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Ajay Singh Gangaram Singh James R. Beatty

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Adoption and correlates of Western concepts of high performance work system in the IT industry in India

Ajay Singh

Department of Human Resource Management, Indian Institute of Management Lucknow, Noida, India

Gangaram Singh

National University, La Jolla, California, USA, and

James R. Beatty

Department of Management Information Systems, San Diego State University, San Diego, California, USA

Abstract

Purpose – An interesting conundrum exists in India with its rise as an economic powerhouse. On one front, there is tremendous pride in asserting its Indian identity. On another front, it seeks to embrace Western practices to announce its entry into the world economy. This paper aims to examine the extent to which Indian information technology (IT) firms adopt Western concepts of a high performance work system (HPWS) and the correlates of such a system (pro-social organizational behavior and employee attitude). Data from 211 IT employees in India show widespread adoption of a HPWS, and more importantly several approaches to assessment indicate that a HPWS positively correlates to pro-social organizational behavior and employee attitude.

Design/methodology/approach – The sample consisted of IT professionals in India having a minimum of three years of work experience. The study has used a snowball strategy to generate the sample. Eight HPWS practices were included in the survey questionnaire to assess three dimensions of HPWS. Analysis was conducted to examine differences between the highest (i.e. top 10 per cent) and the lowest (i.e. bottom 10 per cent) and bivariate correlations of the surveyed employees regarding pro-social organizational behaviors related to altruism, job involvement and work involvement, and regarding employees attitudes related to job satisfaction, intention to stay in organization, level of morale and optimism.

Findings – HPWS is positively associated with employee attitudes and pro-social organizational behavior. It reflects the reality that HPWSs, at least as conceived by researchers from the West, have penetrated organizations in India. Moreover, they seem to complement each other and together they seem to have a positive association with employee attitudes and pro-social organizational behavior. As organizations in India continue with the march toward servicing the world in the IT sector, the present study suggests that they have a potent tool in a HPWS to keep employee attitudes and pro-social organizational behaviors high.

Research limitations/implications – The criticism of survey methodology approach adopted in the present study is that it has common method bias. That is, in the survey, respondents tend to score along a path with a common response. As a validation, the study has performed a treatment-by-subjects analysis of variance with matched participant scores on the three pro-social behaviors to determine whether the means of altruism, job involvement and work involvement were significantly different. As



International Journal of Organizational Analysis Vol. 24 No. 4, 2016 pp. 550-572 © Emerald Group Publishing Limited 1934-8835 DOI 10.1108/IJOA-01-2015-0837 to convergence, much more causal data would be needed to make a definitive conclusion on the findings of the present study. **Originality/value** – This is the first study of its kind to examine the adoption of Western concepts of

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a HPWS in Indian IT Industry. **Keywords** India, HRM, Organizational culture, Job satisfaction, Job commitment,

Organizational performance

Paper type Research paper

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One of the key features of a high performance work system (HPWS) is its emphasis on delivering workforce performance within the organization, thus increasing the competitiveness, success and sustainability of that organization. HPWS consists of a set of HR practices designed to enhance employee skills and commitment, such that employees become a sustainable source of competitive advantage to the organization (Levine, 1995; Pfeffer, 1998). This set of HR practices may include equity concerns, efficiency, employee relations, legal compliance, labor relations, health and safety, workforce performance and pay-for-performance (Becker et al., 2009). Each workforce dimension is focused on delivering outstanding performance. Ang et al. (2013) in their study of healthcare sector however suggests that only when management's implementation of HPWS is similar to employee's espoused HR practices that HPWSs are translated into greater engagement, job satisfaction, affective commitment and less intension to leave. Further, research (Huselid, 1995; Way, 2002; Zacharatos et al., 2005) has found that in an HPWS environment, an emphasis on rigorous and selective staffing and comprehensive training often contributes to a high level of collective human capital for the workforce, Lawler et al. (1995) correlated HPWSs with delegation of authority to lower-level employees (i.e. empowerment), extensive training and development of employees, reliance on pay-for-performance (i.e. significant contingent at risk pay), broadly defined job responsibilities and employee participation in non-work aspects of organizational decision-making. So in addition to each dimension having its unique impact, the dimensions often combine to have a collective impact in an organization.

Most of the research on HPWS has been conducted in Western countries, especially in the USA. However, India provides an interesting context to examine HPWS. The Centre for Economic and Business Research forecasts that by 2024, the Indian economy would become the world's fourth largest economy, moving past the global economic powerhouses like the UK, Germany and France (Saini and Budhwar, 2004; CEBR, 2015). India has one of the largest pools of scientific and technical personnel in the world and a population that exceeds one billion inhabitants. Further, over 250 million of these people are English-speaking and are members of the middle class (Budhwar, 2001). Due to India's large and growing pool of well-educated computer-conscious workers and a strong existing base of blue-chip companies, it has been gaining much attention worldwide for its information technology (IT) and IT-enabled services. In the midst of such economic development, the nature and role of the HR function is also changing and evolving (Saini and Budhwar, 2004).

Understanding the nexus between HPWS and India is also of interest from a sociological perspective. In their classic theory, Kerr *et al.* (1960) proposed that as countries converge from an economic and technological perspective, workplace practices of organizations within those countries would converge. Elites within a

national system would make choices sometimes against the wishes of the masses to move toward "better" practices. It is no secret that India has embraced Western practices, such as a stock market, architecture, clothing, food and, more recently, a social mindset of transparent government and gender equality at work. Within this context, it is highly likely that Western HR practices have also penetrated the Indian workplace. But at the same time, it has to be remembered that distinct Indian values also have impact on various management practices (Gopalan and Rivera, 1997).

Theory and research

Researchers have used various theories to investigate HPWS (e.g. behavioral response theory, resource dependency theory, human capital theory, expectancy theory, behavioral science, organizational theory, social exchange theory and employee exchange theory). At the individual level, and drawing from behavioral response theory, HR practices have a direct impact on the behavior of workers (Pena, 2009). Social exchange theory, in addition, has a primary focus on resources people obtain from, and contribute to, social interactions (Blau, 1964). In fact, this theory focuses on the ways in which individuals respond to the support they receive from their organizations. When workers have positive perceptions of the organization, such perceptions increase their commitment to that organization. Qiao et al. (2009) examined six manufacturing firms in China and found that organizational commitment correlates with higher perception of existence of a HPWS. This increased commitment to the organization in turn contributes to increased organizational success. Further, commitment to quality is a precursor to an HPWS, which in turn leads to opportunities for increasing capital (the bottom line), developing loyal customers and employees and improving business practices (Beatty, 2006). The degree of employee involvement and the level of work satisfaction result in better performance for the organization. These descriptions are supported by Wayne et al. (1997), who found a direct relationship between the HR practices developed by the organization and the perception workers have of the support they receive from the organization.

