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Linking perceived employee voice and creativity

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Abstract

Researchers are of the belief that employee voice has favorable effects for both the employee and the organization. However, the effect of employee voice on creativity, and the process through which it influences creativity, has hitherto received little attention. This study aimed at investigating the relationship between perceived employee voice and creativity. Employees of three premier dairy companies located in Mazandaran province constituted the statistical population of this research. Using a random sampling method, 302 employees were selected as the research sample. Data was gathered through a questionnaire. Before testing the hypotheses, a localized scale was developed for employee voice. Results of the data analysis revealed that perception of employee voice has a positive effect on work meaningfulness. Moreover, work meaningfulness has a positive effect on intrinsic motivation. Results also prove that intrinsic motivation has a significantly positive effect on an individual employee's creativity.

Keywords

Employee voice; work meaningfulness; intrinsic motivation; creativity.

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Introduction

The understanding and interpreting of voice has gained significant recognition among practitioners and researchers in recent years. It has been clearly established in the employee voice literature that employees who are of the firm belief that they can openly and freely express their personal opinions and concerns to a higher level in the organization, and who believe that they can influence decision making, are likely to exhibit more positive attitudes, and will demonstrate constructive behaviors (Holland, Pyman, Cooper and Teicher, 2011; Rees, Alfes and Gatenby, 2013). Previous employee voice research has addressed how such practices may affect employees' attitudes and behaviors, such as job satisfaction (Holland et al., 2011), commitment (Farndale, Van Ruiten, Kelliher and Hope-Hailey, 2011), and work engagement (Rees et al., 2013). However, its influence on employees' creativity and the process through which it operates has received scant attention. Creativity is crucial for organizational performance and survival in today's rapidly changing and highly competitive environments (Lopez-Cabrales, Perez-Luno and Cabrera, 2009). It is also essential for work outcomes, innovation, and achieving competitive advantage (Zhou and Shalley, 2008; Zhang and Bartol, 2010), which is why organizations are increasingly seeking to foster individual creativity. Not surprisingly then, scholars are nowadays seeking to understand how to enhance creativity in organizations. We propose that encouraging employees to voice their concerns, grievances and opinions can enhance their work meaningfulness and intrinsic motivation which, in turn, enhances overall creativity.

Our study extends prior research in three important ways. First, the influence of perceived employee voice on creativity has, hitherto, received little attention. Second, studies examining the relationship between employee voice and work meaningfulness are rare. Theoretically and practically, this study explores this relationship. Third, how meaningfulness affects intrinsic motivation has received scarce attention in previous studies. To fill the gap, therefore, this

paper is structured as follows. First, the definitions and nature of the research variables are reviewed. Then, some evidence that supports how employee voice may lead to creativity considering the roles of work meaningfulness and intrinsic motivation are provided. Following this, hypotheses are developed. Next, the research methodology and results will be presented. Finally, theoretical and practical implications of the findings will be offered.

Literature Review

Employee Voice

The breakdown in the paradigm of mass production, and the emergence of high-performance work practices (also called high-involvement work practices) that deliver quality, innovation and flexibility, has generated widespread experimentation with a multitude of methods for sharing information, consulting with employees, involving employees in workplace decision making, and soliciting feedback (Budd *et al.*, 2010). According to Lawler and Worley (2006), for a high-involvement work practice to be effective and to have a positive impact on employee performance, employees must be given some power. To this aim, employees must have the opportunity to contribute to decisions that are crucial to their performance and working lives.

Employee voice has traditionally been heard through union representation, but a decline in union membership has revived interest in the importance of voice while also prompting inquiries into alternative channels of voice (Budd et al., 2010). As a result, the notion of voice has broadened away from a single channel of representation, towards one that views it as capable of being articulated through a variety of channels such as union membership representation, indirect or representative participation mechanisms, and direct employee involvement. Holland et al. (2011) believe that direct voice enables managers to respond better to the heterogenous needs of the workforce, thus generating higher levels of employee engagement and job satisfaction. Moreover, the authors suggest that direct voice arrangement, such as regular meetings between managers and employees, and the existence of semiautonomous workgroups, were positively associated with job satisfaction implying that having more direct voice arrangements has a greater influence on employees' job satisfaction. Opportunities for employee voice may be implemented at different levels in the workplace; for example, between employees and the senior manager, between the employees and their immediate line manager, between team or workgroup members and the leader.

