Examining the Mediating and Moderating Effects of Engagement and Conscientiousness for the Job Characteristics and Intention to Quit Relationship

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EXAMINING THE MEDIATING AND MODERATING EFFECTS OF ENGAGEMENT AND CONSCIENTIOUSNESS FOR THE JOB CHARACTERISTICS AND INTENTION TO QUIT RELATIONSHIP

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Abstract

Building on the job demands-resources, social exchange, and conservation of resources theories, the present study tests the relationship between job characteristics and intention to quit via work engagement as a mediator, and conscientiousness as a moderator. Based on data collected from a sample of Indian managers (N = 1302), we found that work engagement mediated the relationship between job characteristics and intention to quit. Moreover, personality trait of conscientiousness qualified job characteristics-intention to quit and work engagement-intention to quit relationships such that the negative effects of JC and work engagement on intention to quit were stronger for high conscientiousness than low. Implications for theory and practice are

Keywords: Job characteristics; intention to quit; work engagement; conscientiousness.

discussed.

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Introduction

Escalating customer expectations, rapidly changing technologies, and continuously evolving marketplaces, among other factors, contribute to increasingly complex and demanding jobs (Jones et al., 2007). In such volatile and uncertain times, engaged employees who intend to continue organization membership, make a critical difference to individual job performance, organizational performance and business success (Agarwal, 2014; Bakker & Bal, 2010; Halbesleben & Wheeler, 2008; Hakanen, Perhoniemi & Tanner, 2008; Saks, 2006; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). Organizations failing to retain engaged employees are left with an understaffed, less qualified human resource that ultimately hinders their ability to remain competitive (Rappaport, Bancroft, & Okum, 2003). However, recent analyses of workforce trends points to both plummeting levels of engagement as well as shortage of highly-skilled employees. The Hay report (Hay, 2014) indicates towards accelerating turnover worldwide, with average employee attrition predicted to increase to 23.4 percent from current 20.6 percent. According to Gallup's engagement study conducted in 142 countries, only 13% of employees are engaged at work (Gallup, 2013).

Given the strategic value of engaged human resources and also the costs associated with turnover, retention and engagement of workforce have emerged as areas of priority for practitioners as well as academicians (Budhwar & Varma, 2010). One of the major thrusts in the organizational behaviour literature in the recent years has been directed towards uncovering factors which foster work engagement and can arrest employee attrition (Holtom, Mitchell, Lee,

& Inderrieden, 2005; Karatepe & Olugbade, 2009; Lee & Maurer, 1997; Wefald & Downey, 2009b;). Many theorists and researchers have argued that since people spend a substantial part of their day at their job roles, there must be reasons for employees to fully invest their energy during working time. It is posited that the task characteristics can have motivating potential influencing employee attitudes and behaviours. One of the most well a accepted models explaining the relationships among job design, job attitudes, and job performance is the job characteristics (JC) model proposed by Hackman and Oldham (1976) (Abbott, Boyd, & Miles, 2006; Parker & Wall, 1998; Torraco, 2005). It has been well recognized that jobs have motivational potential which significantly affect employee work attitudes.

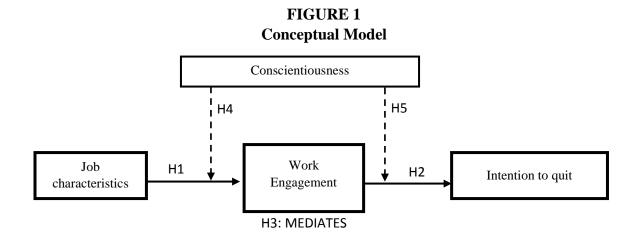
Notwithstanding these promising results of JC model, there are two major concerns that require further research. First, although the consequences of job characteristics are well understood, there is paucity of literature examining the mechanisms that cause these consequences (Van den Broeck et al., 2008) resulting in poor understanding of how JC translates into job performance. Drawing from the Job Demands-Resources (JD-R) theory (Bakker et al., 2008), this study examines work engagement (WE) as the mediating mechanism between JC and intention to quit. According to JD-R model, the motivational potential of job characteristics is likely to enhance work engagement which, in turn, has effect on employee attitudes and behaviours. Yet, as a more likely response to job characteristics, work engagement has not been well examined by empirical research. Since extant literature suggests possible links between JC, work engagement and intention to quit, it is necessary to study whether the work engagement functions as a mechanism to mediate the influence of JC on turnover intentions. Thus the first purpose of this study is to provide an empirical validation of the mediation role of work engagement for JC-intention to quit relationship.

Another important issue that has not sufficiently been attended to is the influence of personality on the relationship between JC and employees attitudes and behaviours. While the role of the individual differences has been recognized in the job characteristics literature (e.g., Lazarus & Folkman, 1984), there is paucity of empirical studies testing the moderating effects of individual characteristics for the JC-outcome relationship (Behson, Eddy, & Lorenzet, 2000), thereby limiting complete understanding of this significant work related aspect. Personality traits like conscientiousness intertwine with work situations, combining into a complex cognitive and affective mosaic (Lewin & Sager, 2010; Chiang, & Shih, 2014). Extant research has examined the moderating effects of conscientiousness on the task related-job performance relationship (Hochwarter, Witt, & Kacmar, 2000; Mount, Barrick, & Steward, 1998; Barrick & Mount, 1993). Building on prior research, in the present study we aim to test a moderated model that examines the moderating effect of conscientiousness on the JC-engagement and the JC-intention to quit relationships. The research model is presented in Figure 1.

The study makes multiple contributions to the literature. First, the study contributes to work engagement literature by establishing its mediating role for the JC-intention to quit relationship. Second, the study contributes to personality literature by empirically validating the moderating role of conscientiousness for JC-intention to quit and work engagement-intention to quit relationships. Finally, this study contributes to the JC literature by enriching our understanding about how JC affects employee attitudes and behaviours.

The study has been organized as follows. The next section describes the theoretical background and rationale for the hypotheses. The method and results sections of this paper present details about the study sample, the measures used in the study, the data analyses performed and the main findings. This is followed by the final section which discusses the

implications for both theory and practice, the limitations of the research and the directions for future research.



