

High-Performance Work Systems and Psychological Ownership: The Moderating Nexus of Work Engagement

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As contemporary organisations strive to survive, grow and make a profit, it is critical they adopt best practices and high-involvement management that can guarantee superior organisational performance. The objective of this study is to evaluate the moderating effect of work engagement on high performance work systems and psychological ownership. Survey data from 302 employees working in the telecommunication industry in Ghana indicate that high-performance work systems is positively associated with psychological ownership. The results of the research also revealed that there is a positive association between work engagement and psychological ownership. As such, work engagement effectively moderates the relationship between high performance work systems and psychological ownership. Implications of our findings for research and practice are presented.

Keywords: high performance work systems, psychological ownership, work engagement

INTRODUCTION

In the last decade, a burgeoning body of research has highlighted the significant role of high-performance work systems (HPWS) in attaining organisational outcomes and improving organisational effectiveness (Aryee, Walumbwa & Otaye, 2012; Becker & Huselid, 2006). HPWS is a specific amalgamation of HR practices, work structures and methods that make best use of employees' knowledge, skill, commitment and flexibility (Bohlander & Snell, 2007). These practices are distinct but interrelated and are intended to improve organisational and employee performance results by enhancing employee capability, behaviour and motivation, thereby aiding the organisation to gain a human capital advantage over its competitors (Guthrie, Liu, Flood, & MacCurtain, 2008). Nadler (1992) describes HPWS as capturing a firm's "architecture" that combines the technical and social aspects of work. Its ultimate goal

is to assist organisations in achieving a balance between data, technology, individuals and work (Hanna, 1988; Nadler & Tushman, 1988). Also, HPWS has been recognised to improve employee job satisfaction, and loyalty (Takeuchi, Chen & Lepak, 2009; Heffernan & Dundon, 2016), enhance firms' performance (Zhang & Long, 2017) and positively influence organisational citizenship behaviour (Gong, Chang & Cheung, 2010; Miao, Zhou, Liu & Li, 2013; Yan & Chen, 2016) and occupational safety (Zacharatos, Barling & Iverson, 2005), yet much less is known about the relationship between HPWS and psychological ownership.

Psychological ownership relates to identification, control, responsibility and the longing to belong (Campbell Pickford, Joy, & Roll, 2016) to a group or organisation. It describes employees' possessiveness towards an organisation and a feeling of shared responsibility in ensuring that the organisation becomes successful (Liu, Wang, Hui, & Lee, 2012). According to Pierce, Kostova and Dirks (2003), psychological ownership assumes a cognitive-affective state that reflects a person's consciousness, views and beliefs that a target or a piece of that target, such as an organisation belongs to him/her. It is considered as a positive resource that could be of mutual benefit to both the organisation and individual employees as it influences employees' work performance outcomes. For example, while prior research has discovered that psychological ownership is positively connected to organisational commitment, job satisfaction and performance (Avey, Avolio, Crossley & Luthans, 2009; Pierce, Kostova & Dirks, 2001; Md-Sidin, Sambasivan & Muniandy, 2009) as well as turnover intention (Peng & Pierce, 2015), the connection between psychological ownership and HPWS has relatively received little scholarly attention.

This study, therefore, argues that HPWS could increase employees' commitment and psychological attachment to an organisation. Hence, the study seeks to examine the connection between HPWS and psychological ownership, and whether work engagement moderates such a connection. We employ the social exchange theory to suggest that employees generally regard HPWS as benefits obtained from the organisation, and hence, reciprocate with a feeling of having a stake in the organisation – a sense of ownership.

THEORY AND HYPOTHESES DEVELOPMENT

The social exchange theory has been progressively employed to explicate HPWS as it is dependent on reciprocity, general responsibilities, and trust as the appropriate instruments for explaining the consequences on worker attitudes and behaviour (Blau, 1964; Kehoe & Collins, 2017; Zhang et al., 2019). According to the social exchange theory, workers in a labour relationship will feel obliged to return a firm's supportive work environment both socially and emotionally, for instance, devotion, trust, attachment and loyalty (Brief & Motowidlo, 1986; van der Heijden, van Engen & Paauwe, 2009). Per the reciprocity exchange rule, when an individual treats someone well, there is a responsibility to reciprocate that good treatment. As it were, when a firm treats its workers well, they will be more motivated to reciprocate in a good manner by exhibiting organisational citizenship behaviour (Farzaneh et al., 2014; Rhoades, Eisenberger & Armeli, 2001). Hence, the utilisation of the theory of reciprocity in labour relations normally leads to shared benefits for both workers and the firm. Lilly (2015) affirms the positive relationship in the exchange by indicating that workers demonstrate high degrees of organisational citizenship behaviour when their managers show great leadership behaviour and the other way around, irrespective of whether the leader's behaviour is relationship- or task-oriented.