Traditional literature on industrial relations considers the articulation of grievances, whether individually or collectively, as the sole component of voice (Budd *et al.*, 2010). An emphasis on grievances reflects a narrow conceptualization of employee voice. The definitions and channels of voice have broadened during the last few decades. Today, employee voice has several meanings, such as articulation of individual dissatisfaction, exchange of views or ideas, collective representation, upward problem solving, contribution to workplace decision making (Morrison *et al.*, 2011). Goldberg *et al.* (2011) suggest that an employee is perceived to have a voice when he/she can safely express his or her views without fear of retaliation, and that in doing so will result in the desired outcome.

Work Meaningfulness

Since individuals spend more than a third of their lives at their workplace, work is an important domain in which individuals engage and find meaning (Van Zyl et al., 2010). Meaningfulness in work is an important psychological state or condition that individuals seek as the primary motive at work (May et al., 2004). Taubman-Ben-Ari and Weintroub (2008) define meaningfulness as the significance one attaches to one's existence, and encompasses the value one places on the existence of life and on the course of his/her life. May et al. (2004) define work meaningfulness as the value of a goal or purpose for working, judged in relation to an individual's own ideals, values and standards. Meaningfulness can lead to higher levels of well-being in the workplace (Rothmann and Rothmann, 2010; May et al., 2004).

Also, it has been shown to be an important contributor of work-related outcomes (Olivier and Rothmann, 2007; Van Zyl *et al.*, 2010). Work meaningfulness has been found to be valued above promotion, income and job security (Grant, 2007).

Meaningful work experiences are not only valuable to employees, but these experiences by employees can also provide value to the organization.

Intrinsic Motivation

To be motivated means to be moved to do something (Ryan and Deci, 2000). The Self-Determination Theory distinguishes between different types of motivation based on the different reasons or goals that give rise to an action. The most basic distinction is between intrinsic and extrinsic motivation. According to (Ryan and Deci, 2000, p.56), "Intrinsic motivation is defined as the doing of an activity for its inherent satisfactions rather than for some separable consequence. When intrinsically motivated, a person is moved to act for the fun or challenge entailed rather than because of external prods, pressures, or rewards." Extrinsic motivation refers to doing something because it leads to an external outcome or reward. Intrinsic motivation exists in the relation between individuals and activities. People are intrinsically motivated for some activities and not for others, and not everyone is intrinsically motivated for any particular task (Ryan and Deci, 2000).

Creativity

Creativity is defined as the generation of novel and useful ideas concerning products, services, processes and procedures by an employee (Amabile and Muller, 2008, p.35). These ideas can be completely new or new only to a focal team or organization. The ideas must be both novel and appropriate to the goal in order to be called creative. To be creative, an employee must think divergently, look at things from different perspectives, and combine previously unrelated subjects into something new and better (Zhang and Bartol, 2010). According to Amabile's componential theory of creativity, all human beings possess the capability for creativity if four components are available: domain-relevant skills, creativity-relevant processes,

intrinsic task motivation, and the social environment in which the individual is working (Amabile and Muller, 2008, p.35).

Hypotheses Development

According to Interpersonal Sensemaking Perspective, interpersonal cues that shape work meaning may be much more explicitly social or interaction-based than those implied by a social information processing perspective on job design (Wrzesniewski, Dutton and Debebe, 2003). This perspective also suggests that employees actively notice, interpret and seek out cues in the course of daily interaction that convey evaluation and worth. Previous studies suggest that employees are most likely to experience work meaningfulness when they feel they are valuable and worthwhile (May et al., 2004; Olivier and Rothmann, 2007). Voice engenders the belief that the organization values its employees and their contribution (Farndale et al., 2011). Empowerment literature also indicates that an employee's participation in decision making gives him/her a sense of value (Zhang and Bartol, 2010) which can lead to meaningfulness. Meaning is also derived from the increased level of perceived power, influence and social status. Grant (2007) believes that when employees perceive that they can influence their work outcomes, they are filled with a sense of meaningfulness. Moreover, Olivier and Rothmann (2007) suggest that individuals tend to experience a sense of meaningfulness when they are treated with respect and appreciation for their work contributions. Listening to employees' suggestions and involving them in decision making means treating employees with respect. Kahn (1990) suggests that the more individuals are able to express their values and principles openly at work, the more likely they will be able to experience meaningfulness.