Theoretical background and hypotheses

Relationship between Job characteristics and Work engagement

The Job Characteristics Model (JCM) (Hackman & Oldham, 1975) posits that the way a job is designed has a substantial motivational impact upon the attitudes, beliefs, and feelings of the employee (Lawler & Hall, 1969). According to JCM, there are five job characteristics that define the motivating potential of a job: task identity, job autonomy, job feedback, task variety, and task significance. Task variety is the degree to which an individual may use multiple skills in performing their work. Task significance is the importance of the job with respect to other people. Job autonomy refers to the extent of decision-making freedom that may be exercised on the job. Job feedback describes the availability of information about performance effectiveness. Task identity refers to the extent to which an individual knows or participates in the completion of a whole piece of work.

Work engagement is defined as the cognitive-affective motivation at work and is characterized by vigor, dedication and absorption (Schaufeli & Bakker, 2004). Employee are engaged in their tasks to the extent that they find work meaningful (Khan, 1990). An important component of engagement is psychological meaningfulness, which is defined as sense of return on investments of the self-in-role. Khan (1990) found that motivational potential of task characteristics are important factors contributing to work engagement.

Extant literature on work engagement has documented several task-related factors (facilitators) that influence the onset of engagement, including autonomy (Christian et al., 2011; De Lange et al., 2008; Mauno et al., 2007; Schaufeli et al., 2009; Xanthopoulou et al., 2009; Prieto et al., 2008) feedback (Schaufeli et al., 2009), task variety (Christian et al., 2011) and skills (Christian et al., 2011). Several of these factors that stimulate engagement have also been recognized as the core or motivating job characteristics (Hackman & Oldham, 1975). However, to the best of authors knowledge, studies in past have not examined the effects of aggregated job characteristics to work engagement. We argue that it is reasonable to treat the identified job characteristics as an integrated construct because five pertinent job characteristics can be combined into a single predictive index, called the motivating potential score. Different from previous researches, in the current study, we examined the motivational relationship between JC and work engagement using the aggregate Job Characteristic Model.

The relationship between JC and work engagement can be examined from the lens of JD-R (Bakker, 2007). According to the theory, work environments can be classified in two general categories, job demands and job resources. Job demands are those physical, social, or organizational aspects of the job that require sustained physical and/or psychological effort and are, therefore, associated with physiological and/or psychological costs. On the other hand, job

resources are those physical, social, or organizational aspects of the job that are functional in achieving work-related goals, reduce job demands as well stimulate personal growth and development. Based on the JD-R (Bakker, 2007) theory, it is expected that the presence of adequate job resources (job characteristics in this case) reduces job demands, fosters goal accomplishment and stimulates positive affective reactions (Hobfoll, 2001), such as work engagement.

Based on the above arguments, we hypothesize:

H1: Jobs having motivating characteristics (a: task variety; b: task identity; c: feedback; d: autonomy; and e: task significance) will be positively related to Work engagement.

Relationship between Job characteristics and Intention to Quit

The relationship between JC and intention to quit can be explained from the social exchange theory perspective (Blau, 1964; Robinson & Morrison, 1995; Rousseau, 1995g). One of the important tenets of the social exchange theory is the norm of reciprocity which suggests which suggests that when one party provides something to another, the other party is likely to reciprocate that action/behavior. Organizations are the prime provider of resources and meaningful jobs to their employees. When employees receive resources from their organizations, for instance well designed jobs, they experience a sense of meaning, derive sense of personal fulfilment and motivation (Kahn, 1990) and as a result, feel more engaged at their job (Loher, Noe, Moller & Fetzgerald, 1985) and thus show greater attachment. Employees experiencing likeability towards work are less likely to leave the organisation (intention to quit) (Saks, 2006). Commensurate to the norm of reciprocity, a tenet of social exchange theory, employees procuring benefits from organizations necessitates that individuals repay the inducement received. One of the ways the organization reciprocates Continuing organizational membership

is considered analogous to making an investment that increases the employee's perceived entitlement and decrease the perceived debt (Cropanzano, Howes, Grandey & Toth, 1997). Literature has examined the negative affect of motivating job characteristics on intentions to quit (Smyth, Zhai, & Li, 2009; Slattery, Selvarajan, Anderson, & Sardessai, 2010; Morgeson & Humphrey 2006; Lee-Kelley et al., 2007). Replicating past literature, we posit:

H2: Jobs having motivating characteristics (a: task variety; b: task identity; c: feedback; d: autonomy; and e: task significance) will be negatively related to intention to quit

Mediating Role of Work Engagement

The central predictions of job characteristics theory is that a well designed job can influence motivation because an employee responds positively to their work environment. The theory posits that the motivating potential of job characteristics fuel employees' critical psychological states and therefore relates to employees' functioning (Hackman & Oldham, 1976). The three employee critical psychological states (CPS) defined by the JC theory is: experience of job meaningfulness, sense of responsibility for work outcomes, and knowledge of work results.

However, the mediating effects of CPS on the relationship between job characteristics and work performance have need inconsistent and mixed (e.g Fried and Ferris's (1987); Renn and Vandenberg (1995)). In order to enhance the understanding of the mechanisms underlying JC-outcome relationship scholars which answer *why* JC has the effects that it does, scholars (Podsakoff et al., 2000; Organ, Podsakoff, and MacKenzie, 2006), have proposed that future researchers should investigate the mediating mechanisms linking job characteristics with work outcomes. Responding to the call of literature, anchored in the JD-R framework (Bakker et al., 2007), this study tests the mediating role of engagement on JC-intention to quit relationship

The central tenet of the JD-R model is that job characteristics are functional in achieving work goals, stimulate personal growth, development, learning (Schaufeli & Bakker, 2004), thereby enhancing employees' work engagement. An important assumption of JD-R theory is that job resources link to organisational outcomes via engagement. The presence of adequate job resources (JC, in this case) can help meeting/coping with the job demands, foster goal accomplishment, and stimulates positive affective reactions like work engagement (Hobfoll, 2001). When employees find their work meaningful and interesting, they are more likely to be engaged in it (Kahn, 1990) and there are likely to be more attached to their organizations.

