

ENGAGED VERSUS DISENGAGED: THE ROLE OF OCCUPATIONAL SELF-EFFICACY

Richa Chaudhary*, Santosh Rangnekar and Mukesh Kumar Barua

Department of Management Studies,
Indian Institute of Technology, Roorkee
Roorkee, Uttarakhand- 247-667 India

*Corresponding author: richa.chaudhary18@gmail.com; rich.biet@gmail.com

ABSTRACT

The fundamental aim of the present study of 126 business executives was to examine whether an engaged workforce could be differentiated from its disengaged counterpart based on occupational self-efficacy, which is an individual difference variable. We anticipated that work engagement would be characterised by high occupational self-efficacy and therefore predicted that it would positively correlate with occupational self-efficacy. Fisher's linear discriminant analysis was used to distinguish engaged employees from disengaged ones. The results showed that the command and adaptability dimensions of self-efficacy are found to be the most important in distinguishing engaged employees from their non-engaged counterparts. A logistic regression analysis was also carried out to determine whether socio-demographic variables contributed to group differences. The results of the logistic regression supported the findings of the discriminant analysis.

Keywords: work engagement, self-efficacy, command, confidence, vigour, dedication

INTRODUCTION

"In every profession and pursuit, engagement ignites talent and skill and disengagement shuts it down. The brilliance and full potential of even the brightest employee will never find expression unless he/she is engaged. It is the ratio of engaged to disengaged workers that drives the financial outcomes and impacts profitable growth" (Loehr, 2005). This quote clearly highlights the importance of an engaged workforce for an organisation in the 21st century information/service economy. The latest report on global employee engagement, by Blessing White, presented the dismal findings that fewer than 1 in 3 (31%) employees worldwide are engaged and that 1 in 5 (17%) are actually disengaged (Blessing White, 2011). Furthermore, the average employee engagement score for the Asia Pacific region dropped to 56% in 2010 from 60% the previous year, representing the largest decline in the last 15 years (Aon Hewitt, 2011). The reasons that are typically given for being disengaged revolve around conditions in the work environment or work characteristics. With engagement being defined

as a "work-related state of mind" (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002), it is no surprise that a large number of research studies focus on the role of work characteristics or environment (Langelaan, Bakker, van Doornen, & Schaufeli, 2006).

However, examining why employees exposed to similar work environments report different levels of engagement continues to be a compelling question. Why do some employees flourish in particular jobs, whereas others do not (Langelaan et al., 2006)? Why do some employees perform at high levels, whereas others perform at the minimally accepted level (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a)? Based on the findings of extensive research studies, Wellings, Bernthal and Phelps (2005) reported that some employees, based on a set of personal characteristics, are more likely than others to be inherently engaged in their work regardless of their jobs, which they refer to as engagement propensity. They identified six personal factors that were significantly correlated with engagement: attachment to the job, agreeableness, emotional stability, openness to experience, achievement orientation, and self-efficacy. Although a moderate number of studies in the West have examined the impact of individual difference variables on work engagement, there is dearth of such studies coming from developing countries such as India (cf. Hallberg, Johansson, & Schaufeli, 2007; Langelaan et al., 2006; Zhang, Gan, & Chan, 2007; Mauno, Kinnunen, & Ruokolainen, 2007; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007).

The present study chooses to restrict itself to occupational self-efficacy because it is a personal characteristic that is malleable, i.e., it can be changed or improved with the help of organisational interventions (unlike positive personality traits, which are fixed) and can thus have significant implications for the management of people at work (Maurer, 2001).

Specifically, the study attempts to examine in great detail the roles that occupational self-efficacy (domain specific), which is an individual difference variable (Leiter, 1992), and its dimensions play in distinguishing engaged employees from non-engaged ones among the Indian workforce. This can have clear managerial implications to drive engagement levels, which are discussed in detail in the discussion section of the paper. The study also attempts to determine whether socio-demographic variables play a role in explaining group differences.

Work Engagement

With more organisations realising the importance of an engaged workforce, there has been a quick rise in academic and scientific research studies focused on the construct of work engagement in the past decade. Unfortunately, even after such extensive investigation, the topic remains obscure (Blessing White, 2011). More

recently, Christian, Garza and Slaughter (2011), in their effort to provide a holistic definition of engagement based on the thorough review of the literature, defined "work engagement as a relatively enduring state of mind referring to the simultaneous investment of personal energies in the experience or performance of work".

The recent trend in work engagement studies is towards exploring the transient nature of engagement, focusing on a within-individual approach based on the argument that the exclusive focus on between-person approaches fails to account for the dynamic and configurational components of the work engagement phenomenon (Sonnentag, Dormann, & Demerouti, 2010). However, studies have shown that a major part of total variance in engagement is still accounted for by between-person variation (see Bakker & Bal, 2010).