At the organizational level, research has focused on establishing a link between HR policies and practices and organizational level measures of performance. As part of this latter perspective, human resource systems are considered as part of the organizational "architecture" impacting organizational effectiveness (Martin-Tapia et al., 2009). With regard to employee exchange theory, the assumption is that there is a tradeoff between the contributions an employee makes to the organization and the rewards provided to the employee by that organization. Thus, if a pay-for-performance strategy is used, then it follows that the application of this tool should lead to increased work performance (Adams, 1965; Belcher and Atchison, 1970; Beatty, 2005). In addition, scholars within this stream (Huselid, 1995; McDuffie, 1995; Guthrie, 2001; Datta et al., 2005) have often focused their studies on "bundles" of HR practices, arguing for the existence of reinforcing, synergistic performance effects. The HR bundle or cluster includes participatory teams and job rotation, high commitment practices such as problem-solving groups and extensive employee consultation and complementary human resource management (HRM) policies such as generous training provision and job security measures (Stewart and Danford, 2008).

While there is some disagreement as to the exact specification of the set of HR practices comprising an HPWS, the common theme in this literature is an emphasis on

using a system of management practices providing employees with the skills, information, motivation and attitude resulting in a workforce which is a source of competitive advantage. As discussed in the related literature, examples of high performance HR practices would include the use of cross-functional teams, high levels of training, information sharing, participatory mechanisms and group-based rewards. Macky and Boxall (2007), for instance, deal with the relationships between commonly cited high-performance work practices and a cluster of important employee attitudes: job satisfaction, organizational commitment (affective and behavioral) and trust in management. As mentioned above, it is pointed out in this study that there is ample research that deals with the relationship under which the HPWS rubric can serve to modify employee behavior, and the context within which that behavior occurs, in ways that enhance employee performance. Findings show a clear additive effect for the relationship between HR practices normatively associated with what has been variously referred to as high-involvement, high-commitment or high-performance HRM and some important employee attitudes towards work (Stewart and Danford, 2008). Another study (Garcia-Chas et al., 2014) on the role of HPWS in determining individual outcomes shows that it is positively associated with job satisfaction, procedural justice and intrinsic motivation.

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High performance work system and pro-social behavior

Pro-social behavior deals with caring about the welfare and rights of others, feeling concern and empathy for them and acting in ways that benefit others (Brief and Motowidlo, 1986). Organizational citizenship behavior (OCB) has also been compared to pro-social organizational behavior (POB). POB is tightly connected with employee's social exchange relationship which has been found to be positively related to extra role behaviors (Masterson et al., 2000; Rupp and Cropanzano, 2002). When employees regard their social exchange relationship with an organization as involved (i.e. a high degree of social exchange), they are more likely to provide help to their co-workers. Employees who share a high social exchange relationship thus benefit from receiving extra help from co-workers and, in turn, help others within the organization.

Altruism. Altruism is to some extent a component of POB. It focuses on the motivation to help others or a desire to do "good" without reward (Wagstaff, 1998). In an organization, altruism means the action of an employee feeling of benevolence toward the employers, co-workers and customers (Kolm, 1983). Altruism primarily concerns with the helping approach of the members of the organization. In a health care organization, such behaviors can help the medical staff (doctors, nurses and paramedical) in working toward the common organizational goals (Chahal and Mehta, 2010). Altruistic behavior, besides other organizational climate dimensions, plays a significant role in increasing managerial effectiveness (Bamel et al., 2013).

Job involvement. Job involvement is the degree to which an employee is engaged in, and enthusiastic about performing his or her work. Kanungo (1982) defined job involvement as an individual's psychological identification or commitment to his/her job. It is the degree to which "one is cognitively preoccupied with, engaged in, and concerned with one's present job" (Paullay et al., 1994). Job involvement thus implicates the internalization of values related to the importance and engagement of one's job. For individuals who display a high level of involvement in their jobs and consider their work to be a very important part of their lives, performing well on the job is important for their

self-esteem (Lodahl and Kejner, 1965). Therefore, job involvement is closely linked to job commitment. Chughtai (2008) also found that job involvement is positively correlated with both "in-role" job performance and with OCB, and Gyekye and Haybatollahi (2015), based on the sample were 320 Ghanaian industrial workers, examined the extent to which age and job satisfaction levels were predictive of organizational citizenship behaviors.

Work involvement. Work involvement reflects the importance individuals attach to having and performing work (Elloy and Terpening, 1992). Thus, work involvement refers to the extent to which an individual is interested in, identifies with and is pre-occupied with his/her work in comparison to other aspects of life (Kanungo, 1982). Work involvement thus constitutes an important motivational variable that is of interest to organizations for full mobilization of their human resources (Gore, 2001):

H1. Very high and very low levels of altruism, job involvement and work involvement are associated with very high and very low perceptions of a HPWS.

High performance work system and attitude

Employees have attitudes or viewpoints about many aspects of their jobs, their careers and their organizations. However, from the perspective of research and practice, the most focal employee attitude is job satisfaction (Saari and Judge, 2004). Schneider and Bowen (1985) had also shown that employee attitude toward various HRM practices is linked to job satisfaction and job performance.

Job satisfaction. Very few would contest the utility of job satisfaction. Ample evidence exists to show that employee job satisfaction is consistently and negatively associated with voluntary employee turnover (Harter *et al.*, 2002), with job dissatisfaction being an antecedent to forming intentions to quit (Allen and Griffeth, 2001), and with other withdrawal cognitions (Hom *et al.*, 1998). Prior research has also consistently shown a strong positive relationship between job satisfaction and employee commitment to their organizations (Mathieu and Zajac, 1990), although the causal nature of this relationship is not entirely understood. Some studies have suggested that satisfaction determines commitment (Lance, 1991), while others have suggested the reverse (Vandenberg and Lance, 1992).

Intent to stay. Intent to stay is the perception of the "estimated likelihood of continued membership in an organization" (Price and Mueller, 1981, p. 546). The investigation of factors associated with intent to stay is important because there is a great potential for managers and administrators to develop interventions and processes that may facilitate the intent to remain in organizations and subsequently prevent the costs associated with staff turnover. Previous studies (Cavanagh and Coffin, 1992; Nedd, 2006) suggested that intent to stay is a good predictor of turnover. This association suggests, for example, that when workers no longer intend to stay in an organization, this intention is likely to be followed by a pattern of behavioral turnover (Irvine and Evans, 1995).

Morale. Morale is generally described in terms of high and low. High morale exists where people have favorable attitude toward their superiors, peers and subordinates, their job, management policies and practices and their company; and where these attitudes are less favorable, morale is said to be low. Morale is the enthusiasm with which workers as individuals and as groups respond to their work situation and requirements. It is a state of healthy balance in the organization in which people make their respective contributions to achieve their set goals and maintain their sense of

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favorable impact on job performance. However, Hmieleski and Baron (2009) demonstrated a negative relationship between entrepreneurs' optimism and the performance of their new ventures. According to them, highly optimistic individuals often hold unrealistic expectations, suffer from overconfidence and discount negative information:

H2. Very high and very low levels of job satisfaction, intention to stay in

self-esteem and life satisfaction which are the indicators of positive orientation have

H2. Very high and very low levels of job satisfaction, intention to stay in organization, morale and optimism are associated with very high and very low perception of HPWS.