H1: Employee voice has a significantly positive effect on work meaningfulness.

Individuals who believe that a given work role activity is personally meaningful are intrinsically motivated to invest themselves more fully in it. Research in the job design area has also demonstrated that meaningfulness is linked with intrinsic motivation (Renn and Vandenberg, 1995). Furthermore, May *et al.* (2004) believe that individuals who find their work meaningful will be more likely to invest their energy and other aspects of themselves within their work-related activities indicating that meaningfulness increases employees' intrinsic motivation.

H2: Work meaningfulness has a significantly positive effect on intrinsic motivation.

On the basis of the componential theory of creativity, an individual who is not intrinsically motivated will not use his/her skills and expertise to perform and function creatively. Intrinsic motivation is the most important factor which determines an individual's discretionary effort at the workplace. Actually, the main function of intrinsic motivation is controlling an individual's attention. When employees are intrinsically motivated, they will devote all their attention to the issues or problems they encounter (Zhang and Bartol, 2010). Creative solutions are generated when an individual devotes substantial attention to a problem, and analyzes the problem from various perspectives, gathers diverse but relevant information, and creates a choice of alternatives. Intrinsic motivation enables employees to search for new and better ways of doing things, and leads to high levels of creativity (Amabile and Muller, 2008, p.35). Employees who are intrinsically motivated tend to be cognitively more flexible and persevering. Therefore, they are equipped to finding several alternatives, use novel approaches, and be persistent. All these behaviors suggest that an intrinsically motivated individual is more likely to exhibit a high level of creativity (McMahon and Ford, 2013).

H3: Intrinsic motivation has a significantly positive effect on an employee's creativity.

Methodology

Quantitative data for this study was collected through questionnaires. Employees of three premier dairy companies located in Mazandaran province constituted the statistical population of this study. Using random sampling, 302 employees were selected as the research sample. Totally, 284 completed questionnaires were taken into

consideration for data analysis since 18 incomplete questionnaires were ignored. To increase the response rate, the authors of this article personally distributed the questionnaires and explained the aim of the research to the selected sample. To do so, the authors obtained prior permission of the companies' managers with the help of some friends and relatives. Since employees may provide unrealistic answers should they get the notion that the research is conducted by the company, and that such information may affect their position, the authors assured them that all the data and information provided by the respondent would be kept very confidential, and that it was just an academic research. Also, the questionnaires were anonymous, thus decreasing the employees' fear of risk. The authors again personally referred to the respondents to make sure that all of them complete the questionnaires. About 58% of the respondents were male and 42% were female. Descriptive statistics also shows that about 9% of the respondents were 20–25 years old, about 42% were 26–30 years old, about 38% were 31-35 years old, and about 11% were above 35 years of age. Descriptive statistics indicates that about 32% of the respondents had worked for 1-5 years, about 34% had worked for 6-10 years, about 26% had worked for 11–15 years, and 8% had worked for more than 15 years for their respective organizations. All the items were measured on a 5-point Likert scale (1 = strongly disagree, to 5 = strongly agree). Five experts were asked to check the content validity of the questionnaire.

To measure employee voice, the authors of this paper used 12 items that were based partly on existing scales (Holland *et al.*, 2011; Farndale *et al.*, 2011) and partly developed for this study. For two reasons, the authors developed their own scale. First, some of the items included in the existing scales are not related to the context of this study. For example, labor unions do not exist in the target country, and usually workers voice their concerns, opinions, grievances and suggestions directly, collectively or through representatives. Second, the existent scales lack some elements mentioned in the definitions and literature of employee voice. Previous literature was reviewed in depth, and 12 items were

developed for the employee voice scale. To determine item retention, an exploratory factor analysis was performed using SPSS software. The results of confirmatory factor analysis are presented in the next section. Work meaningfulness was measured using six items based on the scale developed by May, Gilson and Harter (2004). The reliability of the six-item scale was 0.83. Intrinsic motivation was measured using four items derived from prior research (Kuvaas and Dysvik, 2009). The four-item scale had a Cronbach's alpha value of 0.89. Employee creativity was measured by four items derived from Gong et al. (2013). Cronbach's alpha value for this scale was calculated at 0.81.