The present study builds on the conceptualisation of engagement given by Schaufeli et al. (2002), who defined engagement as "a positive fulfilling work-related state of mind characterized by vigor, dedication and absorption" (Schaufeli et al., 2002; Schaufeli, Bakker, & Salanova, 2006). In this case, vigour is characterised by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence in the face of difficulties. Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge. Finally, absorption is characterised by being fully concentrated and happily engrossed in one's work such that time passes quickly (Schaufeli & Bakker, 2010; May, Gilson, & Harter, 2004). According to the authors, rather than a momentary state, engagement refers to a more persistent and pervasive affective-cognitive state. They differed in opinion from the burnout researchers, who define engagement as the positive antipode of burnout (Maslach & Leiter, 1997), in that they considered engagement to be a unique construct that is independent of burnout and is correlated with it.

With engagement receiving more attention from executives in the corporate world as a top strategic objective, it becomes imperative to determine what distinguishes an engaged employee from a disengaged one such that precise interventions can be designed at the right time to increase the ratio of engaged to disengaged workers.

Occupational Self-efficacy

Self-efficacy is a critical component of social cognitive theory, which has a primary influence on human thought, motivation, action and performance. Self-efficacy, as defined by Bandura (1997), is the "belief in one's capabilities to organize and execute the course of action required to produce given attainments" (p. 3). It is concerned not with the skills one has, but rather with the estimation of

what one can attain with the skills one currently possesses (Bandura, 1986). According to Stajkovic and Luthans (1998), self-efficacy is the most important psychological mechanism for producing positive work-related outcomes.

To predict performance in an occupation (as is the case in present study), the level of self-efficacy assessed should be broader; that is, it should be domain-rather than task-specific (Schyns & Sczesny, 2010). Salanova, Peiro and Schaufeli (2002) also highlighted the need for a domain-specific measure over a general measure of self-efficacy, even when predicting relatively broad concepts such as burnout. Thus, the present study uses an occupational self-efficacy measure that has an intermediate level of specificity because it has higher predictive value than generalised and task-specific measures of self-efficacy (Chen, Gully, & Eden, 2001; Pajares, 1996; Abel & Spurk, 2009).

Occupational self-efficacy reflects a person's conviction that he or she can execute behaviours relevant to his or her own work (Schyns & Sczesny, 2010). Rigotti, Schyns and Mohr (2008) defined occupational self-efficacy as "the competence that a person feels concerning the ability to successfully fulfil the tasks involved in his or her job". The present study uses the conceptualisation of occupational self-efficacy as given by Pethe, Chaudhary and Dhar (1999), who defined it as "the belief in ability and competence to perform in an occupation".

Employees with high occupational self-efficacy are often characterised by their tenacity and determination and driven by their belief in future success (Breso, Schaufeli, & Salanova, 2011). Empirical research has linked occupational self-efficacy with a wide range of attitudes, behaviours and work performance measures such as commitment (Schyns & Collani, 2002), job satisfaction (Rigotti et al., 2008), work-related performance (Rigotti et al., 2008), performance increase (Eden & Ravid, 1982), training success (McLaughlin, Moutray, & Muldoon, 2008; Tziner, Fisher, Senior, & Weisberg, 2007), learning styles (Berings, Poell, Simons, & van Veldhoven, 2007), and career satisfaction (Abele & Spurk, 2009). With well-established links between occupational self-efficacy, work attitudes and behaviours, it can be concluded that self-efficacy is an important personal resource with significant implications for employee well-being (Grau, Salanova, & Peiro, 2001) and engagement (Salanova, Llorens, Cifre, Martinez, & Schaufeli, 2003).

Work Engagement and Occupational Self-efficacy

Kahn (1990) proposed that both individual and organisational factors influence the psychological experience of work and that work behaviour is derived from this experience. Sonnentag (2003) has also shown that in addition to work characteristics, non-work factors also impact work engagement.

Several research studies have linked engagement with personal variables. For example, engagement is reported to be positively associated with achievement-striving (Hallberg, Johansson, & Schaufeli, 2007), high extraversion and low neuroticism (Langelaan et al., 2006), and adaptive perfectionism (Zhang, Gan, & Cham, 2007). Furthermore, Mauno et al. (2007), in a longitudinal study, reported that organisation-based self-esteem, which is a context-specific personal resource, is associated with every dimension of engagement.