Methodology

Our sample consisted of IT professionals in India having a minimum of three years of work experience in any large IT company. We used a snowball strategy to generate the sample. Our primary group consisted of working professionals from IT industry, who were attending long duration executive MBA program (part time) in a leading business school in Delhi. In turn, this group distributed the questionnaire to colleagues who meet the required criteria. Fifty-five responses were generated from this approach. We then presented the survey to IT professionals through an open-sourced software (now LimeSurvey) and collected data in the following year. The online version generated an additional 156 respondents, representing different IT (mostly Software) companies. Thus, the total sample of useable data consisted of 211 respondents from a total of nine different organizations, who met the predetermined professional work experience requirement. Based on the responses, we found that 82 per cent of the respondents were working in MNCs, including Indian MNCs. Approximately 58 per cent of these respondents categorized themselves as either middle or senior managers, and the rest at junior managerial positions, mostly as software programmers. Though there is no clear categorization in Indian IT sector for middle managers, usually team leaders are perceived to be middle level managers. Further, over 90 per cent of the respondents had technical/engineering background, and women respondents were 30 per cent, who almost truly represent the gender percentage in a large IT sector in India. All respondents are from the core IT function and not from Information Technology enabled services (ITES) or in voice-based customer support.

Eight HPWS practices were included in the survey questionnaire to assess three dimensions of a HPWS. Participants were asked to respond to items based on a seven-point scale, ranging from 1 = strongly disagree to 7 = strongly agree, regarding how each of the various components reflects on the characteristics of their organizations. The items were extracted from various previously published sources. The three dimensions, along with their HPWS characteristics, are as follows:

- (1) employee acquisition (job analysis/design and staffing);
- (2) employee development (training, performance appraisal and career progression); and
- (3) employee maintenance (compensation, participation and dispute resolution.

The job analysis/design scale included five items, three of which were from Delery and Doty (1996), one from Huselid (1995) and one from Kelleberg et al., 1996). These items yielded $\alpha = 0.89$. The staffing scale involves both recruitment and selection and is captured by three items. One item was taken from Huselid (1995), while the other two items were taken from Marsden (1996). The coefficient for the staffing scale is $\alpha = 0.74$. The training scale is based on two items taken from McDuffie (1995). This two-item scale vielded $\alpha = 0.79$. The performance appraisal scale contains five items from Delery and Doty (1996). These items yielded $\alpha = 0.86$. The career progression scale contains nine items. These items yielded $\alpha = 0.90$. The compensation scale contains six items, of which three items are common to many sources (Delery and Doty, 1996). The other three items capture benefits, clarity of communication concerning pay for performance and extremes with regard to pay-for-performance. These items yielded $\alpha = 0.88$. The participation scale is based on three items taken from Delery and Doty (1996) and a common fourth item used in many other sources (Osterman, 1994). This scale yield α = 0.88. The dispute resolution scale is measured by three items taken collectively from Block and Cutcher-Gershenfeld (1992) and Huselid (1995). The dispute resolution scale yielded $\alpha = 0.79$. Table I contains the items and descriptive statistics for each scale.

Four pro-social attitudes were included in the survey: job satisfaction, intentions to stay, morale and optimism. For the purpose of this study, our job satisfaction scale is based on the five items developed by Wanous *et al.* (1997). Our respondents indicated their job satisfaction based on five aspects of their current job setting, namely, work, pay, promotions, supervision and co-workers, using the seven-point response format. However, this time, the two extreme anchors ranged from 1 = not at all satisfied to 7 = very satisfied. The *job satisfaction scale* yielded $\alpha = 0.87$. The five job satisfaction items included in this scale, along with relevant statistics, are listed in Table II.

Employee *intentions to stay, morale and optimism* toward the organization's future potential for success were also surveyed on a seven-point scale, ranging from 1 = strongly disagree to 7 = strongly agree. As these items were evaluated separately and were not a part of an overall dimension, coefficient alphas are not applicable. The items used to address these three measures of attitudes are also given in Table II.

Three pro-social behaviors were also accounted for in the survey: altruism, job involvement and work involvement. The *altruism scale* was based on a scale ranging from 1 = not at all characteristic of me to 7 = very characteristic of me. This scale used six items from Organ (1988) and yielded $\alpha = 0.90$. The job involvement scale used ten items taken from Kanungo (1982), with possible responses ranging from 1 = strongly disagree to 7 = strongly agree. This scale yielded $\alpha = 0.85$. The six items for the *work involvement scale* were also taken from Kanungo (1982), using the same scale format. The work involvement scale yielded $\alpha = 0.80$. Descriptive statistics for the pro-social behaviors are reported in Table II.

Results

Table I provides summary statistics for the set of eight dimensions of the HPWS, including means and standard deviations for each individual item included in the eight dimensions of the survey. It also includes composite means, standard deviations and internal consistency reliability coefficients (i.e. coefficient alphas) for these HR dimensions. Collectively, the alphas for these eight measures are 0.89, 0.74, 0.79, 0.86, 0.90, 0.88, 0.88 and 0.79, respectively. The table shows that the eight dimensions have

HR practices	Scale means	Scale SDs	Scale alpha	Item means	Item SDs
Job analysis/Design	3.94	1.39	0.89		
1. Duties of jobs are determined by job analysis				4.02	1.74
2. Jobs are broadly defined				424	1.69
3. Duties of jobs are clearly defined				3.98	1.66
4. Jobs have up-to-date job descriptions				3.76	1.74
5. Job descriptions contain all the duties performed by the employees				3.68	1.56
Staffing	4.07	1.36	0.74		
1. Employment tests are used in the hiring process				4.36	1.81
2. Hiring decisions are based on the candidates' prospects to learn the job rather than whether they					
can currently do the job				4.07	1.75
3. Ratios of people hired to the number of applicants are used to evaluate the hiring process				3.79	1.44
Training	3.74	1.55	0.79		
1. On average, new hires receive extensive training				3.88	1.78
2. Training continues to be extensive after the initial period				3.59	1.61
Performance appraisal	4.02	1.33	98.0		
1. Performance appraisals are based on objective, quantifiable results				3.85	1.67
2. Performance appraisals are formally done				4.52	1.68
3. People generally need to put forth a lot of effort to achieve an actual performance consistent with their					
performance standard				4.18	1.60
4. Performance appraisals are frequently done				3.61	1.75
5. Employees are given feedback on their performance based on formal, quantifiable results				3.91	1.65
Career progression	3.84	127	0.00		
1. Non-entry level jobs are filled by internal candidates				3.76	1.60
2. Individuals have clear career paths within the company				3.79	1.69
3. Employees' career aspirations within the company are known by their immediate supervisors				3.84	1.77
4. Employees who desire promotion have more than one potential position to which they could be promoted				3.55	1.68
5. Job security is almost guaranteed to employees in this company				3.98	1.78
6. It is very difficult to dismiss an employee in this company				3.73	1.77
7. Promotion is based on both merit and seniority				3.96	1.65
8. Employees in this company can expect to stay for as long as they wish				4.36	1.58
9. If the company was facing economic problems, employees would be the last to get cut				3.59	1.70
					(continued)