Furthermore, literature has so far established the relationships between JC with engagement (Saks, 2006; Christian et al., 2011; De Lange et al., 2008; Mauno et al., 2007; Schaufeli et al., 2009; Xanthopoulou et al., 2009; Prieto et al., 2008), and between JC with intention to quit(Smyth, Zhai, & Li, 2009; Slattery, Selvarajan, Anderson, & Sardessai, 2010). The relationship of engagement as an antecedent of turnover intentions has been documented (Saks, 2006; May, 2004). Studies have demonstrated the mediating role of work engagement for the relationships between other job resources and organisational outcomes (Sonnentag, 2003; Schaufeli & Bakker, 2004; Richardsen et al., 2006; Schaufeli & Salanova, 2008; Rich et al., 2010). Extending the results of previous studies, we propose that JC will lead to lower intention to quit via work engagement. Thus, we hypothesize:

H3. Work engagement mediates the relationship between motivating job characteristics (a: task variety; b: task identity; c: feedback; d: autonomy; and e: task significance) and intention to quit

Moderating Role of Conscientiousness

The idea that human behavior is a function of personality as well as the environment remains quite compelling. In the work environment, the interaction of personality and job

characteristics may have important implications for a variety of work outcomes. High degree of congruence between the environment and the individual is generally believed to result in higher performance, satisfaction, stability and lower stress (Caplan & Harrison, 1993; Gilboa et al., 2008; Holland, 1997; Pervin, 1968). Although the role of personality on JC-outcome relationship has been recognized, studies examining their interaction have been few and sparse. Addressing the gap in the literature, we argue that the relationship between JC and intention to quit is mediated by work engagement and the strength of these relationships will differ based on conscientiousness, a component of individual's personality (McCrae and Costa, 1987). In order to theorize these interactions, we draw from conservation of resources theory (Hobfoll, 1989) (COR) to explain how conscientiousness can act as resource to influence work related variables (Halbesleben et al., 2009; Perry et al., 2007; Zellars et al., 2006). Resources are defined as 'those objects, personal characteristics, conditions, or energies" (Hobfoll, 1989, p. 516) that are valued by the individual or that serve as a means for addressing work demands. The COR theory argues that the individuals with resources are in a better position to invest those resources and that these individuals not only strive to protect (conserve) these resources, but also to accumulate (acquire) them. Resources tend to generate other resources, thus creating resource caravans, which may result in positive outcomes like better coping and well-being (Hobfoll, 2002).

Resources may be provided to employees by organizations (e.g., logistical, financial, or social support) propensity to work in an organized manner or stem from individual differences (Hobfoll and Freedy, 1993) such as the and maintain a calm demeanour during stressful times. Employees high in conscientiousness are characterized by strong responsibility, dedication, organizational skills, absorption and steadiness, and are more likely to drive their energy into work (components of engagement), complete the job, and ultimately feel a strong sense of

professional efficacy (Kim, Shin, & Swanger, 2009). In contrast, individuals who are low in conscientiousness can be described as careless, undependable, thoughtless, and sloppy (McCrae & Costa, 1987). Zellars et al. (2006) argued that the diligence and focus associated with conscientiousness serve as resources facilitating the accomplishment of work-related goals in a timely manner, thereby conserving resources and reducing strain. Similarly, Halbesleben et al. (2009) suggested that conscientiousness acts as a resource that enables employees to balance work and family goals. Highly conscientious employees are more likely to set high-performance goals and deploy their resources towards actions that will help them meet those goals compared to less conscientious employees.

Being engaged in work is consistent with natural tendencies of high-conscientious individuals. High conscientious individuals are likely to be dedicated, vigorous and absorbed in their jobs, and motivated to perform experience for their own sake. Put differently, the threshold for engagement is expected to be low for highly conscientious employees. Thus, these individuals are likely to manifest high levels of engagement regardless of whether or not their jobs have high characteristics. On the other hand, employees low on conscientiousness will be unlikely to be engaged for its own sake, because the default behavior of these employees is to avoid hard work and to be irresponsible and untrustworthy. However, the presence of motivational job characteristics (autonomy, skill, significance, feedback and variety) will strongly aggravate the levels of engagement of conscientious employees, much more than non-conscientious employees.

The above discussion also suggests that conscientiousness should buffer the effect of JC on intention to quit. Highly conscientious employees are more likely to set high-performance goals and deploy their resources towards actions that will help them meet those goals compared to less

conscientious employees. Specifically, high conscientious employees are more likely to set and pursue task-related goals at work (Malouff et al., 1990) and constrain the negative influence of the work engagement on intentions to quit. On the other hand, low conscientious employees, who are less disciplined and more distracted, will have lesser engagement and hence experience higher intentions to quit. Thus, the strength of negative relationship between engagement and intention to quit will be high for high conscientious employees than low conscientious employees. Based on the above arguments, we hypothesize:

H4: Conscientiousness moderates the negative relationship between job characteristics and intention to quit such that this relationship is stronger and more negative for people with higher conscientiousness.

H5: Conscientiousness moderates the negative relationship between work engagement and intention to quit such that this relationship is stronger and more negative for people with higher conscientiousness.

METHOD

Sample and Data collection

The data for this study were collected from eight heterogeneous organizations, located in and around Mumbai, India. 1302 managerial employees with a team responsibility (i.e., at least three subordinates) formed the sample of this study. The survey was distributed to the employees which explained the purpose and scope of the study and assurance them of confidentiality of their responses. The questionnaire was prepared in English, the official language and a language commonly understood by managers.

In terms of the demographics, the sample consisted of respondents from a well-distributed age group, with the average age was 30.4 years. The average employee tenure was 4.3 years. Forty two percent were in junior management positions and 58% reported senior management

positions. Educationally, 8% people had diplomas, 50% were having graduate degrees, 39% employee had postgraduate degrees and 3% had done their PhDs.

Measures

The specific measures used in the study are described below, along with the results of the confirmatory factor analyses (CFA) for each measure.

Conscientiousness

Conscientiousness was measured using a 9 items scale developed by John et al. (1991). Respondents indicated their level of agreement or disagreement on a 5-point Likert type scale ranging from 'strongly disagree' (1) to 'strongly agree' (5). A sample item in the scale is 'I see myself as someone perseveres until the task is finished'. There were 4 negatively worded items in the scale. The negative items were reverse scored to yield overall conscientiousness score with higher scores indicating high conscientiousness. The model consisting of 9 items and one latent 'conscientiousness' factor showed very good fit with the data ($\chi^2[16] = 23.31$, p = .11; GFI = .99; TLI = .99; CFI = .99; RMSEA = .02).