According to the Job Demand-Resource (JD-R) model (cf. Bakker & Demerouti, 2007), job resources are the most important predictors of work engagement. Xanthopoulou et al. (2007) subsequently incorporated the concept of personal resources into the JD-R model. They asserted that personal resources have the potential to influence work engagement beyond the impact of job resources. Then, in a series of diary studies, they highlighted the role of various personal resources in enhancing the work engagement level of employees. For example, in a study among Dutch employees using structured equation modelling, they reported that personal resources (self-efficacy, organisation-based self-esteem and optimism) partially mediated the impact of job resources on work engagement. They concluded that job resources lead to the development of personal resources, which, in turn, enhance work engagement (see also Xanthopoulou, Bakker, Heuven, Demerouti, & Schaufeli, 2008; Xanthopoulou et al., 2009a; 2009b). In addition, in a study among Indian software programmers, occupational self-efficacy was reported to be a significant predictor of employee engagement, with the relationship being mediated by organisational and supervisory support (Pati & Kumar, 2010). Bandura (1997) clearly demonstrated that greater efficacy is related to becoming absorbed in the task as well as to expending higher levels of energy and effort to complete a task (Sweetman & Luthans, 2010). Furthermore, Pintrich and De Groot (1990) suggested that self-efficacy plays a facilitative role in the process of cognitive engagement (Breso et al., 2011). However, self-related doubts that are associated with low occupational self-efficacy interfere with the engagement process and make employees more susceptible to distractions from the environment; individuals with low self-efficacy find it difficult to become absorbed and work with full dedication (Sonnentag et al., 2010). Low self-efficacy has often been reported to predict burnout, the antipode of work engagement (Gonzalez-Roma, Schaufeli, Bakker, & Lloret, 2006; Bresó et al., 2011). Additionally, inefficacy or lack of confidence in one's abilities has been reported in the literature to be a critical factor in the development of burnout (Cherniss, 1993; Leiter, 1992).

The reason for the proposed relationship lies in social cognitive theory, which proposes that expectations of personal efficacy will determine the choices people make, their goals (Bandura & Wood, 1989), how much task-related effort will be spent, and how long the efforts at the task will be sustained under adverse

conditions and uncertain outcomes (Bandura, 1986, 1997). Thus, Albert Bandura's social cognitive theory provides the theoretical foundation for linking occupational self-efficacy with work engagement by suggesting that efficacy beliefs are the basis of human agency, which influences one's motivation to engage in specific positive behaviours related to high performance.

Markus and Kitayama (1991) claimed that efficacy beliefs are shaped through socialisation processes based on the cultural context. Culture influences how efficacy beliefs are moulded (Bandura, 1996). With the second largest population in the world and an increasing share of the world economy, it becomes important to test Western theories and practices in India to explore differences caused by the large cultural gap between them. Although the mentioned studies have highlighted the importance of self-efficacy in enhancing the work engagement level of employees, the empirical evidence in the Indian context is still scarce because the work engagement literature in this context has just begun to grow. Therefore, it will be interesting to examine the relationship between self-efficacy and work engagement in a collectivist cultural setting such as India, where hard work and group adherence is valued over individual abilities.

Based on the above review and with social cognitive theory and the JD-R model providing the theoretical basis for our study, we hypothesise the following:

- H1: Occupational self-efficacy and its dimensions significantly distinguish engaged employees from their disengaged counterparts.

METHODOLOGY

The Sample

The target population of the present study comprises junior-, middle- and senior-level employees from select business organisations in India. A total of 126 employees from different samples participated in the study. The business organisations included both public and private sector manufacturing and service firms. Data collected from such diverse organisations helped increase statistical power and achieve greater occupational heterogeneity (Langelaan et al., 2006). The sample was drawn using the purposive sampling method during the period from November 2010 to March 2011. Some of the responses were also collected through online questionnaire and electronic mails. The sample consisted of 100 males (79.4%) and 26 females (20.6%) aged between 21 to 52 years (Mean = 32.40, S.D. = 7.98). There are 40 junior-level (31.74%), 80 middle-level (63.49%), and 6 senior-level (5%) employees. The education levels of the sample were varied: there were 57 undergraduates (45.2%) and 69 postgraduates

(54.7%). The work experience profile of the sample was less than 5 years (55.5%), 5–10 years (16.7%) and above 5 years (27.8%).

Measures

Work engagement was measured with the 17-item Utrecht Work Engagement Scale (UWES) developed by Schaufeli et al. (2002). All 17 items were rated on a 5-point frequency-based scale (1 = strongly disagree, 5 = strongly agree). Schaufeli et al. (2002) suggested that vigour, dedication and absorption represent three distinct dimensions of work engagement. A principal component analysis conducted with the data from the present study did not result in a clear factor solution. Therefore, an overall scale that showed high reliability (Cronbach's alpha = 0.842) was used. This is similar to the results reported by Sonnentag (2003), in which an exploratory factor analysis did not result in a clear three-factor structure. For this reason, Schaufeli et al. (2006) recommended that the total score on the UWES serves an indicator of work engagement for practical purposes.