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Table I. Survey summary statistics for eight HPWS practices

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HR practices	Scale means	Scale SDs	Scale alpha	Item means	Item SDs
Compensation	4.10	1.38	0.88		
1. Compensation is directly tied to individual performance				4.00	1.72
2. Benefits are generous relative to total compensation				3.81	1.68
3. People's compensation contracts clearly specify how their compensation is based on their performance				3.92	1.70
4. Individuals receive bonuses based on the profit of the company				4.25	1.84
5. People's compensation increases as their performance increases				4.18	1.66
6. People whose performance ranks in the top 25% receive higher compensation than people who rank in the bottom 25%				4.42	1.85
Participation	3.93	1.43	0.88		
1. Employees are provided the opportunity to suggest improvements in the way things are done				4.18	1.72
2. Employees are allowed to make many decisions				3.87	1.68
3. Formal mechanisms (e.g. worker-management committee) are set in place to promote employee					
participation				3.73	1.67
4. Employees are asked by their superiors to make decisions				3.93	1.62
Dispute resolution	3.97	1.32	0.79		
1. Workplace disputes are settled in multiple steps				4.13	1.58
2. Workplace disputes are quickly resolved				4.00	1.63
3. Workplace disputes are settled by a formal procedure				3.78	1.52

Table I.

Pro-social behaviors and attitudes	Scale means	Scale SDs	Scale alpha	Item means	Item SDs
Prosocial attitudes Job satisfaction	3.91	1.35	0.87	:	:
 How satisfied are you with your current work, compared to what you think it should be? How satisfied are you with your current pay, compared to what you think it should be? 				4.03 3.90	1.69
3. How satisfied are you with your current promotions, compared to what you think they should be?				3.66	1.68
 How satisfied are you with your current supervision, compared to what you think it should be? How satisfied are you with your current co-workers, compared to what you think it should be? 				3.70 4.27	1.76
Intention to stay If I had it my way, I would be working for this company several years from now	3.87	1.93	NA	3.87	1.93
	4.00	1.75	NA	4.00	1.75
Optimism I am confident that this company can succeed in the current competitive environment	4.36	1.80	NA	4.36	1.80
Pro social behavior		į	1		
Altruism 1 Thele actions with chair mode when their boars beaut	4.81	1.29	0.90	F	1 79
2. I volunteer to do things not formally required by my job				4.70	1.59
3. I take the initiative to orient new employees to the company even though it is not part of my job				4.74	1.59
description. 4. Thelp others when their work load increases (assist others until they get over the hurdles)				4.89	1.55
5. I assist others with their duties				4.77	1.49
6. I make innovative suggestions to improve the overall quality of the company				5.01	1.54
Job involvement	3.89	1.14	0.85		
1. The most important things that happened to me involved my job				3.80	1.65
2. To me, my job was only a small part of who I am. (scoring reversed) 3. Times were mirch involved passonally in my joh				4.02	1.75
4. I lived, ate and breathed my iob				3.67	1.82
5. Most of my interests were centered around my job				3.58	1.77
6. I had very strong ties with my job that would have been very difficult to break				3.70	1.72
7. Usually I felt detached from my job (scoring reversed)				3.52	1.71
				3.85	1.50
9. I considered my job to be very central to my existence 10. I liked to be absorbed in my job most of the time				3.74	1.76
	6		6		
WORK involvement 1. The water immediate thin we that borns and in our life involved mosts	3.88	1.20	0.80	9.74	1.70
1. The most important units that happened in infrared with Wills. 9 Work is competition manyle should not involved in most of the time.				2.74 7.05	1.79
2. Work is sometiming people showing get involved in most of unit time. 3. Work should be only a small most of one's life (cooring parameter).				3.01	1.72
o, won should be only a small part of offer alte, (scoring reversed) 4. Work should be considered central to life				3.83	1.59
T. Work should be considered contain to me. 5. In my view, an individual's personal life goals should be work-oriented				3.84	166
6. Life is worth living only when people get absorbed in work				3.71	1.79
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mean values ranging from 3.74 to 4.07, yielding an overall un-weighted mean of 3.95. In other words, the means of each of the eight dimensions hover very close to the midpoint of the seven-point scales.

Seven aspects are considered to be components of POBs and employee attitudes, to reiterate, and the four attitudes are job satisfaction, intention to stay with the organization, morale and optimism, and the three POBs are altruism, job involvement and work involvement. Table II provides means and standard deviations for each of the individual survey items, along with composite means, standard deviations and coefficient alphas. The alphas for job satisfaction, altruism, job involvement and work involvement are 0.87, 0.90, 0.86 and 0.80, respectively. The other three dimensions consist of one item each (i.e. intention to stay with the organization, morale and optimism). Similar to the findings in Tables I and II, it is seen that all groupings have mean values ranging from 3.87 to 4.81, yielding an overall un-weighted mean of 4.01. In other words, the means of each of these seven dimensions hover very close to the midpoint of the seven-point scales being used. Within employee attitudes, the mean scores for both morale and optimism exceed the mean scores for job satisfaction and intention to stay with the organization.

Additional analyses were conducted to examine differences between the very highest (i.e. top 10 per cent) and the very lowest (i.e. bottom 10 per cent) of the surveyed employees regarding POBs related to altruism, job involvement and work involvement, as addressed in Table III, and regarding employees attitudes related to job satisfaction, intention to stay in organization, level of morale and optimism, as addressed in Table IV.

H1 states that very high and very low levels of altruism, job involvement and work involvement are associated with very high and very low perceptions of a HPWS. To test this hypothesis, a series of two-sample independent t-tests were performed. These tests compared the differences between pairs of means for each of the two most extreme subgroups within each of the eight HR practices, as operationally defined by those having scores at or above the 90th percentile and those having scores at or below the 10th percentile. Table III includes sample sizes, means and computed t-values for comparing pairs of subgroup means across the eight HR practices for the each of the *POBs* (i.e. altruism, job involvement and work involvement). All $8 \times 3 = 24$ t-tests are statistically significant (p < 0.01). Thus, Table III supports H1, as scores for altruism, job involvement and work involvement are significantly higher in all cases in which there is a perception that the organization has effective strategies in place for job analysis/design, staffing, training, performance appraisal, career progression, compensation, employee participation and dispute resolution. For example, when a very positive perception of the organization's HR practices exists with regard to job analysis/ design (i.e. for those individuals falling in the 90th percentile), these same individuals' perceptions are also very high with regard to altruism, job involvement and work involvement. Simultaneously, POB perceptions were found to be very low in cases where there is a perception that the organization has ineffective HPWS strategies in place for job analysis/design, staffing, training, performance appraisal, career progression, compensation, employee participation and dispute resolution.