Job Characteristics

In this study we used a 10 item short scale of job Diagnostic Survey developed by Idaszak and Drasgow (1987). The scale used two items to measure each of the five dimensions of work characteristics. On a seven-point scale (1, 'very inaccurate' to 7, 'very accurate'), participants indicated the accuracy of statements such as, 'The job requires me to use a number of complex high-level skills' (variety), 'The job provides me the chance to completely finish the pieces of work I begin' (identity), 'The job is very significant and important in the broader scheme of things' (significance), 'The job gives me considerable opportunity for independence and freedom in how I do the work' (autonomy), and 'After I finish a job, I know whether I have performed

well' (feedback). This scale was recently used in a study by Piccolo and Colquitt (2006). Model consisting of five first-order factors (task variety, task identity, task significance, feedback and autonomy) showed strong interrelationships between the first-order factors (average r = .69) suggesting the presence of a higher-order common factor (Kline, 2005). Consequently, another model was specified consisting of the first-order dimensions plus one second-order factor labeled as *motivating job characteristics*. The model showed very good fit with the data ($\chi^2[15] = 27.12$, p = .03; GFI = .99; TLI = .99; CFI = .99; RMSEA = .02).

Work Engagement

Work engagement was measured with the nine-item version of the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2006). Sample items included "at my job, I feel strong and vigorous" (vigor), "when I am working, I lose track of time" (absorption), and "my job inspires me" (dedication). Model consisting of three first-order factors (vigor, dedication, absorption) showed strong interrelationships between the first-order factors (average r = .90) suggesting the presence of a higher-order common factor. Consequently, another model was specified consisting of the first-order dimensions plus one second-order factor labeled as *work engagement*. The model showed very good fit with the data (χ^2 [14] = 22.04, p = .08; GFI = .99; TLI = .99; CFI = .99; RMSEA = .02).

Intention to Quit

Intention to quit was measured using a 5-item scale developed by Wayne Shore and Liden (1997). A sample item is "I am seriously thinking of quitting my job." One item was reverse coded. The model showed very good fit with the data ($\chi^2[1] = 2.02$, p = .16; GFI = 1.00; TLI = 1.00; CFI = 1.00; RMSEA = .03).

Control Variables

We controlled for demographic variables (age, gender, education, job tenure, and job level). Age was measured as a continuous variable. Gender was modeled as a categorical variable. Education was measured as an ordinal variable. Employee job tenure was measured as years in service and was modeled as a continuous variable. Job level was measured as an ordinal variable.

Common Method Bias

Following recommendations of Podsakoff et al. (2003), antecedents were separated from outcomes in the survey, and respondents were ensured anonymity and confidentiality of their responses. To verify whether these procedures successfully reduced shared method variance, we estimated the measurement model with and without an additional orthogonal latent method factor related to all items. Measurement model consisting of only the study variables (job characteristics, conscientiousness, work engagement, and intention to quit) showed very good fit with the data (χ^2 [418] = 918.55, p < .01; χ^2 /df = 2.20; GFI = .96; TLI = .97; CFI = .97; RMSEA = .03). The average variance extracted by the method factor was only 5.29%, which was substantially less than the average contamination of about 20-40% found to be present in studies using attitude measures in applied psychology literature (Podsakoff et al., 2003; Williams, Cote, & Buckley, 1989). The measurement model, however, showed very good fit with the data $(\chi^2[415] = 872.14, p < .01; \chi^2/df = 2.10; GFI = .96; TLI = .97; CFI = .97; RMSEA = .05).$ All indicators exhibited significant (p < .01) relationships with their intended latent constructs. In order to account for the influence of common method bias, we performed hypotheses testing using the measurement models with a common method factor.

Discriminant and Convergent Validity

The convergent and discriminant validity of the perceptual variables were tested through CFA. Table 1 presents the descriptive statistics and inter-correlations between study variables.

TABLE 1
Descriptive Statistics and Inter-Construct Correlations

	α^{a}	CR^b	M	SD	1	2	3	4	5	6	7	8	9
1. Age			30.46	7									
2. Gender			.30	.46	20**								
3. Education			2.12	1.16	09**	01							
4. Tenure			4.39	5.73	.72**	09**	17**						
5. Hierarchy			1.56	.49	.32**	11**	.08**	.20**					
6. Conscientiousness	.74	.71	1.27	.22	.05	.06*	01	.03	.03				
7. Job Characteristics	.80	.94	2.00	.46	.17**	03	06*	.14**	.17**	.19**	(.58)	.46	.16
8. Work Engagement	.88	.95	3.91	1.02	.22**	08*	04	.17**	.14**	.23**	68**	(.61)	.32
9. Intention to Quit	.90	.90	1.05	1.09	13**	01	02	09**	08**	30**	40**	57**	(.65)

a. α: Cronbach Alpha Reliability; b. CR: Composite Reliability of the construct measures

Average Variance Extracted (AVE) for each construct (nos. 7-9) is provided in parentheses along the diagonal;

Values below the diagonal are inter-construct correlations; Values above the diagonal (i.e. AVE) are square of correlations (nos. 7-9).

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^{**} p < .01(two-tailed); * p < .05 (two-tailed); N = 1302

The results in Table 1 point to desirable psychometric properties of the subjective measures. In particular, Cronbach alpha and composite reliability values were well above the suggested minimum value of .70 (Anderson & Gerbing, 1988; Nunnally & Bernstein, 1994). We examined the discriminant validity between the latent constructs by applying the Fornell and Larcker (1981) test. This test requires average variance extracted (AVE) of each construct to exceed the square of inter-correlations between the latent constructs. Table 1 shows that the square of correlations between constructs was lesser than AVEs of individual constructs. Next, we compared the hypothesized measurement model with the model where the correlation between the constructs is constrained to unity (Anderson & Gerbing, 1988). The χ^2 -difference test was significant ($\Delta\chi^2[6] = 1672.15$, p < .001) suggesting that the correlation between the constructs significantly differs from 1.