Results

Prior to extraction of the factors related to employee voice scale, several tests should be applied to examine the appropriateness of the respondent data for factor analysis. These tests include the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy, and Bartlett's Test of Sphericity. The KMO measure of sampling adequacy compares the sizes of the observed correlation coefficients to the sizes of the partial correlation coefficients for the sum of analysis variables. The KMO measure of sampling adequacy varies between 0 and 1, and the values closer to 1 are better, whereas, being below 0.50 is unacceptable. It must be at least 0.70, and the higher the better. The KMO value in this study was calculated at 0.91. Bartlett's Test of Sphericity tests, whether the correlation matrix is an identity matrix, which indicates the factor model is inappropriate. It must obtain significant value (p < 0.05). A significant value for Bartlett's Test of Sphericity was obtained for data of this study. It indicates that data is appropriate for factor analysis. Next, principal components analysis with varimax rotation was used to extract factors. Following Kuvaas and Dysvik's (2009) suggestion, we retained only items with a loading of at least 0.50 or higher on the target construct, a cross-loading of less than 0.35 on other included factors, and a differential of 0.20 or higher between included factors. The exploratory factor analysis revealed that one of the items obtained 0.3 loading, and another item

cross-loaded. These two items were removed and the scale remained with 10 items loaded on one factor.

Once all the significant loadings have been identified, variables that are not adequately accounted for by the factor solution should be identified. One approach is to examine each variable's communality which represents the amount of variance explained by each variable. According to Hair *et al.* (2009), variables with communality less than 0.5 are not acceptable. All the remaining items in this study had communality above 0.5. Moreover, Hair *et al.* (2009) suggest that in the natural sciences, the factoring procedure should not be stopped until the extracted factors account for at least 95% of the variance; but in the social sciences, where information is often less precise, the researchers should consider a solution that at least accounts for 50–60% of the total variance. The extracted items for employee voice explain 76% of the variance which is far beyond the threshold. The 10-item scale had a Cronbach's alpha value of 0.86.

Next, the scale reliability was tested by assessing indicator reliability and scale reliability. Indicator reliability refers to the reliability of individual indicators. These are the squared factor loadings (R^2) for an indicator. Indicator reliability should preferably be 0.5 or greater (Joreskog and Sorbom, 2002). Indicator reliability was more than 0.5 in all cases. The reliability of the scales is assessed by computing the alpha coefficient of internal consistency. Reliability assessment of employee voice, work meaningfulness, intrinsic motivation and creativity was calculated at 0.86, 0.83, 0.89 and 0.81, respectively, which indicate good reliability. Means, standard deviations and correlations for all the measures used in this study are presented in Table 1.

Table 1. Descriptive Statistics and Correlations

Variables	Mean	SD	1	2	3		
1. Employee Voice	3.44	0.558			_		
2. Work Meaningfulness	3.76	0.374	0.29^{**}				
3. Intrinsic Motivation	3.69	0.424	0.31**	0.65^{**}			
4. Creativity	3.91	0.442	0.37^{**}	0.42^{**}	0.70^{**}		
** Correlation is significant at the 0.01 level							

The measurement model for the four scales was first estimated before testing the study hypotheses. The measurement model estimates the unidimensionality, reliability and validity of each construct. The scale validity was analyzed by focusing on content validity, convergent validity and discriminant validity. Content validity of the questionnaire was verified by five experts in human resources management.

Convergent validity is accepted when factorial loads are higher than 0.5 and *t* coefficients are significant. All parameter estimates of the scales had standardized loadings of more than 0.50, indicating high convergent validity. Convergent validity is also assessed through *t* values for the factor loadings. If all *t* values are over 2, then convergent validity is said to be existing. It is to be noted that in all cases, *t* values were more than 2, thus indicating that convergent validity was high. We also took into account the fact that all fit indices have optimal values. Since all the fit indices, *t* values, and factorial loads obtained favorable values, we could assume that our measurement scales had convergent validity.