The scale developed by Pethe et al. (1999) was used to measure the efficacy beliefs of the participants with regard to their occupations. This is a 19-item scale comprises six factors. This is a five-point Likert scale with the response range varying from 1 for "strongly disagree" to 5 for "strongly agree". The six underlying dimensions of the OSE Scale are (i) confidence (dependence on one's own abilities), (ii) command (sense of control over the situation), (iii) adaptability (the ability to adjust), (iv) personal effectiveness (inclination towards continuous development), (v) positive attitude (ability to evaluate optimistically), and (vi) individuality (independence in making decisions and setting performance standards). Both the reliability and validity coefficients of scale are high. For the present study, the Cronbach's alpha value was found to be 0.874.

Statistical Analysis

Data were analysed using correlation analysis, discriminant analysis and logistic regression. First, the means, standard deviations and intercorrelations were computed for the study variables.

Fisher's linear discriminant analysis was used to distinguish the group of engaged employees from their non-engaged counterparts based on six occupational self-efficacy dimensions because this optimally separates two groups, using the Mahalanobis metric or generalised distance. It also gives the same linear separating decision surface as Bayesian maximum likelihood discrimination in the case of equal class covariance matrices. Because the three-factor structure of UWES (Schaufeli et al., 2002) was not supported, employees were divided into

engaged and non-engaged groups based on total employee engagement scores. Thirty percent of the employees at the top of the distribution were classified as engaged, whereas those at the bottom 30% of the distribution were classified as non-engaged. Because we are interested in distinguishing engaged employees from non-engaged employees, only these two extreme engaged ($n = 38$) and non-engaged ($n = 38$) groups were included in the discriminant analysis.

Additionally, logistic regression analyses were conducted to determine whether socio-demographic variables (i.e., gender, age, work experience, educational level and position in organisational hierarchy) play a role in distinguishing engaged employees from non-engaged ones.

RESULTS

Table 1 presents the means and standard deviations of the variables as well as their inter-correlations. The relationship between occupational self-efficacy dimensions and work engagement is in the expected direction. Specifically, work engagement is positively and significantly correlated with all six dimensions of occupational self-efficacy, with the coefficients of correlation ranging from 0.41–0.62.

Table 1
Means, standard deviations and inter-correlations of the study variables

Variables	Mean	S.D	1	2	3	4	5	6	7	8
WE	3.80	0.52	1							
Confidence	4.03	0.64	0.565**	1						
Command	3.96	0.54	0.489**	0.608**	1					
Adaptability	4.05	0.52	0.574**	0.628**	0.560**	1				
PE	4.24	0.57	0.617**	0.611**	0.530**	0.605**	1			
PA	3.94	0.68	0.537**	0.592**	0.465**	0.558**	0.581**	1		
Individuality	3.77	0.79	0.408**	0.453**	0.304**	0.523**	0.361**	0.449**	1	
OSE	4.02	0.52	0.686**	0.858**	0.761**	0.816**	0.802**	0.782**	0.602**	1

Note: WE = work engagement, PE = personal effectiveness, PA = positive attitude;
**Correlations are significant at 0.01 level

Distinguishing Engaged Employees from Non-Engaged Employees

The results of the discriminant analysis are summarised in Table 2. It can be observed from the table that Wilk's Lambda = 0.452 and $X^2(6) = 56.32, p < .001$, which confirms that the two groups (engaged versus non-engaged) could be

significantly distinguished. The discriminant function had an eigen value of 1.21 and a canonical correlation of 0.74, i.e., 54.8% of the variance in the discriminant function can be explained by group differences. Overall, 84.2% of the total sample could be correctly classified, which is superior to a random assignment based on prior group membership probabilities (50%) (Tabachnik & Fidell, 2001). By looking at the standardised canonical coefficient, it can be observed that the command, adaptability, and individuality dimensions are of prime importance in distinguishing between the two groups. This implies that, relative to non-engaged employees, engaged employees are characterised by high scores on the command, adaptability and individuality dimensions of occupational self-efficacy. This provides support for hypothesis H1, which states that occupational self-efficacy significantly distinguishes engaged employees from non-engaged ones.

Table 2
Distinguishing engaged from disengaged employees

Study variables	Standardised canonical co-efficient	Wilk's Lambda	Chi-square	Eigen value	Canonical correlation
Confidence	-.091				
Command	.414				
Adaptability	.411	0.452	56.32, <i>p</i> < .001	1.21	0.74
PE	.147				
PA	.166				
Individuality	.370				

Logistic Regression Analysis

A logistic regression analysis was performed to determine whether socio-demographic variables contributed to the difference between the groups of engaged and non-engaged employees. The results of the logistic regression analysis are shown in Table 3, revealing that, when unadjusted, the effects of each socio-demographic variable were calculated by including a single variable in the model at a time, and only position in the organisational hierarchy ($\chi^2 = 2.87$, $X^2 = 5.6220$, $p < .05$) was found to significantly contribute to the group differences.