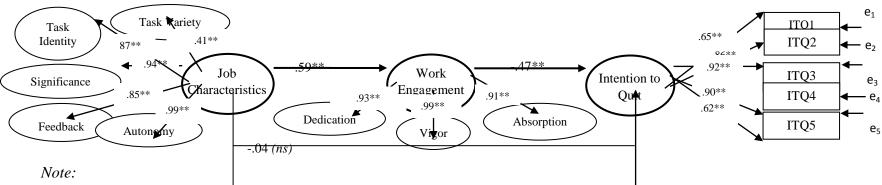
RESULTS

Hypotheses Testing

Relationships between perceptual measures were estimated using covariance based Structural Equation Modeling (SEM), performed through AMOS 22. In order to account for the effects of common method variance, we estimated the structural model with a common method latent factor. Structural model containing the study variables as well as the control variables showed very good fit with the data ($\chi^2[503] = 1127.02$, p < .01; $\chi^2/df = 2.24$; GFI = .95; TLI = .96; CFI = .97; RMSEA = .03). The results of path analysis are provided in Figure 2.

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FIGURE 2
Best Fitting Structural model with standardized path coefficients



Results represent standardized path coefficients of structural model with control variables and with CLF. Control variables (Age, Gender, Tenure, Education and Job Level) and common method latent factor (CLF) are not shown for ease of presentation.

Model fit: χ^2 [503] = 1127.02, p < .01; χ^2 /df = 2.24; GFI = .95; TLI = .96; CFI = .97; RMSEA = .03 ** p < .01; * p < .05; N = 1302.

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Motivating job characteristics were significantly related to intention to quit (β = -.36, p < .01) and work engagement (β = .59, p < .01). Work engagement was negatively related to intention to quit (β = -.47, p < .01). Figure 2 shows that in the presence of work engagement, job characteristics had non-significant direct relationship to intention to quit (β = -.04, ns). The indirect effect of job characteristics on intention to quit was -.62 with the 95% bootstrap confidence interval of -.83 to -.44. The results of the analysis provided strong support for hypotheses 1, 2 and 3.

To assess moderation, we conducted hierarchical regression analyses using SPSS 22. In order to perform the regression analysis in SPSS, we imputed the common-method bias adjusted construct values from AMOS 22. Table 2 shows the results of the regression analysis.

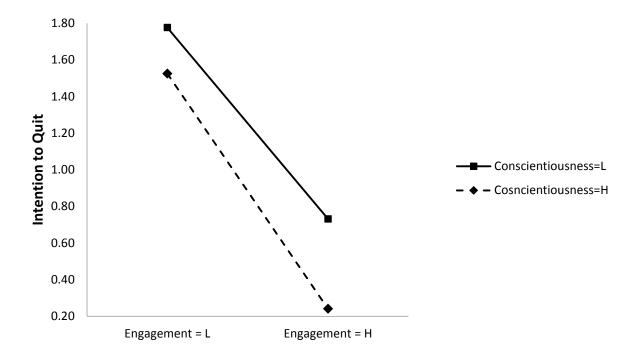
TABLE 2 Hierarchical Regression Analysis Results

		Intention to Quit					
		Step1	Step2	Step1	Step2		
	Age	08*	08	04	04		
	Gender	02	02	05*	05*		
Control Variables	Education	05*	05	05*	05*		
	Job Tenure	.01	.01	.02	.02		
	Job Level	.01	.01	.01	.01		
	Job Characteristics (JC)	35**	36**				
	Conscientiousness (Cons)	22**	23**				
Common Method Bias	JC x Cons		09**				
Adjusted Predictors	Work Engagement (WE)			54**	54**		
	Conscientiousness (Cons)			17**	17**		
	WE * Cons				06*		
	Adjusted R ²	.21	.22	.36	.36		
Fit Statistics	Δ Adjusted R ²	.21	.01	.36	.003		
	F	51.47**	47.06**	103.78**	91.91**		
N = 1302; **p < .01, * p <	<.05						

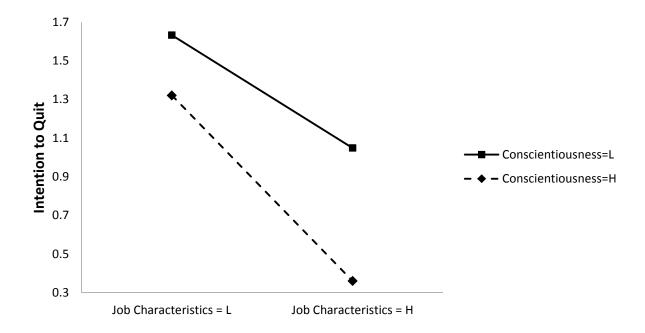
As seen from Table 2, the interaction between motivating job characteristics and conscientiousness was significantly but negatively related (β = -.09, p < .01) to intention to quit. The interaction between work engagement and conscientiousness was all negatively related to intention to quit (β = -.06, p < .05). Following the guidelines of Aiken and West (1991), we plotted the interaction effects on intention to quit. The plots, presented in Figure 3a and Figure 3b, show that at high levels of conscientiousness, the relationships between job characteristics and intention to quit, and between work engagement and intention to quit are stronger (more negative). Hypotheses 4 and 5 were, thus, supported.

FIGURE 3
Moderating Effect of Conscientiousness on Intention to Quit

a. Interaction with Work Engagement



b. Interaction with Motivating Job Characteristics



DISCUSSION

Theoretical Implications

The present study contributes to theory in multiple ways. First, the findings from this study indicate the crucial role of task characteristics in influencing work engagement. Employees experiencing motivational aspects of job develop positive affective reactions such as engagement. Since much prior research on work engagement has focused on the benefits an organization can reap by supporting its employees, this study contributes by exploring factors that might stimulate work engagement in its employees. Well designed jobs have motivational potential because they make employees' work meaningful, hold them responsible for work processes and outcomes, and provide them with information about the actual results of the work activities. This finding of the study significant extends recent studies which show that such job resources can relate to positive work-related experience (Demerouti, 2006; Demerouti et al., 2001; Schaufeli & Bakker, 2004; Chan, Huan & Ng, P. M. (2008).) which, in turn, influences employee attitudes.