H2 states that very high and very low levels of job satisfaction, intention to stay with the organization, morale and optimism are associated with very high and very low perceptions of a HWPS. To test this hypothesis, another series of two-sample independent *t*-tests were performed. This time, however, the tests compared differences

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Note: All 2-sample independent *t*-tests significant (p < 0.01)

Table III. Comparisons between top and

bottom 10%regarding pro-social organizational behaviors related to altruism, job involvement and work involvement

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Table IV.
Comparisons
between top and
bottom 10%
regarding employee
attitudes related to
job satisfaction,
intention to stay in
organization, level of
morale and optimism

			HR	HR practices and pro-social attitudes Job satisfaction	ttitudes		Intention to stay	
8 HR practices	N for P90	N for P10	Mean for ≥90th percentile	Mean for <10th percentile	2-asample t -test	Mean for ≥90th percentile	Mean for == 10th percentile	2-sample t -test
Job analysis/Design	26	21	5.14	2.76	5.61	5.23	2.71	4.43
Staffing	18	22	5.01	2.58	5.49	5.11	2.59	4.11
Training	32	25	4.73	2.81	5.11	4.84	2.48	4.42
Performance appraisal	26	36	5.08	2.47	7.56	5.35	2.38	5.45
Career progression	24	21	5.03	2.60	5.67	5.42	2.29	5.89
Compensation	25	21	5.30	2.43	7.52	5.36	2.19	6.07
Participation	22	23	5.15	2.63	6.24	5.73	2.61	5.76
Dispute resolution	16	21	5.16	2.50	6.03	5.62	2.33	6.04
								(continued)

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			HR practices and 1	HR practices and pro-social attitudes		
		Morale			Optimism	
8 HR practices	Mean for ≥90th percentile	Mean for ≤10th percentile	2-sample t -test	Mean for ≥90th percentile	Mean for ≤10th percentile	2-sample t -test
•	•	•		•	•	
Job analysis/Design	5.50	2.29	69.9	5.81	2.38	7.80
Staffing	5.22	2.45	5.11	3.72	2.59	6.30
Training	4.97	2.80	4.58	5.12	3.28	3.71
Performance appraisal	5.62	2.73	5.72	5.69	2.88	00.9
Career progression	5.29	2.38	5.23	5.46	2.76	5.04
Compensation	5.68	2.43	6.38	5.80	2.29	8.11
Participation	5.55	2.43	6.12	5.59	2.83	5.16
Dispute resolution	5.69	2.33	6.23	5.44	2.67	4.58
Note: All 2-sample independent t -tests significant ($p < 0.01$	lent <i>t</i> -tests significant $(p < 0)$.	01)				

Table IV.

between the eight pairs of means for the two extreme subgroups with regard to the *employee attitudes*. Table IV includes sample sizes, means and computed t-values for the pairs of subgroup means across the HR practices for the each of the employee attitude (i.e. job satisfaction, intention to stay with the organization, morale and optimism). All $8 \times 4 = 32 \, t$ -tests are again statistically significant (p < 0.01). Thus, Table IV supports H2, as scores for the four employee attitudes are significantly higher when comparing very high vs very low levels within perceptions of the organization's HR practices. For example, when a very positive perception of the organization's HR practices exists with regard to job analysis/design, individuals' perceptions are also high with regard to job satisfaction, intention to stay with the organization, morale and optimism. Conversely, employee attitudes perceptions were found to be very low when there is a negative perception of the organization's HPWS strategies for these same eight HR practices.

A 15-variable inter correlation matrix is included in Table V, based on the eight HR practices, the four *pro-social employee attitudes* and the three *POBs*. With only one exception, all correlation coefficients are statistically significant (p < 0.01). The one exception is the correlation between work involvement and optimism.

Table VI focuses on the correlations among HR practices and the four *employee* attitudes extracted from Table V. This table reveals that all eight HR practices are significantly correlated with the four employee attitudes (p < 0.01). For example, the correlation between job analysis/design and job satisfaction has a correlation of r = 0.52. Thus, Table VI supports the association of employee attitudes with the HPWS, indicating that higher levels of job satisfaction, intention to stay, morale and optimism are exhibited by employees when they perceive that their organizations have better HPWS practices at the workplace (strong support for H2).

In the same manner, Table VII focuses on the correlations among HR practices and the three *POBs* extracted from Table V. This table reveals that all eight HR practices are significantly correlated with the three pro-social behaviors (p < 0.01). The correlation between job analysis/design and altruism also has a correlation of r = 0.52. The results show strong support for H1.

Going beyond the two primary hypotheses, we also investigated the correlations among the four *employee attitudes* and the three *POBs*. Table VIII reveals that, with the exception of work involvement and optimism, all employee attitudes measures are significantly correlated with all POBs (p < 0.01). Thus, Tables V-VIII all further confirm that employee pro-social attitudes and behaviors have a very strong relationship with one-another and with employee perceptions of HR practices within an organization.

Conclusions and discussion

Our primary objective in this paper was to examine the association between a HPWS and employee attitudes, as well as with POB. The logic of our argument was that attitudes and POBs are the individual responses to a HPWS. In *H1* and *H2*, respectively, we articulated that high and low levels of perceptions of HPWS will be associated with high and low levels of employee attitudes and POBs. We used both extremes analysis (90th and 10th percentile) and bivariate correlations to show support for *H1* and *H2*.

While the results do support *H1* and *H2*, we propose an alternative discussion. Should the hypotheses be revised to read: HPWS is positively associated with employee attitudes and POB? Such a revision would certainly receive support from our data. Our caution here is that we should not discount the context in which we make our case. Our

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	iism		22		9	2	0.	22	1	57	8	_∞	4	9	6	0
	Morale Optimism	0.51	0.45	0.31	0.4	0.42	0.50	0.4	0.4	0.61	0.48	0.2	0.04	0.56	69.0	1.00
		0.54	0.44	0.34	0.45	0.45	0.50	0.51	0.45	99.0	0.58	0.45	0.21	0.72	1.00	0.69
	Intentions to stay	0.49	0.37	0.34	0.42	0.42	0.41	0.45	0.39	0.64	0.51	0.47	0.20	1.00	0.72	0.56
	Work involvement	0.35	0.35	0.35	0.32	0.36	0.34	0.31	0.36	0.20	0.40	0.62	1.00	0.20	0.21	0.04
	Job involvement	0.49	0.41	0.43	0.44	0.44	0.42	0.48	0.46	0.40	0.51	1.00	0.62	0.47	0.45	0.28
	Altruism	0.52	0.50	0.37	0.49	0.45	0.50	0.46	0.51	0.59	1.00	0.51	0.40	0.51	0.58	0.48
	Job satisfaction	0.52	0.50	0.36	0.55	0.49	0.57	0.54	0.45	1.00	0.59	0.40	0.20	0.64	99.0	0.61
dimensions	Dispute resolution	0.79	0.77	0.68	0.82	0.84	0.80	0.82	1.00	0.45	0.51	0.46	0.36	0.39	0.45	0.41
Intercorrelation matrix for 15 dimensions	Participation	0.83	0.68	0.75	0.85	0.82	0.81	1.00	0.82	0.54	0.46	0.48	0.31	0.45	0.51	0.45
Intercorrelation	Compensation Participation	0.81	0.78	99.0	0.87	0.83	1.00	0.81	0.80	0.57	0.50	0.42	0.34	0.41	0.50	0.50
	Career progression	0.82	0.80	0.75	0.83	1.00	0.83	0.82	0.84	0.49	0.45	0.44	0.36	0.42	0.45	0.42
	Performance appraisal	0.83	0.77	0.75	1.00	0.83	0.87	0.85	0.82	0.55	0.49	0.44	0.32	0.42	0.45	0.46
	Training	0.77	69.0	1.00	0.75	0.75	99.0	0.75	89.0	0.36	0.37	0.43	0.35	0.34	0.34	0.31
	Staffing	92.0	1.00	69.0	0.77	0.80	0.78	89.0	0.77	0.50	0.50	0.41	0.35	0.37	0.44	0.45
	Job analysis/ Design	1.00	0.76	0.77	0.83	0.82	0.81	0.83	0.79	0.52	0.52	0.49	0.35	0.49	0.54	0.51
	HR practices, employee Job attitudes, and pro-analysis/ social behaviors Design	Job Analysis/Design	Staffing	Training	Performance appraisal	Career progression	Compensation	Participation	Dispute resolution	Job satisfaction	Altruism	Job involvement	Work involvement	Stay	Morale	Optimism