Table 3
Unadjusted effects of categorical predictor variables on work engagement obtained from logistic regressions.

Predictors	LR test	Exp(B)	95% CI for exp(B)
Gender	$X^2(1) = 0.076, p\text{-value} = .783$	0.859	0.292–0.253
Age	$X^2(2) = 0.024, p\text{-value} = .877$	0.953	0.520–1.747
Length of service	$X^2(2) = 0.469, p\text{-value} = .493$	1.207	0.704–2.070
Education	$X^2(1) = 0.477, p\text{-value} = .490$	1.375	0.566–3.399
Position	$X^2(2) = 5.620, p\text{-value} = .018$	2.877	1.150–7.200

However, when the all of the variables were modelled together by including all socio-demographic factors, i.e., gender, age, education, tenure and position in the organisational hierarchy, as covariates, none of them was found to significantly predict work engagement.

Table 4
Unadjusted effects of dimensions of occupational self-efficacy on work engagement when each was modelled independently with demographic variables.

Predictors	Wald test	Exp(B)	95% CI for exp(B)
Confidence	$X^2(1) = 15.36, p\text{-value} = 0.000$	1.812	1.346–2.440
Command	$X^2(1) = 16.52, p\text{-value} = 0.000$	2.809	1.707–4.622
Adaptability	$X^2(1) = 18.72, p\text{-value} = 0.000$	3.33	1.930–5.737
Personal effectiveness	$X^2(1) = 14.33, p\text{-value} = 0.000$	2.904	1.672–5.044
Positive attitude	$X^2(1) = 16.90, p\text{-value} = 0.000$	2.135	1.487–3.065
Individuality	$X^2(1) = 17.74, p\text{-value} = 0.000$	3.010	1.803–5.027
Overall OSE	$X^2(1) = 21.81, p\text{-value} = 0.000$	1.311	1.170–1.468

The results of logistic regression analysis suggest that when the dimensions of self-efficacy were modelled independently with all five demographic variables, each variable was found to be a significant predictor of work engagement. Thus, the findings remain unchanged even after controlling for socio-demographic variables, i.e., age, gender, length of service, education and position. Thus, the logistic regression analysis supports the results of the discriminant analysis because occupational self-efficacy was found to significantly predict work engagement.

DISCUSSION

The central aim of the present study was to explore the role of occupational self-efficacy and its dimensions in discriminating between groups of employees with high and low engagement scores. The results of the discriminant analysis clearly show that occupational self-efficacy plays a significant role in distinguishing the groups of engaged employees from non-engaged ones, with 54.8% of the variance in the discriminant function being explained by group differences. The performance of the discriminant analysis can be assumed to be good, with 84.2% of the total sample classified correctly. Considering the standard canonical discriminant function, it can be concluded that the command and adaptability dimension, followed by individuality, contributes the most to explaining the group differences. With none of the socio demographic variables being found to have a significant impact on work engagement (when modelled together), as revealed by the logistic regression analysis, the results of the discriminant analysis can have significant managerial implications for increasing the ratio of engaged to disengaged workers. Additionally, the results of the logistic regression analysis reveal that occupational self-efficacy and its dimensions (when modelled independently) significantly predicted work engagement. There could be number of possible explanations for this result. First, the increase in occupational self-efficacy could strengthen the employee's belief about being able to adequately manage his or her tasks and achieve the desired outcomes. This confidence in one's ability to adequately command the work situation is helpful for fully immersing oneself in one's work and to become absorbed and dedicate oneself to the task at hand. Second, because self-efficacious individuals believe that they are capable of mastering tasks and coping well with adversity, they become involved with personally fulfilling activities and are thus more likely to become engaged (Kittredge, 2010).

The results of the study corroborate some previous studies in which positive links between self-efficacy and work engagement were reported (Pati & Kumar, 2010; Xanthopoulou, 2007, 2008, 2009a, 2009b; Llorens, Salanova, Schaufeli, & Bakker, 2007; Salanova et al., 2003). Salanova et al. (2003), for instance, demonstrated the importance of self- and collective efficacy in explaining work engagement when they reported that groups with higher levels of collective efficacy show higher engagement and group performance. Bresó et al. (2011), based on their quasi-experimental study among university students, reported that self-efficacy interventions focused on students' psychological states lead to a significant increase in work engagement. Additionally, based on their two- and three-wave longitudinal studies among secondary school and university students, Salanova, Llorens and Schaufeli (2008) reported that efficacy beliefs were related to positive emotions (i.e., enthusiasm, satisfaction, and comfort), which, in turn predicted work engagement. Thus, one of the possible explanations for the

mechanism underlying the positive link between occupational self-efficacy and work engagement could be that efficacy beliefs generate positive emotions which, in turn, predict work engagement (cf. Fredrickson, 1998, 2001). The other possible explanation could be that self-efficacy beliefs influence the perception of resources at work. Because individuals with high self-efficacy can control their environments effectively, they are more likely to perceive job demands as challenging and job resources as abundant (Salanova, Schaufeli, Xanthopoulou, & Bakker, 2010). Additionally, Xanthopoulou et al. (2007) found that self-efficacy affects the motivational process that leads to engagement.