Second, this study highlights the attitudinal effect of engagement on turnover intentions. Since engaged employees experience positive emotions, including happiness, joy, interest, and enthusiasm in their work (Schaufeli et al., 2006) 2006), they possess a lower tendency to quit. Third, by examining work engagement as a mediator in JC and intention to quit relationship, this study addresses literature gap of limited knowledge of how JC is associated with intention to quit (Chang et al., 2009:780). The mediating role of work engagement on JC-outcome indicates that employees high on job resources experience positive emotions such as engagement which in turn results in lesser intentions to quit. This finding agrees with the assumptions of the broaden-and-build theory (Fredrickson, 2001) that states that positive emotions broaden habitual modes of thinking and acting and result in effective functioning. Motivational potential of job resources leads to increased levels of work engagement, which in turn results in reduced turnover intentions. The study demonstrates that the effects of job characteristics on turnover intentions are not direct and emotional reactions precede intentions to quit. These findings are significant since they improve our understanding of the complex relationship between JC and work outcomes. Fourth, to capture the complexity of the relationships between the study constructs, the research also examined the moderating role of conscientiousness. We found that conscientiousness qualifies the main effects of JC and engagement on intention to quit. Similarly, the negative effects of JC and work engagement on intention to quit were stronger for employees low on conscientiousness. The study demonstrates that although positive states such as engagement at work seem to be able to explain a substantial part of job performance, the relationship is not straight forward and similar across individuals. This study is one of the first to show that conscientiousness moderates the direct effects of JC on engagement as well as its indirect effects of turnover intentions. It is, therefore, also one of the few studies that follow Hurtz and Donovan's (2000) suggestion to build more extensive multivariate models

of the personality-job performance relation and to integrate motivational variables within such models to improve the prediction of performance. By offering an additional explanation as to when JC and engagement is related in to intention to quit, this study significantly contributes to extant body of knowledge on JC, engagement and intention to quit.

Finally, this study makes an important theoretical contribution by integrating the JD-R, COR and social exchange theories, to propose and test a conceptual model linking JC, work engagement, intentions to quit and conscientiousness. Most of the studies on engagement have taken some only few aspects of job characteristic and not all. This is the first study to examine an aggregated score of job characteristics on work engagement.

The study also contributes in terms of context. With multinational corporations increasingly opening businesses in India, an understanding of employee motivation is an important concern (Varma & Budhwar, 2012; Agrawal, Khatri, & Srinivasan, 2012). Addressing a call from Ahlstrom (2012) for theory-based research that advances the understanding of management in the Asia-Pacific region, this study was conducted in India

Practical Implications

The findings of this study suggest that organizations have powerful influence on employees' affective and attitudinal states by managing the meaning of work. By altering the job designs, organizations can significantly define and shape the "reality" in which employees work (Smircich & Morgan, 1982). Although the design of the study inhibits any causal inferences, it can be assumed that job characteristics such as task variety, autonomy, job feedback, task identity, and task significance can induce engagement.

The present study shows that the effect of JC in affecting engagement levels and intentions to quit varies based on levels of conscientiousness among employees. Although motivating job characteristics will most probably be beneficial for organizations as it leads to

higher levels of engagement and lower levels of intention to quit, the effects will vary for individuals based on their levels of conscientiousness. As the personality of employees is not easy to change, organizations can take some measures to make sure that employees high on conscientiousness are made aware of the tasks/activities on which they should focus their attention. It is important that the management takes extra care for such employees to set clear performance targets and to clearly indicate their primary and secondary job responsibilities.

Strengths, Limitations and Directions for Future Research

We were able to directly access a large sample of full-time managers from Indian organizations that are generally considered to be difficult to approach and gain access to. A notable strength of this study is the sample size of 1302 managerial employees from different industries. The occupational heterogeneity increases the ability to generalize the findings of the present study. In addition, in designing the survey, we were aware of potential limitations associated with this methodology and took steps to minimize their seriousness by taking care of the ordering of items, incorporating controls, testing for discriminant and convergent validities of constructs and controlling for common method variance by modeling an orthogonal common method factor.

Although the findings of this study are in line with the developed theory, the study has some limitations that can be addressed in future research. First, the research was cross-sectional, so any inferences regarding causality may be limited. Second, the data on the study variables were self-reported and collected at a single point in time. We made every attempt to minimize concerns of common method variance and checked for the common method variance through procedural control (assuring respondents of anonymity of their responses) and statistical control (modeling a latent common method factor), the possibility of this error cannot be all together discounted. Future studies should test the relationships explored in this study through other study designs, like longitudinal study, analysis of daily diary in order to

better understand the interrelationships between the constructs. An interesting direction for future study might be to assess the extent to which other individual differences (e.g. other four factors of personality, role identity, knowledge, etc.) interact with aspects of job characteristics and work engagement to influence intention to quit. Also, it is possible that other intervening variables might come into play in the relationship between job characteristics and intention to quit. For example, self-efficacy (i.e., belief that one's actions are responsible for successful outcomes) might be an important mediator for JC-intention to quit relationship. Future studies are necessary to clarify such differences in the psychological mechanisms for different employees and employee groups.

CONCLUSION

The motivational basis of employee work attitudes and behavior is regarded as an important component of the research agenda relating to management practices especially in employment relationship domain. The current research contributes to the ongoing debate about the motivational potential of job resources on work engagement and intention to quit. The results of this study suggest that employee work engagement is likely to benefit organizations by arresting turnover intentions of their employees. These results reinforce the practical value of research examining factors which foster such affective reactions (work engagement) as well as its consequences. The study is also significant as it shows that the effects of motivating JC and work engagement will be higher for employees high on conscientiousness, an important factor of personality.