Discriminant validity was also demonstrated in order to determine whether the constructs in the model were distinct from each other. First, the average variance extracted for the variable in each scale was calculated. According to Hair *et al.* (2009), scale variables are sufficiently different from one another if a scale's average variance extracted (AVE) is greater than its squared multiple correlations with the rest of the constructs. AVE for employee voice, work meaningfulness, intrinsic motivation and creativity was calculated at 0.66, 0.68, 0.73 and 0.64, respectively, which indicates that the AVE value for each construct is greater than its squared correlation with other constructs. Therefore, discriminant validity is approved.

At the next step, the hypotheses were tested. To this end, a structural model that contains relationships in accordance with the stipulated hypotheses was generated. Indices of model fit are X^2/df , CFI, GFI and RMSEA. These indices indicate the extent to which a research model provides an improved overall fit relative to a null model or independence model in which the correlations among

observed variables are assumed to be zero. The CFI and GFI have been considered the best approximations of the population value for a single model, with values greater than or equal to 0.90 considered to be indicative of a good fit (Hair et., 2009). Favorable value for RMSEA is less than or equal to 0.08 (Zhang and Bartol, 2010). Table 2 summarizes all the model fit indices. As Table 2 shows, goodness-of-fit indices for all constructs obtained favorable values.

Table 2. Summary of Model Fit Indices

	2				
Model Test	\mathbf{X}^2	df	CFI	GFI	RMSEA
Employee Voice	91.69	35	0.92	0.90	0.07
Work Meaningfulness	19.03	9	0.96	0.93	0.06
Intrinsic Motivation	4.08	2	0.98	0.92	0.05
Creativity	4.90	2	0.95	0.91	0.06

 X^2 values for the structural models are significant at $p \le .001$

Figure 1 presents the overall structural model with path coefficients.

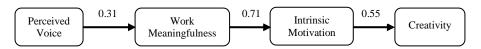


Figure 1. Standardized Path Estimates

Hypothesis 1 states that employee voice is positively related to work meaningfulness. Our results supported this view (β = 0.31, p<0.001). Hypothesis 2, which states that work meaningfulness is positively related to intrinsic motivation, received support as well (β = 0.71, p<0.001). Hypothesis 3 says that intrinsic motivation is positively related to creativity. Our results supported this hypothesis (β = 0.55, p<0.001). Therefore, all hypotheses of the study were confirmed.

Conclusion

This study examined the relationship between perceived employee voice and creativity through work meaningfulness and intrinsic motivation. The results confirmed that perceived employee voice indirectly affects intrinsic motivation through meaningfulness in work.

Intrinsic motivation, in turn, affects employees' creativity. The relationship between perceived voice and intrinsic motivation has not been investigated in previous studies. Prior researchers (Dewett, 2007; Zhang and Bartol, 2010) found that intrinsic motivation has a positive influence on an employee's creativity. This is in line with the results of our study. In terms of theoretical implications, our findings add to our understanding of the effect of employees' voice on employees' creativity, and the process through which it works. The results show that employees who have the opportunity to have a "say" in workrelated issues, and believe that the organization values their contribution, are more likely to find their work meaningful and will become intrinsically motivated. Confirming a relationship between employee voice arrangements and creativity makes an important contribution to the literature and provides implications for scholars and practitioners of HRM. Our study makes some important contributions. First, we proposed and tested a conceptual model that connects employee relationships with employee creativity. The effect of perceived voice on creativity through work meaningfulness has not been investigated. Second, our study is unique in explaining the relationship between perceived voice and work meaningfulness. Meaningful work is the crucial job feature that an employee values above promotion, income and job security (Grant, 2007). Therefore, finding ways to enhance the meaning of work can make a significant contribution to the literature and to organizations. To our knowledge, the relationship between employee voice and work meaningfulness has not been investigated in prior studies. Therefore, voice can be considered as a motivational factor which should be considered while designing a communication system within the organizations. This study highlights how communication within an organization affects employees' intrinsic motivation and creativity.