When the impact of socio-demographic factors was assessed individually using a logistic regression analysis, the position in the organisational hierarchy was found to significantly impact the level of engagement. This could be because those at the senior level in the organisation are the decision makers and have more say in the important decisions that impact the achievement of organisational goals. The results are in congruence with those reported by Businessworld in their survey on global engagement levels (Businessworld, 2008). Additionally, Blessing White (2011) reported that due to greater autonomy and control over work as well as close proximity to organisational direction and decisions, people higher up in the organisational hierarchy were found to be more engaged. However, unlike the findings of Blessing White (2011), age and tenure were not found to be significant in explaining work engagement where it was reported that engagement increases with the age and is higher for older employees. The present study also failed to identify any link between gender and engagement, which is in congruence with the findings of Robinson, Perryman and Hayday (2004), who, based on NHS survey results, reported no significant differences between the engagement levels of men and women. One possible explanation for this could be that the examined sample is male-biased and no generalisation can therefore be made. However, several studies have reported a significant correlation between gender and engagement (Businessworld, 2008; Kong, 2009, Truss, Soane, & Edwards, 2006). The possible reason for this divergence could be the very small percentage of women constituting the sample in the present study.

In sum, we conclude that occupational self-efficacy dimensions play a crucial role in explaining work engagement among the Indian workforce. The study makes important theoretical contributions by contributing to the scarce literature on work engagement from developing economies. The study's findings have provided support for the JD-R model, a relatively new model in the field of work engagement from a developing country, which is an important step towards the process of theory building with regard to work engagement. Examining the impact of occupational self-efficacy on work engagement has extended our

knowledge and understanding of the underlying motivational process, which would extend the domain of self-efficacy and theories in employee engagement.

MANAGERIAL IMPLICATIONS

The results of the study have certain important implications for driving engagement levels among the Indian workforce. Organisations can benefit at the recruiting stage by identifying individuals with high self-efficacy (an individual difference variable) because such employees are more likely to be engaged and perform better.

Because occupational self-efficacy is found to play a significant role in distinguishing the group of engaged employees from their non-engaged counterparts, designing interventions to increase occupational self-efficacy is likely to enhance the level of engagement. The malleable nature of occupational self-efficacy makes it possible to increase the engagement level of the existing workforce by designing self-efficacy-based interventions. SCT theory identifies four sources of efficacy beliefs: mastery experiences, vicarious experiences, verbal persuasion, and emotional states (Bandura, 2001). Thus, training programmes in organisations that focus on enhancing the four sources of self-efficacy would help to increase the engagement level.

With the "command" dimension of self-efficacy being shown to have the highest influence on engagement, giving employees more control over the environment and catering to their motivation for autonomy and competence is likely to increase their belief in their capacities to control events (Xanthopoulou et al., 2009a) and give them a reason to invest their full energy in their work (Macey, Schneider, Barbera, & Young, 2009). Because adaptability, i.e., the ability to quickly adjust to the new challenges, was found to be the second most important dimension of self-efficacy in distinguishing the group of engaged employees from their non-engaged counterparts, providing employees with training in self-management can help them effectively deal with negative feedback and more easily adapt to whatever may come their way (Tams, 2008). Additionally, because individuality, i.e., independence for decision making and setting performance standards, was found to be the next most significant factor in distinguishing between the two groups, providing employees with autonomy and decision-making authority in their work areas without requiring managerial approval in every instance will help to increase their confidence and control over work situations and would hence lead to more dedicated efforts from them.

LIMITATIONS

It is important to note several limitations of the present study and directions for further research. First, all measures were based on self-reports, thus causing concern for common method bias. However, we took the following two actions to guard against this, based on the recommendations proposed by Podsakoff, MacKenzie, Lee and Podsakoff (2003) to reduce common source bias: (1) we ensured anonymity in survey administration, and (2) we improved the items used to measure the constructs. Second, because the present study included only cross-sectional information on the relationships between occupational self-efficacy, socio-demographic variables and work engagement, inferences of causality cannot be drawn. Future research should examine the relationships among socio-demographic variables, other personal resources, and engagement dimensions across time to address causality issues. The study has taken only considered occupational self-efficacy; however, many other personal variables (e.g., optimism, hope, personality factors) can impact work engagement. Future studies should attempt to address all of these issues, which remain unaddressed here. Third, the sample size should be increased in future studies to improve the generalisability of the results. The study has only focused on the unidirectional impact of self-efficacy on work engagement. However, recent studies have demonstrated the reciprocal relationship between them. Future studies should be undertaken to test this dynamic relationship between self-efficacy and work engagement in the Indian context.