Notes: N = 211; all correlations but one are significant ($\rho < 0.01$); NS: correlation between optimism and work involvement

Table V. Correlations among eight HR practices, four employee attitudes, and three pro-social organizational behaviors

contention, in the first place, is that low and high levels of a HPWS will be associated with low and high levels of employee attitudes as well POBs, and these individual-level outcomes would then be mechanisms through which an organization would gain positive organizational level outcomes such as financial performance. As such, we suggest that, with further research, the concept of "high" levels of HR practices be

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Table VI.Correlations among HR practices and employee attitudes extracted from Table V

Table VII.Correlations among HR practices and pro-social organizational behaviors extracted from Table V

		Pro-social attitud	es	
HR practices	Job satisfaction	Intentions to stay	Morale	Optimisn
Job analysis/Design	0.52	0.49	0.54	0.51
Staffing	0.50	0.37	0.44	0.45
Training	0.36	0.34	0.34	0.31
Performance appraisal	0.55	0.42	0.45	0.46
Career progression	0.49	0.42	0.45	0.42
Compensation	0.57	0.41	0.50	0.50
Participation	0.54	0.45	0.51	0.45
Dispute resolution	0.45	0.39	0.45	0.41

Notes: N = 211; all correlations significant (p < 0.01)

HR practices	Altruism	actices and pro-social behavior Pro-social behavior Job involvement	
Job analysis/Design	0.52	0.49	0.35
Staffing	0.50	0.41	0.35
Training	0.37	0.43	0.35
Performance appraisal	0.49	0.44	0.32
Career progression	0.45	0.44	0.36
Compensation	0.50	0.42	0.34
Participation	0.46	0.48	0.31
Dispute resolution	0.51	0.46	0.36

Table VIII.
Correlations among
employee attitudes
and pro-social
organizational
behaviors

	Correlations among attitudes and pro-social behavior					
Pro-social behaviors	Job satisfaction	Intentions to stay	Morale	Optimism		
Altruism	0.59	0.51	0.58	0.48		
Job involvement	0.40	0.47	0.45	0.28		
Work involvement	0.20	0.20	0.21	0.04		

Notes: N = 211; 11 of 12 correlations significant (p < 0.01); NS: correlation between optimism and work involvement

One criticism of our approach is that our technique has a common method bias. That is, in the survey, respondents tend to score along a path with a common response. For example, he or she would give a four or a three, and that pattern would result in little variation. While the mean scores for most of the variables were at the mid-point of the scale, there were greater variations (as indicated by the standard deviations). As validation, we performed a treatment-by-subjects analysis of variance (ANOVA) with matched participant scores on the three pro-social behaviors to determine whether the means of altruism, job involvement and work involvement were significantly different. The overall ANOVA resulted in F(2,420) = 83.07, p < 0.01. Therefore, post-comparison t-tests were used to focus on which components of the pro-social behaviors were significantly different. As seen in Table IX, the means for altruism and job involvement were significantly different, t(210) = 11.10, p < 0.01. The means for altruism and work involvement were also significantly different, t(210) = 9.89, p < 0.01. Thus, individual self-perceptions of altruism were significantly greater than those for job involvement and for work involvement. However, the means for job involvement and work involvement were not significantly different. At a minimum, we show that the respondents discriminate or behave in a statistically significant different way on measures of pro-social behavior.

Our final comment reflects the reality that HPWSs, at least as conceived by researchers from the West, have penetrated organizations in India. Moreover, they seem to complement each other, and together they seem to have a positive association with employee attitudes and POB. As organizations in India continue with the march toward servicing the world in the IT sector, we suggest that they have a potent tool in a HPWS to keep employee attitudes and POBs high. As to convergence, much more causal data would be needed to make a definitive conclusion. However, our peek gives a never before seen view of a HPWS in India.

Our study has some clear strengths and implications. We assembled the dimensions of a HPWS as well as several pro-social behavior and collected evidence from an important category of employees in India. Our results indicate the critical relationship between a HPWS and pro-social behavior, and how that relationship has the potential to drive organizational performance. Apart from examining the connection between a HPWS and pro-social behavior, we have established an inventory of measures and theoretical paradigms for future research. We would encourage more research on establishing the connection between a HPWS, pro-social behavior and organizational performance. One important step in that direction would entail the well-established connection with the overall strategy of the organization. We believe we have established a base on which Indian

Pro-social	Two-sample <i>t</i> -tests				
behaviors	Means	SD	Altruism	Job involvement	Work involvement
Altruism	4.81	1.29		11.10**	9.89**
Job involvement	3.89	1.14			0.13^{NS}
Work involvement	3.88	1.20			

Notes: N = 211; **p < 0.01; NS = not significant

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Table IX. Statistical comparison of means for altruism, job involvement and work involvement evidence of a HPWS can be built. Moreover, our evidence suggests that concepts of Western HPWS have positive outcomes among an Indian sample.

Our study also has several limitations, which should be addressed in future research. It is true that our data are from a single source, although we presented some evidence to support an argument against common method bias. As further levels of analysis (e.g. organizational outcome) are brought into the research question, such a bias will reduce. Our sample is also one of convenience, which began with an executive MBA student cohort and snowballed with the use of an open source channel. A wider cross-section of employees would be the next logical sample. One common caution when examining workplace practices that are established in one country (culture) in a different country (culture) is the cross-cultural equivalency of measurement. We cannot comment on this issue, given that we collected data only in India. Cross-cultural equivalency of the HPWS could be a fruitful area of research. One final limitation of our research is the bivariate dimension of our statistical techniques. Pro-social behavior (and ultimately organizational performance) are determined by many factors beyond a HPWS. Subsequent research should account for such determinants with multivariate techniques similar to studies that have been conducted in the Western context. Moving beyond these limitations, our study is the first to provide a view of an HPWS in India.

