice (Colquitt, 2001).

Similar anatomy of the mediator variable, PsyCap, can be observed. About a decade ago, when a new movement in the field of psychology called ‘positive psychology’ began, it spurred two related developments in organizational research: positive organizational scholarship (POS) and positive organizational behaviour (POB). Like their mother domain, both POS and POB are primarily concerned with positivity, with an idea of applied positivity and strength-based management of the work context. The

POB capacities include, hope, optimism, resilience, and self-efficacy; these are collectively referred to as positive psychological capital, or simply PsyCap. Markedly differentiable from trait and state is the *state-like* nature of PsyCap, which renders it more malleability and openness to development (Luthans, Avey, Avolio, & Peterson, 2010). Given this differentiation, PsyCap and its four-factors have been clearly theorized as being state-like in nature. Further, in a similar direction, the 24-item scale used for measurement of PsyCap also operationalizes the four-factors as measuring a state-like aspect (Luthans et al., 2007a; Luthans et al., 2007b). This conceptualization of all the four PsyCap capacities as being state-like in nature has important organizational implications. Such a nature of PsyCap provides it for organizational development by means of training and interventions (Luthans et al., 2006; Luthans & Youssef, 2007). In entirety, being state-like in nature renders it the most critical quality for organizational implication, viz., interventions can be developed for enhancing employees' hope, optimism, resilience, and self-efficacy. Hence, like traditional forms of capital, psychological capital can be assessed and linked to return on investment and impact on competitive advantage (Luthans & Youssef, 2004). The edge that psychological capital enjoys over other forms of traditional capitals is that the former focuses on development of such capacities that contribute to development of an individual employees; rendering a kind of competitive advantage to the organization which is difficult for the competitors to replicate (Luthans et al., 2010).

Conclusively, it can be suggested that, although the core constructs of PsyCap (hope, optimism, resilience, and self-efficacy) might have existed along with other variables which could be characterized as positive (e.g. satisfaction, extra-role behaviour, trust, commitment, and psychological well-being), it is specifically the 'state-like' nature of these four core constructs of PsyCap that differentiates them from the others. Further, as an applied difference, because of the state-like nature, PsyCap outrightly results in performance improvement and organizational development. Thus, it is the basic nature of PsyCap that segregates it from other available forms of organizational constructs.

## IMPLICATIONS

It makes two primary contributions to research and practice in the domain of satisfaction and commitment. First,

it is argued that the causal influence of justice on satisfaction and commitment can be better explained through the mediating influence of PsyCap. This is primarily because PsyCap acts as a bridge between an organizationally controlled factor (organizational justice) and the individual level variables (job satisfaction and organizational commitment). Second, as PsyCap is a pathway for the effect of justice on employees' satisfaction and commitment, an organization can also control this variable to enhance the commitment and satisfaction of its employees. Third, controlling PsyCap would be much easier than directly influencing justice perceptions, primarily because PsyCap can be developed through training and other group level interventions, because it is a state-like capacity which lends itself to development and is capable of performance enhancement (Luthans, et al., 2006; Luthans, et al., 2007b). Hence, given the 'open to control' nature of PsyCap, it imparts a crucial tool in the hands of the managers to influence the satisfaction and commitment of their employees.

## LIMITATIONS

This study is limited by the use of self-reported data. Such data, even if collected at different points in time, may not completely control common source variance. This study therefore tested a series of nested models to make sure that the scales were distinctive. The use of certain procedural remedies should have reduced the susceptibility of the data. These remedies were, for instance, strong assurances of respondent confidentiality and use of different questionnaire sections, instructions, and response scales for different measures as recommended by Podsakoff et al. (2003). Also, as a future endeavour, it is suggested that the findings of this study can be validated with some qualitative methods such as closed group interviews. Multi-method studies, though challenging in terms of execution, enable the researcher to posit causal linkages with greater assurance.

This study is also limited by the sample characteristics as it was conducted amongst employees largely drawn from the Indian service sector companies. The participants were predominantly male. It is not known whether the results would be applicable to other contextual settings or organizations. Generalizability of the present findings should therefore be examined in future research for other types of organizations, for mixed gender, and for more heterogeneous samples. 

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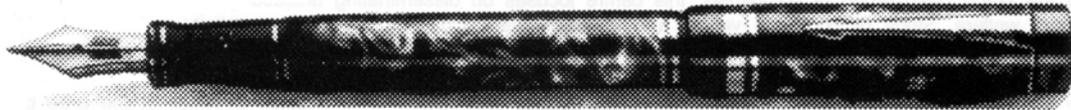
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