REFERENCES

- Abele, A. E., & Spurk, D. (2009). The longitudinal impact of self-efficacy and career goals on objective and subjective career success. *Journal of Vocational Behavior, 74*(1), 53–62.
- Aon Hewitt (2011). *Trends in the global employee engagement* (White Paper). Retrieved 12 September 2011, from <http://www.aon.com>
- Bakker, A. B., & Bal, M. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology, 83*(1), 189–206.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309–328.
- Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1996). A socio-cognitive view on shaping the future. In S. C. Choi (Ed.), *Proceedings of the Korean Psychological Association 50th Anniversary Conference* (p. 106). Seoul, Korea: HK Mun Publishing.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*(1), 1–26.

- Bandura, A., & Wood, R. (1989). Effects of perceived controllability and performance standards on self regulation of complex decision making. *Journal of Personality and Social Psychology*, *56*(5), 805–814.
- Berings, M. G. M. C., Poell, R. F., Simons, P. R., & van Veldhoven, M. J. P. M. (2007). The development and validation of the On-the-job Learning Styles Questionnaire for the nursing profession. *Journal for Advanced Nursing*, *58*(5), 480–492.
- Blessing White. (2011). *Beyond the numbers: A practical approach for individuals, managers and executives* (Employee Engagement Report). Retrieved 12 December 2010, from http://www.blessingwhite.com/eee_report.asp
- Breso, E., Schaufeli, W. B., & Salanova, M. (2011). Can a self-efficacy-based intervention decrease burnout, increase engagement, and enhance performance? A quasi-experimental study. *Higher Education*, *61*(4), 339–355.
- Business World* (2008). HR special survey: Engage the employee. 24 April, 32–35.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, *4*(1), 62–83.
- Cherniss, C. (1993). Role of professional self-efficacy in the etiology and amelioration of burnout. In: W. B. Schaufeli & C. Maslach (Eds.), *Professional burnout: Recent developments in theory and research. Series in applied psychology: Social issues and questions* (pp. 135–149). Washington, DC: Taylor & Francis.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, *64*(1), 89–136.
- Eden, D., & Ravid, G. (1982). Pygmalion versus self-expectancy: Effects of instructor- and self-expectancy on trainee performance. *Organizational Behavior and Human Performance*, *30*(3), 351–364.
- Fredrickson, B. L. (1998). What good are positive emotions in positive psychology? *Review of General Psychology*, *2*(3), 300–319.
- Fredrickson, B. L. (2003). Positive emotions and upwards in organization. In K. Cameron, J. Dutton, & R. Quinn (Eds.) *Positive organizational scholarship* (pp. 163–175). San Francisco: Berrett-Koehler.
- Gonzalez-Roma, V., Schaufeli, W. B., Bakker, A. B., & Lloret, S. (2006). Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behavior*, *68*(1), 165–174.
- Grau, R., Salanova, M., & Peiro, J. M. (2001). Moderating effects of self-efficacy on occupational stress. *Psychology in Spain*, *5*(1), 63–74.
- Hallberg, U., Johansson, G., & Schaufeli, W. B. (2007). Type A behavior and work situations: Associations with burnout and work engagement. *Scandinavian Journal of Psychology*, *48*(2), 135–142.
- Kahn W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, *33*(4), 692–724.
- Kittredge, A. (2010). *Predicting work and organizational engagement with work and personal factors*. Unpublished master's thesis, San Jose State University, California. Retrieved 2 April 2011, from http://scholarworks.sjsu.edu/etd_theses/3771
- Kong, Y. (2009). A study on job engagement of company employees, *International Journal of Psychological Studies*, *1*(2), 65–68.