Our study also has implications for managers. First of all, in improving work meaningfulness, voice arrangements do matter. Our study highlights the value of a greater focus on facilitating employee voice to enhance work meaningfulness. Prior researches highlight the importance that work meaningfulness has to employees. Second, our

results suggest that creativity may be enhanced if employees believe that they can express their suggestions and grievances, and contribute to organizational plans or decision makings. Using team work offers much opportunity for employees to have a "say" about work-related issues and, hence, increase their intrinsic motivation. Managers also should promote a friendly and safe atmosphere that encourages employees to express their concerns and to contribute in decision making. In short, managers should create an environment in which employees realize that their managers do place a value on their subordinates. Managers can hold weekly meetings to obtain their employees' opinions, and solve team, departmental or organizational problems. Establishing of grievance and suggestion systems which allow employees to voice their grievance and opinions anonymously will be more useful if employees feel they are not in a safe environment. Establishing an effective communication system is paramount if managers want to elicit creativity through voice arrangement.

Despite this study's theoretical and practical contributions, we acknowledge that our research design has some limitations and raises questions for future research. First, we measured creativity using respondents' self-reports. Although self-reported creativity may be more valid than a supervisor's or coworker's assessment about an individual's creativity (Shalley et al., 2009), such measurement is subject to personal bias. Further studies should include other measures of creativity besides self-reports. In this study, data for the independent and the dependent variables came from a single source. Further studies should preferably include measures of independent and dependent variables collected from different sources. Although this study found that perceived voice results in intrinsic motivation and creativity, it is not clear which arrangements for employee voice (direct or indirect) have such an effect, or which mechanism has more influence on an employee's motivation and behavior. Future studies should investigate the effects of such mechanisms.

References

- Amabile, T. M. & Mueller, J. S. (2008). "Studying Creativity, Its Processes, and Its Antecedents: An Exploration of the Componential Theory of Creativity". Chapter in J. Zhou and C. E. Shalley (Eds), *Handbook of Organizational Creativity*, 33-64, New York: Lawrence Erlbaum Associates.
- Baard, P.; Deci, E. & Ryan, R. (2004). "Intrinsic Need Satisfaction: A Motivational Basis of Performance and Well-being in two Work Settings". *Journal of Applied Social Psychology*, 34(10), 2045–2068.
- Budd, J.W.; Gollan, P.J. & Wilkinson, A.J. (2010). "New Approaches to Employee Voice and Participation in Organizations". *Human Relations*, 63(3), 303-310.
- Dewett, T. (2007). "Linking Intrinsic Motivation, Risk Taking, and Employee Creativity in an R&D Environment, R&D Management". 37(3), 197-208.
- Farndale, E.; Van Ruiten, J.; Kelliher, C. & Hope-Hailey, V. (2011). "The Influence of Perceived Employee Voice on Organizational Commitment: an Exchange Perspective". *Human Resource Management*, 50(1), 113–129.
- Goldberg, C. B.; Clark, M. A. & Henley, A. B. (2011). "Speaking up: A Conceptual Model of voice responses following the unfair treatment of others in non-union settings." *Human Resource Management*, 50(1), 75–94.
- Gong, Y.; Zhou, J. & Chang, S. (2013). "Core Knowledge Employee Creativity and Firm Performance: The Moderating Role of Riskiness Orientation, Firm Size and Realized Absorptive Capacity". *Personnel Psychology*, 66, 443–482.
- Grant, A.M. (2007). "Relational Job Design and the Motivation to Make a Prosocial Difference". *Academy of Management Review*, 32(2), 393–417.
- Hair, J. F.; Black, W. C.; Babin, B. J.; Anderson, R. E. & Tatham, R. L. (2009). *Multivariate Data Analysis*.7th Edition, Upper Saddle River, NJ: Pearson Prentice Hall.
- Holland, P.; Pyman, A.; Cooper, B.K. & Teicher, J. (2011). "Employee Voice and Job Satisfaction in Australia: the Centrality of Direct Voice". *Human Resource Management*, 50(1), 95–111.
- Hu, L. & Bentler, P. M. (1998). "Fit Indices in Covariance Structure Modeling: Sensitivity to Underparameterized Model Misspecification". *Psychological Methods*, 3(4), 424–453.