References

- Adams, J.S. (1965), "Inequity in social exchange", in Berkowitz, L.(Ed.), *Advances in Experimental Social Psychology*, Academic Press, New York, NY, pp. 267-299.
- Alessandri, G., Vecchione, M., Tisak, J., Deiana, G., Caria, S. and Caprara, G.V. (2012), "The utility of positive orientation in predicting job performance and organizational citizenship behaviors", Applied Psychology: An International Review, Vol. 61 No. 4, pp. 669-698.
- Allen, D.G. and Griffeth, R.W. (2001), "Test of a mediated performance-turnover relationship highlighting the moderating roles of visibility and reward contingency", *Journal of Applied Psychology*, Vol. 86 No. 5, pp. 1014-1021.
- Ang, S.H., Bartram, T., McNeil, N., Leggat, S.G. and Stanton, P. (2013), "The effects of high-performance work systems on hospital employees' work attitudes and intention to leave: a multi-level and occupational group analysis", *The International Journal of Human Resource Management*, Vol. 24 No. 16, pp. 3086-3114.
- Bamel, U.K., Rangnekar, S., Stokes, P. and Rastogi, R. (2013), "Organizational climate and managerial effectiveness: an Indian perspective", *International Journal of Organizational Analysis*, Vol. 21 No. 2, pp. 198-218.
- Beatty, J.R. (2005), "Equity theory in compensation: a 25-year study", paper presented at the International World at Work 50th Annual Convention, New Orleans, May.
- Beatty, J.R. (2006), "The quality journey: historical and workforce perspectives and the assessment of commitment to quality", *International Journal of Productivity and Quality Management*, Vol. 1 No. 2, pp. 139-167.
- Becker, B., Huselid, M. and Beatty, R.W. (2009), *The Differentiated Workforce*, Harvard Business Press, Boston.
- Belcher, D.W. and Atchison, T.J. (1970), "Equity theory and compensation policy", *Personnel Administration*, Vol. 33 No. 3, pp. 22-33.
- Blau, P.M. (1964), Exchange and Power in Social Life, Wiley, New York.

Block, R. and Cutcher-Gershenfeld, J. (1992), "Traditional and non-traditional systems of resolving disputes under collective bargaining", *Workplace Topics (AFL-CIO)*, Vol. 2 No. 3, pp. 113-129.

High performance work system

- Brief, A.P. and Motowidlo, S.J. (1986), Academy of Management Review, Vol. 11 No. 4, pp. 710-725.
- Budhwar, P. (2001), "Doing business in India", *Thunderbird International Business Review*, Vol. 43 No. 4, pp. 549-568.
- Cavanagh, S.J. and Coffin, D.A. (1992), "Staff turnover among hospital nurses", *Journal of Advanced Nursing*, Vol. 17 No. 11, pp. 1369-1376.
- Centre for Economic and Business Research (2015), "Cebr Global, World Economic League Table".
- Chahal, H. and Mehta, S. (2011), "Antecedents and consequences of organizational citizenship behaviour (OCB): a conceptual framework in reference to health care sector", *Journal of Services Research*, Vol. 11 No. 1, pp. 25-44.
- Chughtai, A.A. (2008), "Impact of Job Involvement on in-role job performance and organizational citizenship behavior", *Institute of Behavioral and Applied Management*, Dublin City University, Ireland, pp. 169-183.
- Datta, D.K., Guthrie, J.P. and Wright, P.M. (2005), "Human resource management and labor productivity: does industry matter?", Academy of Management Journal, Vol. 48 No. 1, pp. 135-145.
- Delery, J.E. and Doty, D.H. (1996), "Modes of theorizing in strategic human resource management: tests of universalistic, contingency, and configurational performance predictions", *Academy of Management Journal*, Vol. 39 No. 4, pp. 802-835.
- Elloy, D.F. and Terpening, W.D. (1992), "An empirical distinction between job involvement and work involvement: some additional evidence". Canadian Journal of Behavioural Science, Vol. 24 No. 1, pp. 465-478.
- Garcia-Chas, R., Neira-Fontela, E. and Castro-Casal, C. (2014), "High-performance work system and intention to leave: a mediation model", The International Journal of Human Resource Management, Vol. 25 No. 3, pp. 367-389.
- Gopalan, S. and Rivera, J.B. (1997), "Gaining a perspective on Indian value orientations: implications for expatriate managers", The International Journal of Organizational Analysis, Vol. 5 No. 2, pp. 156-179.
- Gore, N. (2001), "What's all this mobilizing about?", Canadian HR Reporter, Vol. 14 No. 21, pp. 17-19.
- Guthrie, J.P. (2001), "High-involvement work practices, turnovers, and productivity: evidence from New Zealand", *Academy of Management Journal*, Vol. 4 No. 1, pp. 180-190.
- Gyekye, S.A. and Haybatollahi, M. (2015), "Organizational citizenship behaviour: an empirical investigation of the impact of age and job satisfaction on Ghanaian industrial workers", *International Journal of Organizational Analysis*, Vol. 23 No. 2.
- Harter, J.K., Schmidt, F.L. and Hayes, T.L. (2002), "Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis", *Journal of Applied Psychology*, Vol. 87 No. 2, pp. 268-279.
- Hmieleski, K.M. and Baron, R.A. (2009), "Entrepreneurs' optimism and new venture performance: asocial cognitive perspective", *Academy of Management Journal*, Vol. 52 No. 3, pp. 473-488.