REFERENCES

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park: Sage.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two step approach. *Psychological Bulletin*, 103, 411-423.
- Ahlstrom, D. 2012. On the types of papers the Asia Pacific Journal of Management generally publishes. *Asia Pacific Journal of Management*, 29(1): 1–7.
- Abbott, J. B., Boyd, N. G., & Miles, G. (2006). Does type of team matter? An investigation of the relationships between job characteristics and outcomes within a team-based environment. *The Journal of Social Psychology*, 146(4), 485-507.
- Agarwal, U. A. (2014). Linking justice, trust and innovative work behaviour to work engagement. *Personnel Review*, 43(1), 41-73.
- Agrawal, N. M., Khatri, N., & Srinivasan, R. (2012). Managing growth: Human resource management challenges facing the Indian software industry. *Journal of World Business*, 47(2), 159-166.
- Bakker, A. B., & Bal, M. P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83(1), 189-206.
- Banai, M., & Reisel, W. D. (2007). The influence of supportive leadership and job characteristics on work alienation: A six-country investigation. *Journal of World Business*, 42(4), 463-476.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173.
- Barrick, M. R., & Mount, M. K. (2000). Select on conscientiousness and emotional stability. Handbook of Principles of Organizational Behavior, 15, 28.
- Barrick, M. R., Mount, M. K., & Strauss, J. P. (1993). Conscientiousness and performance of sales representatives: Test of the mediating effects of goal setting. *Journal of Applied Psychology*, 78(5), 715.
- Barrick, M. R., Parks, L., & Mount, M. K. (2005). Self-Monitoring as a moderator of the relationships between personality traits and performance. *Personnel Psychology*, 58(3), 745-767.
- Behson, S. J., Eddy, E. R., & Lorenzet, S. J. (2000). The importance of the critical psychological states in the job characteristics model: A meta-analytic and structural equations modeling examination. *Current Research in Social Psychology*, *5*(12), 170-189.

Berry, C. M., Sackett, P. R., & Wiemann, S. (2007). A review of recent developments in integrity test research. *Personnel Psychology*, 60(2), 271-301.

- Budhwar, P., & Varma, A. (2010). 'Guest editors' introduction: Emerging patterns of HRM in the new Indian economic environment. *Human Resource Management*, 49(1), 345-351.
- Champoux, J. E. (1991). A multivariate test of the job characteristics theory of work motivation. *Journal of Organizational Behavior*, 12(5), 431-446.
- Chiang, Y. H., Hsu, C. C., & Shih, H. A. (2014). Experienced high performance work system, extroversion personality, and creativity performance. *Asia Pacific Journal of Management*, 1-19.
- Chan, K. W., Huang, X., & Ng, P. M. (2008). Managers' conflict management styles and employee attitudinal outcomes: The mediating role of trust. *Asia Pacific Journal of Management*, 25(2), 277-295.
- 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.
- Cropanzano, R., Howes, J. C., Grandey, A. A., & Toth, P. (1997). The relationship of organizational politics and support to work behaviors, attitudes, and stress. *Journal of Organizational Behavior*, 18(2), 159-180.
- De Lange, A. H., De Witte, H., & Notelaers, G. (2008). Should I stay or should I go? Examining longitudinal relations among job resources and work engagement for stayers versus movers. *Work & Stress*, 22(3), 201-223.
- Demerouti, E. (2006). Job characteristics, flow, and performance: The moderating role of conscientiousness. *Journal of Occupational Health Psychology*, 11, 266 280.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: a general analytical framework using moderated path analysis. *Psychological Methods*, 12(1), 1.
- Edwards, J. R., Caplan, R. D., & Van Harrison, R. (1998). Person-environment fit theory. *Theories of Organizational Stress*, 28, 67.
- Fried, Y., & Ferris, G. R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology*, 40(2), 287-322.
- Gallup (2013). State of engagement. Downloaded from http://www.gallup.com/services/178517/state-global-workplace.aspx, on 12th Janury, 2015.
- Gilboa, S., Shirom, A., Fried, Y., & Cooper, C. (2008). A meta-analysis of work demand stressors and job performance: examining main and moderating effects. *Personnel Psychology*, 61(2), 227-271.
- Hay (2014). Preparing for takeoff Hay Group Atrium. Downloaded on 10th January, 2015

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, *16*(2), 250-279.

- Hakanen, J. J., Perhoniemi, R., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of Vocational Behavior*, 73(1), 78-91.
- Halbesleben, J. R., & Wheeler, A. R. (2008). The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work & Stress*, 22(3), 242-256.
- Halbesleben, J. R., Harvey, J., & Bolino, M. C. (2009). Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family. *Journal of Applied Psychology*, 94(6), 1452.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6(4), 307.
- Hobfoll, S. E., & Shirom, A. (2001). Conservation of resources theory: Applications to stress and management in the workplace.
- Hochwarter, W. A., Witt, L. A., & Kacmar, K. M. (2000). Perceptions of organizational politics as a moderator of the relationship between consciousness and job performance. *Journal of Applied Psychology*, 85(3), 472.
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments.* Psychological Assessment Resources.
- Holtom, B. C., Mitchell, T. R., Lee, T. W., & Inderrieden, E. J. (2005). Shocks as causes of turnover: What they are and how organizations can manage them. *Human Resource Management*, 44(3), 337-352.
- Idaszak, J. R., & Drasgow, F. (1987). A revision of the Job Diagnostic Survey: Elimination of a measurement artifact. *Journal of Applied Psychology*, 72(1), 69.
- Judge, T. A., Bono, J. E., Erez, A., & Locke, E. A. (2005). Core self-evaluations and job and life satisfaction: the role of self-concordance and goal attainment. *Journal of Applied Psychology*, 90(2), 257.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Kahn, W. A. (1992). To be fully there: Psychological presence at work. *Human Relations*, 45(4), 321-349.
- Kim, H. J., Shin, K. H., & Swanger, N. (2009). Burnout and engagement: A comparative analysis using the Big Five personality dimensions. *International Journal of Hospitality Management*, 28(1), 96-104.

Lawler, E. E., & Hall, D. T. (1970). Relationship of job characteristics to job involvement, satisfaction, and intrinsic motivation. *Journal of Applied Psychology*, *54*(4), 305.