- Joreskog, K. & Sorbom, D. (2002). LISREL 8.53: User's Reference Guide. Chicago, IL: Scientific Software International Inc. (SSI).
- Kahn, W.A. (1990). "Psychological Conditions of Personal Engagement and Disengagement at Work". *Academy of Management Journal*, 33(4), 692-724.
- Kuvaas, B. & Dysvik, A. (2009). "Perceived Investment in Employee Development, Intrinsic Motivation and Work Performance". *Human Resource Management Journal*, 19(3), 217–236.
- Lawler, E. E. & Worley, C.G. (2006). "Winning Support for Organizational Change: Designing Employee Reward Systems that Keep on Working". *Ivey Business Journal*, Mar/April, 1-5.
- Lopez-Cabrales, A.; Perez-Luno, A. & Cabrera, R. V. (2009). "Knowledge as a Mediator between HRM Practices and Innovative Activity". *Human Resource Management*, 48(4), 485–503.
- 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.
- 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 Organisational Psychology*, 77(1), 11–37.
- McMahon, S. R. & Ford, C. M. (2013). "Heuristic Transfer in the Relationship Between Leadership and Employee Creativity". *Journal of Leadership & Organizational Studies*, 20(1), 69–83.
- Morrison, E. W.; Wheeler-Smith, S. L. & Kamdar, D. (2011). "Speaking Up in Groups: A Cross-Level Study of Group Voice Climate and Voice". *Journal of Applied Psychology*, 96(1), 183–191.
- Olivier, A. L. & Rothmann, S. (2007). "Antecedents of Work Engagement in a Multinational Oil Company". SA Journal of Industrial Psychology, 33(3), 49-56.
- Rees, C.; Alfes, K. & Gatenby, M. (2013). "Employee Voice and Engagement: Connections and Consequences". *International Journal of Human Resource Management*, 24(14), 2780-2798.
- Renn, R. W. & Vandenberg, R. J. (1995). "The Critical Psychological States: An Under-Represented Component in Job Characteristics Model Research". *Journal of Management*, 21, 279–304.
- Richer, S.F.; Blanchard, C. & Vallerand, R. J. (2002). "A Motivational Model of Turnover". *Journal of Applied Social Psychology*, 32(10), 2089–2113.
- Rothmann, S. & Rothmann, S. (2010). "Factors Associated with Employee

- Engagement in South Africa". SA Journal of Industrial Psychology, 36(2), 1–12.
- Ryan, R. M. & Deci, E. L. (2000). "Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions". *Contemporary Educational Psychology*, 25(1), 54–67.
- Saks, A.M. (2006). "Antecedents and Consequences of Employee Engagement". *Journal of Managerial Psychology*, 21(7), 600–619.
- Shalley, C. E.; Gilson, L. L. & Blum, T. C. (2009). "Interactive Effects of Growth need Strength Work Context, and Job Complexity on Self-Reported Creative Performance". *Academy of Management Journal*, 52(3), 489-505.
- Taubman-Ben-Ari, O. & Weintroub, A. (2008). "Meaning in Life and Personal Growth among Pediatric Physicians and Nurses". *Death Studies*, 32(7), 621-645.
- Van Zyl, L.; Deacon, E. & Rothmann, S. (2010). "Towards happiness: Experiences of Work-Role Fit, Meaningfulness and Work Engagement of Industrial Organizational Psychologists in South Africa". SA Journal of Industrial Psychology, 36(1), 10-20.
- Wrzesniewski, A.; Dutton, J.E. & Debebe, G. (2003). "Interpersonal Sensemaking and the Meaning of Work". *Research in Organizational Behavior*, 25, 93-135.
- Zapata-Phelan, C. P.; Colquitt J.A.; Scott, B.A. & Livingston, B. (2009). "Procedural Justice, Interactional Justice, and Task Performance: The Mediating Role of Intrinsic Motivation". *Organizational Behavior and Human Decision Processes*, 108(1), 93–105.
- Zhang, X. & Bartol, K. M. (2010). "The Influence of Creative Process Engagement on Employee Creative Performance and Overall Job Performance: A Curvilinear Assessment". *Journal of Applied Psychology*, 95(5), 862–873.
- Zhou, J. & Shalley, C. E. (2008). "Expanding the Scope and Impact of Organizational Creativity Research". In J. Zhou & C. E. Shalley (Eds.), *Handbook of organizational creativity:* 347–368. Mahwah, NJ: Erlbaum.
- Zhou, J.; Shin, S.J. & Cannella, A. (2008). "Employee Self-Perceived Creativity after Mergers and Acquisitions: Interactive Effects of Threat Opportunity Perception, Access to Resources, and Support for Creativity". *Journal of Applied Behavioral Science*, 44(4), 397–421.