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- Hom, P.W., Griffeth, R.W., Palich, L.E. and Bracker, J.S. (1998), "An exploratory investigation into theoretical mechanisms underlying realistic job previews", *Personnel Psychology*, Vol. 51 No. 2, pp. 421-451.
- Huselid, M.A. (1995), "The impact of human resource management practices on turnover, productivity and financial performance", Academy of Management Journal, Vol. 38 No. 3, pp. 635-672.
- Irvine, D.M. and Evans, M.G. (1995), "Job satisfaction and turnover among nurses: integrating research findings across studies", *Nursing Research*, Vol. 44 No. 4, pp. 246-253.
- Kanungo, R.N. (1982), "Measurement of job and work involvement", Journal of Applied Psychology, Vol. 67 No. 3, pp. 341-349.
- Kelleberg, A.L. and Mark, E.V.B. (1996), "Is bigger better? Explaining the relationship between organization size and job rewards", American Sociological Review, Vol. 61 No. 1, pp. 47-66.
- Kerr, C., Dunlop, J.T., Harbison, F.H. and Myers, C.A. (1960), Industrialism and Industrial Man: The Problems of Labor and Management in Economic Growth, Harvard University Press, Cambridge.
- Kethirvel, N. (2010), "A study on the morale of employees with reference to textile industries in Coimbatore", *The IUP Journal of Management Research*, Vol. 9 No. 3, pp. 61-81.
- Kolm, S.C. (1983), "Altruism and efficiency", Ethics, Vol. 94 No. 1, pp. 18-65.
- Lawler, E.E., Mohrman, S.A. and Ledford, G.E. (1995), Creating High Performance Organizations: Practices and Results of Employee Involvement and Total Quality Management in Fortune 100 Companies, Jossey-Bass, San Francisco.
- Levine, D. (1995), Reinventing the Workplace: How Business and Employers can Both Win, Brookings Institution, Washington, DC.
- Lodahl, T. and Kejner, M. (1965), "The definition and measurement of job involvement", Journal of Applied Psychology, Vol. 49 No. 1, pp. 24-33.
- McDuffie, J.P. (1995), "Human Resource bundles and manufacturing performance: organizational logic and flexible production systems in the world auto industry", *Industrial and Labor Relations Review*, Vol. 48 No. 2, pp. 197-221.
- Macky, K. and Boxall, P. (2007), "The relationship between high performance work practices and employee attitudes: an investigation of additive and interaction effects", *International Journal of Human Resource Management*, Vol. 18 No. 4, pp. 537-567.
- Marsden, P.V. (1996), "The staffing process: recruitment and selection methods", in Kalleberg, A., Knoke, D., Marsden, P. and Spaeth, J. (Eds), Organizations in America: Analyzing their Structures and Human Resource Practices, Thousand Oaks, Sage, CA, pp. 133-156.
- Martin-Tapia, I., Aragón-Correa, J.A. and Guthrie, J.P. (2009), "High performance work systems and export performance", *The International Journal of Human Resource Management*, Vol. 20 No. 1, pp. 633-653.
- Masterson, S.S., Lewis, K., Goldman, B.M. and Taylor, M.S. (2000), "Integrating justice and social exchange: the differing effects of fair procedures and treatment on work relationship", Academy of Management Journal, Vol. 43 No. 4, pp. 738-748.
- Mathieu, J.E. and Zajac, D.M. (1990), "A review of meta-analysis of the antecedents, correlates and consequences of organizational commitment", *Psychological Bulletin*, Vol. 108 No. 2, pp. 171-194.
- Nedd, N. (2006), "Perceptions of empowerment and intent to stay", Nursing Economics, Vol. 24 No. 1, pp. 13-19.

- Organ, D.W. (1988), "A restatement of the satisfaction-performance hypothesis", *Journal of Management*, Vol. 14 No. 4, pp. 547-557.
- Osterman, P. (1994), "How common is workplace transformation and who adopts it?", *Industrial and Labor Relations Review*, Vol. 47 No. 2, pp. 173-188.
- Paullay, I., Alliger, G. and Stone-Romero, E. (1994), "Construct validation of two instruments designed to measure job involvement and work centrality", *Journal of Applied Psychology*, Vol. 79 No. 2, pp. 224-228.
- Pena, I. (2009), "Entrepreneurial strategic behaviour and business performance", *International Journal of Entrepreneurship and Innovation Management*, Vol. 10 No. 1, pp. 3-19.
- Pfeffer, J. (1998), The Human Equation: Building Profits by Putting People First, Harvard Business School Press, Boston.
- Price, J.L. and Mueller, C.W. (1981), "A causal model of turnover for nurses", Academy of Management Journal, Vol. 24 No. 3, pp. 543-565.
- Qiao, K., Khilji, S. and Wang, Z. (2009), "High-performance work systems, organizational commitment, and the role of demographic features in the People's Republic of China", The International Journal of Human Resource Management, Vol. 20 No. 11, pp. 2311-2330.
- Rupp, D.E. and Corpanzano, R. (2002), "The Mediating effects of social exchange relationships in predicting workplace outcomes from multifoci organizational justice", Organizational Behavior and Human Decision Processes, Vol. 89 No. 1, pp. 925-946.
- Saari, L.M. and Judge, T.A. (2004), "Employee attitudes and job satisfaction", *Human Resource Management*, Vol. 43 No. 4, pp. 395-407.
- Saini, D. and Budhwar, P. (2004), "Human Resource Management in India", in Budhwar, P. (Ed.), Managing Human Resources in Asia-Pacific, Routledge, London, pp. 113-139.
- Schneider, B. and Bowen, D.E. (1985), "Employee and customer perceptions of service in banks: replication and extension", *Journal of Applied Psychology*, Vol. 70 No. 3, pp. 423-433.
- Stewart, P. and Danford, A. (2008), "Union strategies and worker engagement with new forms of work and employment", New Technology, Work and Employment, Vol. 23 No. 3, pp. 146-150.
- Vandenberg, R.J. and Lance, C.E. (1992), "Examining the causal order of job satisfaction and organizational commitment", *Journal of Management*, Vol. 18 No. 1, pp. 153-167.
- Wagstaff, G.F. (1998), "Equity, justice, and altruism", Current Psychology, Vol. 17 Nos 2/3, pp. 111-134.
- Wanous, J.P., Reichers, A.E. and Hudy, M. (1997), "Overall job satisfaction: how good are single-item measures?", *Journal of Applied Psychology*, Vol. 82 No. 2, pp. 247-252.
- Way, S.A. (2002), "High performance work systems and intermediate indicators of firm performance within the US small business sector", *Journal of Management*, Vol. 28 No. 6, pp. 765-785.
- Wayne, S.J., Liden, R.C., Graf, I.K. and Ferris, G.R. (1997), "The role of upward influence tactics in HR decisions", *Personnel Psychology*, Vol. 50, pp. 997-1005.
- Zacharatos, A., Barling, J. and Iverson, R.D. (2005), "High-performance work systems and occupational safety", *Journal of Applied Psychology*, Vol. 90 No. 1, pp. 77-93.

Further reading

Blau, G.J. (1986), "Job involvement and organizational commitment as interactive predictors of tardiness and absenteeism", *Journal of Management*, Vol. 12 No. 1, pp. 577-584. High performance work system

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572

- Budhwar, P.S., Varma, A., Singh, V. and Dhar, R. (2006), "HRM systems of Indian call centres: an exploratory study", The International Journal of Human Resource Management, Vol. 17 No. 5, pp. 881-897.
- Lance, C.E. (1991), "Evaluation of a structural model relating job satisfaction, organizational commitment and precursors to voluntary turnover", *Multivariate Behavioral Research*, Vol. 26 No. 1, pp. 137-162.
- The Economist (2004), "India's shinning hopes: a survey of India", The Economist, New York, NY, February, p. 21.
- Van Breukelen, W., Van Der Vlist, R. and Steensma, H. (2004), "Voluntary employee turnover: combining variables from the traditional turnover literature with the theory of planned behavior", *Journal of Organizational Behavior*, Vol. 25 No. 7, pp. 893-914.
- Wayne, S.J., Lynn, M.S. and Robert, C.L. (1997), "Perceived organizational support and leader-member exchange: a social exchange perspective", *Academy of Management Journal*, Vol. 40 No. 1, pp. 82-111.
- Wright, P.M. and Boswell, W.R. (2002), "Desegregating HRM: a review and synthesis of micro and macro human resource management research", *Journal of Management*, Vol. 28 No. 3, pp. 247-276.

Corresponding author

Ajay Singh can be contacted at: asingh@iiml.ac.in