- Lazarus, R. S., & Folkman, S. (1984). Stress. Appraisal and Coping, 456.
- Lee, T. W., & Maurer, S. D. (1997). The retention of knowledge workers with the unfolding model of voluntary turnover. *Human Resource Management Review*, 7(3), 247-275.
- Lee-Kelley, L., Blackman, D. A., & Hurst, J. P. (2007). An exploration of the relationship between learning organisations and the retention of knowledge workers. *Learning Organization*, 14(3), 204-221.
- Lewin, J. E., & Sager, J. K. (2010). The influence of personal characteristics and coping strategies on salespersons' turnover intentions. *Journal of Personal Selling and Sales Management*, 30(4), 355-370.
- Llorens, S., Schaufeli, W., Bakker, A., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist?. *Computers in Human Behavior*, 23(1), 825-841.
- Loher, B. T., Noe, R. A., Moeller, N. L., & Fitzgerald, M. P. (1985). A meta-analysis of the relation of job characteristics to job satisfaction. *Journal of Applied Psychology*, 70(2), 280.
- Malouff, J., Bauer, M., Mantelli, D., Pierce, B., Cordova, G., Reed, E., & Schutte, N. (1990). Development and evaluation of a measure of the tendency to be goal oriented. *Personality and Individual Differences*, 11(12), 1191-1200.
- 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.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81.
- McEvoy, G. M., & Cascio, W. F. (1987). Do good or poor performers leave? A meta-analysis of the relationship between performance and turnover. *Academy of Management Journal*, 30(4), 744-762.
- McKnight, D. H., Phillips, B., & Hardgrave, B. C. (2009). Which reduces IT turnover intention the most: Workplace characteristics or job characteristics?. *Information & Management*, 46(3), 167-174.
- Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91(6), 1321.
- Mount, M. K., Barrick, M. R., & Stewart, G. L. (1998). Five-factor model of personality and performance in jobs involving interpersonal interactions. *Human Performance*, 11(2-3), 145-165.

Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, 89(6), 852.

- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). Organizational citizenship behavior: Its nature, antecedents, and consequences. Sage.
- Parker, S. K. K., & Wall, T. D. (1998). *Job and work design: Organizing work to promote well-being and effectiveness* (Vol. 4). Sage Publications.
- Penney, L. M., Hunter, E. M., & Perry, S. J. (2011). Personality and counterproductive work behaviour: Using conservation of resources theory to narrow the profile of deviant employees. *Journal of Occupational and Organizational Psychology*, 84(1), 58-77.
- Pervin, L. A. (1989). Persons, situations, interactions: The history of a controversy and a discussion of theoretical models. *Academy of Management Review*, 14(3), 350-360.
- Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, 49(2), 327-340.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513-563.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185-227.
- Prieto, L. L., Soria, M. S., Martínez, I. M., & Schaufeli, W. (2008). Extension of the Job Demands-Resources model in the prediction of burnout and engagement among teachers over time. *Psicothema*, 20(3), 354-360.
- Rappaport, A., Bancroft, E., & Okum, L. (2003). The aging workforce raises new talent management issues for employers. *Journal of Organizational Excellence*, 23(1), 55-66.
- Renn, R. W., & Vandenberg, R. J. (1995). The critical psychological states: An underrepresented component in job characteristics model research. *Journal of Management*, 21(2), 279-303.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, *53*(3), 617-635.
- Richardsen, A. M., Burke, R. J., & Martinussen, M. (2006). Work and health outcomes among police officers: The mediating role of police cynicism and engagement. *International Journal of Stress Management*, 13(4), 555.
- Robinson, S. L., & Morrison, E. W. (2000). The development of psychological contract breach and violation: A longitudinal study. *Journal of Organizational Behavior*, 21(5), 525-546.

Rousseau, D. (1995). Psychological contracts in organizations: Understanding written and unwritten agreements. Sage Publications.

- Saavedra, R. and Kwun, S. K. (2000), Affective states in job characteristics theory. *Journal of Organizational Behaviour*, 21: 131–146.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600-619.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of organizational Behavior*, 25(3), 293-315.
- Schaufeli, W. B., & Salanova, M. (2008). Enhancing work engagement through the management of human resources. *The Individual in the Changing Working Life*, 380.
- 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.
- Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International*, *14*(3), 204-220.
- Slattery, J. P., Selvarajan, T. T., Anderson, J. E., & Sardessai, R. (2010). Relationship between job characteristics and attitudes: A study of temporary employees. *Journal of Applied Social Psychology*, 40(6), 1539-1565.
- Slattery, J. P., Selvarajan, T. T., Anderson, J. E., & Sardessai, R. (2010). Relationship between job characteristics and attitudes: A study of temporary employees. *Journal of Applied Social Psychology*, 40(6), 1539-1565.
- Smircich, L., & Morgan, G. (1982). Leadership: The management of meaning. *Journal of Applied Behavioral Science*, 18(3), 257-273.
- Smyth, R., Zhai, Q., & Li, X. (2009). Determinants of turnover intentions among Chinese off farm migrants. *Economic Change and Restructuring*, 42(3), 189-209.
- 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.
- Taber, T. D., & Taylor, E. (1990). A review and evaluation of the psychometric properties of the Job Diagnostic Survey. *Personnel Psychology*, *43*(3), 467-500.
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88(3), 500.
- Thatcher, J. B., Liu, Y., Stepina, L. P., Goodman, J. M., & Treadway, D. C. (2006). IT worker turnover: an empirical examination of intrinsic motivation. *ACM SIGMIS Database*, *37*(2-3), 133-146.
- Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, 4(3), 356-367.

Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work & Stress*, 22(3), 277-294.

- Varma, A., & Budhwar, P. (2012). International human resource management in the Indian context. *Journal of World Business*, 47(2), 157-158.
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), 82-111.
- Wefald, A. J., & Downey, R. G. (2009). Construct dimensionality of engagement and its relation with satisfaction. *The Journal of Psychology*, 143(1), 91-112.
- Wefald, A. J., & Downey, R. G. (2009). Construct dimensionality of engagement and its relation with satisfaction. *The Journal of Psychology*, 143(1), 91-112.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74(3), 235-244.
- Zellars, K. L., Perrewé, P. L., Hochwarter, W. A., & Anderson, K. S. (2006). The interactive effects of positive affect and conscientiousness on strain. *Journal of Occupational Health Psychology*, 11(3), 281.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, XVIII, 39-50.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- 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, 879-903. doi: 10.1037/0021-9010.88.5.879
- Williams, L. J., Cote, J. A., & Buckley, M. R. (1989). Lack of method variance in self-reported affect and perceptions at work: Reality or artifact? *Journal of Applied Psychology*, 74, 462-468. doi: 10.1037/0021-9010.74.3.462