As well as reciprocity, other behaviours are likewise linked to social exchange. For example, Meeker (1971) proposes six diverse exchange rules: reciprocity, rationality, altruism, competition, group-gain and status consistency. He proposes that exchange behaviour can be based on one or more exchange rules per the rewards and consequences (the goal structure) as seen by the individuals in the exchange relationship. Also, Lilly (2015) notes that an individual's view of rewards and consequences to him/herself and the others involved in a transactional relationship shapes that person's goal structure, inducing his/her consequent exchange behaviour. Social exchange researchers indicate that the exchange could go beyond mere reciprocity of equal sizes. For example, relational exchange motivates workers to give extra time and effort

to a firm and act in a manner that is beyond expectations, such as psychologically becoming attached to the organisation without being forced by the employer.

Therefore, workers who experience good results from a firm or institution will, in turn, perform much better than expected (Karriker & Williams, 2009; Lilly, 2015; Meeker, 1971; Rousseau & McLean Parks, 1992). Hence, firms that are regarded as considerate and supportive, because of effective HRM practices and employee-friendly policies, are probably going to benefit significantly from employees' devotion, sacrifice and a great attitude toward work and the firm generally. Rhoades and Eisenberger (2002) posit that very good human resource practices, employment conditions and job experience, for instance, managers' support and procedural equity, have a solid connection with the apparent degree of support a firm enjoys from its workers. Consequently, we contend that HPWS are benefits employees receive from an organisation and could influence employees' psychological attachment to the organisation.

High-Performance Work Systems and Psychological Ownership

HPWS has been conceptualised as a set of internally clear and reliable human resource practices that are intended to improve employees' competencies, drive and commitment to an organisation (Aryee et al., 2012; Liao, Toya, Lepak & Hong, 2009; Macky & Boxall, 2007). Such HR practices include a comprehensive recruitment and selection process, performance-based reward system, extensive training, developmental performance management, participative decision-making, flexible work design and communication (Huselid, 1995; Sun, Aryee & Law, 2007). Previous studies have found that the joint effect of a bundle of HR practices significantly relates to organisational performance compared to a combination of individual practices (Aryee et al., 2012; Subramony, 2009). In addition, HR practices like flexible work design, participatory decision-making and performance-based reward systems demonstrate that the organisation trusts and values the unique contributions of its employees (Liao et al., 2009). Scholars have also viewed HPWS as contributing positively to the achievement of a firm's overall strategic goals. For example, while Patel, Messersmith and Lepak (2013) found that HPWS utilisation relates positively to a measure of an organisation's ambidexterity, Schuler and Jackson (1987) maintain that HPWS shapes and aligns employees' work attitudes and behaviours with the strategic goals of the organisation for enhancing effective performance.

Psychological ownership, in contrast, has been termed as the state where a person feels that the target of ownership or a piece of that target (job or organisation) is theirs (Pierce et al., 2001). As such, the state of ownership is grounded on not only a feeling of ownership and being psychologically connected to the object, but also a feeling of responsibility toward the particular target (Parker, Wall & Jackson, 1997; Pierce et al., 2003). Psychological ownership reflects an individual's emotional connection to an object such that it surpasses the cognitive assessment of the object (Dawkins et al., 2017). As noted by Dittmar (1992), when individuals develop a sense of ownership, they feel a connection between themselves and several tangible and intangible objects. These targets, according to Avey et al. (2009), could represent anything at all in the organisation, as minor as a chair in the firm's cafeteria, or as major as the company itself. Psychological ownership scholars are generally of the view that the concept develops as it satisfies some human motives that are either genetic or social in nature (Pierce et al., 2001). Previous studies have acknowledged that psychological ownership is a multidimensional construct comprising self-efficacy, accountability, belongingness and identity. Self-efficacy is the belief and confidence of a person that he/she can successfully implement actions and effectively perform certain tasks (Bandura, 1997). Accountability, as a constituent of psychological ownership, relates to a person's right to hold other people accountable and be also held accountable (Avey et al., 2009). According to Lerner and Tetlock (1999), it is the implied or explicit expectation that an individual might be required at any time to justify his own actions, beliefs and feelings to others. Belongingness with regard to psychological ownership in organisations manifests when workers feel that they belong to their work unit, co-workers and the organisation itself (Avey et al., 2009). Self-identity is explained in terms of ownership or symbols by which people describe themselves (Rousseau, 1998). Workers classify themselves with both intangibles and tangibles symbols. For example, tangible symbols include a work setting and intangible symbols such as ideas and objects.