- Langelaan, S., Bakker, A. B., Van Doornen, L. J. P., & Schaufeli, W. B. (2006). Burnout and work engagement: Do individual differences make a difference? *Personality and Individual Differences, 40*(3), 521–532.
- Leiter, M. P. (1992). Burn-out as a crisis in self-efficacy: Conceptual and practical implications. *Work & Stress, 6*(2), 107–115.
- Llorens, S., Salanova, M., Schaufeli, W. B., & Bakker, A. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist? *Computers in Human Behavior, 23*(1), 825–841.
- Loehr, J. (2005). Become fully engaged. *Leadership Excellence, 22*(2), 14.
- Macey, W. H., Schneider, B., Barbera, K. M., & Young, S. A. (2009). *Employee engagement tools for analysis, practice, and competitive advantage*. Malden, MA: Wiley.
- Markus, H., & Kitayama, S. (1991). Culture and the self: implications for cognition, emotion and motivation. *Psychological Review, 98*(2), 224–253.
- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout*. San Francisco, CA: Jossey-Bass.
- Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior, 70*(1), 149–171.
- Maurer, T. J. (2001). Career relevant learning and development, worker age, and beliefs about self efficacy for development. *Journal of Management, 27*(2), 123–140.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology, 77*(1), 11–37.
- McLaughlin, K., Moutray, K., & Muldoon, O. T. (2008). The role of personality and self efficacy in the selection and retention of successful nursing students: a longitudinal study. *Journal of Advanced Nursing, 61*(2), 211–221.
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Measurement, 66*(4), 543–578.
- Pati, S. P., & Kumar, P. (2010). Employee engagement: Role of self-efficacy, organizational support & supervisor support. *The Indian Journal of Industrial Relations, 46*(1), 126–137.
- Pethe, S. Chaudhary, S., & Dhar, U. (1999). *Occupational self- efficacy scale and manual*. Agra, India: National Psychological Corporation.
- Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*(1), 33–40.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903.
- Rigotti, T., Schyns, B., & Mohr, G. (2008). A short version of the occupational self-efficacy scale: Structural and construct validity across five countries. *Journal of Career Assessment, 16*(2), 238–255.
- Robinson, D., Perryman, S., & Hayday, S. (2004). *The drivers of employee engagement*. Brighton: Institute for Employment Studies.
- Salanova, M., Llorens, S., & Schaufeli, W. B. (2008). *Upward spirals of efficacy beliefs: A longitudinal and multi sample study*. Manuscript submitted for publication.

- Salanova, M., Llorens, S., Cifre, E., Martinez, I., & Schaufeli, W. B. (2003). Perceived collective efficacy, subjective well-being and task performance among electronic work groups: An experimental study. *Small Group Research, 34*(1), 43–73.
- Salanova, M., Peiro, J. M., & Schaufeli, W. B. (2002). Self-efficacy specificity and burnout among information technology workers: an extension of the job demand-control model. *European Journal of Work and Organizational Psychology, 11*(1), 1–25.
- Salanova, M., Schaufeli, W. B., Xanthopoulou, D., & Bakker, A. B. (2010). The gain spiral of resources and work engagement: Sustaining a positive worklife. In A. B. Bakker & M.P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 118–131). New York: Psychology Press.
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10–24). New York: Psychology Press.
- Schaufeli, W., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: a two-sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*(1), 71–92.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*(4), 701–716.
- Schyns, B., & Sczesny, S. (2010). Leadership attributes valence in self-concept and occupational self-efficacy. *Career Development International, 15*(1), 78–92.
- Schyns, B., & von Collani, G. (2002). A new occupational self-efficacy scale and its relation to personality constructs and organisational variables. *European Journal of Work and Organizational Psychology, 11*(2), 219–241.
- Sonnentag S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work. *Journal of Applied Psychology, 88*(3), 518–528.
- Sonnentag, S., Dormann, C., & Demerouti, E. (2010). Not all days are created equal: The concept of state work engagement. In: A. B. Bakker, & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 25–38). New York: Psychology Press.
- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin, 124*(2), 240–261.
- Sweetman, D., & Luthans, F. (2010). The power of positive psychology: Psychological capital and work engagement. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 54–68). New York: Psychology Press.
- Tabachnik, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston: Allyn & Bacon.
- Tams, S. (2008). Constructing self-efficacy at work: A person centered perspective. *Personnel Review, 37*(2), 165–183.
- Truss, C., Soane, E., & Edwards, C. (2006). *Working life: Employee attitudes and engagement*. London: Chartered Institute of Personnel and Development.

- Tziner, A., Fisher, M., Senior, T., & Weisberg, J. (2007). Effects of trainee characteristics on training effectiveness. *International Journal of Selection and Selection, 15*(2), 167–74.
- Wellings, R. S., Bernthal, P., & Phelps, M. (2005). *Employee engagement: The key to realizing competitive advantage* (Monograph). Pittsburgh, PA: Development Dimensions International. Retrieved 4 April 2011, from http://www.ddiworld.com/pdf/ddi_employeeengagement_mg.pdf
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the Job Demands-Resources model. *International Journal of Stress Management, 14*(2), 121–141.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009a). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior, 74*(3), 235–244.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009b). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology, 82*(1), 183–200.
- Xanthopoulou, D., Bakker, A. B., Heuven, E., Demerouti, E., & Schaufeli, W. B. (2008). Working in the sky: A diary study on work engagement among flight attendants. *Journal of Occupational Health Psychology, 13*(4), 345–356.
- Zhang, Y., Gan, Y., & Cham, H. (2007). Perfectionism, academic burnout and engagement among Chinese college students: A structural equation model analysis. *Personality and Individual Differences, 43*(6), 1529–1540.