Possession has been described as the key element that distinguishes the notion of psychological ownership from other work-related outcomes such as job satisfaction, job contribution, organisational commitment, firm identification and internalisation, and psychological empowerment (Pierce et al., 2001; Pierce, O' Driscoll & Coghlan, 2004; van Dyne & Pierce, 2004). Scholars such as Dittmar (1992) and Brown, Lawrence and Robinson (2005) contend that an individual can become so attached and identified with his target of ownership to the point that he sees it as an extension of himself, and thus, defends it. While describing what makes up possession and ownership, Pierce et al. (2001) maintain that the sense of ownership is naturally human in relation to both tangible and intangible objects. Ownership affects the emotions, attitudes and behaviours of individuals.

We assume that HPWS may enable employees to become psychologically attached to an organisation as it reflects workers' feeling that they have a duty to make strategic decisions that are consistent with the organisation's future goals (O'Reilly, 2002). For example, HPWS such as a comprehensive recruitment and selection process enables the organisation to acquire a capable workforce with the requisite skills and competencies for superior performance. Similarly, other HPWS that focus on providing support for employees' career development programmes through job enrichment, work skills enhancement, and participatory decision-making (Snape & Redman, 2010) could be returned by workers through increased psychological ownership. Accordingly, we propose that:

Hypothesis 1: HPWS will be positively related to psychological ownership.

Work Engagement as a Moderator Between HPWS and Psychological Ownership

Work engagement is termed as a positive, satisfying, job-related condition of well-being characterised by vigour, commitment and absorption (Bakker & Schaufeli, 2015). An engaged worker is full of energy, fully involved in work, and often fully focused and happily occupied with work activities (Bakker, Albrecht & Leiter, 2011; Bakker & Schaufeli, 2015). Vigour is high energy levels, the readiness to put effort into one's work, and perseverance in difficult circumstances. Commitment denotes a strong involvement in one's job, and a feeling of importance, excitement, motivation, pride and challenge. Absorption is depicted by complete attention, being content and engrossed in one's job, with time passing swiftly, and having problems taking time off work (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Leiter and Bakker (2010) note that engaged employees in contemporary organisations are proactive, take the initiative, responsible for their individual professional development, and committed to high-quality performance standards. It has been acknowledged that engaged employees work with enthusiasm as they have a high level of energy (Bakker et al., 2008).

An increasing body of literature has empirically recognised a connection between HPWS and different organisational outcomes; for example, organisational performance, productivity and turnover intention (Huselid, 1995; Jensen, Patel & Messersmith, 2013). This lends support to the notion that HPWS contributes positively to organisational success. Psychological ownership entails control over objects of ownership and responsibility for them. As a result, workers who feel psychologically safe are involved and perform better as they have a greater chance of owning the organisation. The present research presents work engagement as a moderator in the connection between a high-performance work system and psychological ownership. Thus, we propose that work engagement serves as a potential moderator in the association between HPWS and psychological ownership.

Hypothesis 2: Work engagement will moderate the relationship between HPWS and psychological ownership

Hypothesis 3: HPWS will be positively related to work engagement

METHOD

To attain the objectives of the study, we collected data from workers in Ghana's telecommunication sector. Specifically, we distributed 450 survey forms to employees working in three telecommunication companies within the Greater Accra Region of Ghana, and received 302 usable forms by the deadline for data collection; thus, a response rate of 67.1%. Employees were also assured of confidentiality and were permitted to complete the survey at their own convenience. Data were collected between May and July 2019, with the help of three research assistants.

Measures

High-Performance Work Systems

The high-performance work systems scale was borrowed from Becker and Huselid (1995). The 20-item scale was graded on a 5-point Likert scale where 1=strongly disagree, and 5=strongly agree. The instrument was pre-tested to measure its reliability and validity. The scale yielded a Cronbach alpha of 0.823.

Psychological Ownership

Psychological ownership was taken from Avey et al. (2009). This 17-item scale was graded on a 5-point Likert scale ranging from 1=strongly disagree to 5=strongly agree. The instrument was pre-tested to determine its reliability and validity. The Cronbach alpha was 0.718.

Work Engagement Scale

This scale was adapted from Schaufeli et al. (2002). This 16-item scale was also graded on a 5-point Likert scale ranging from 1=strongly disagree to 5=strongly agree. The instrument was pre-tested to check its reliability and validity. The Cronbach Alpha was 0.685.

RESULTS

TABLE 1
DESCRIPTIVE STATISTICS AND CORRELATION AMONG VARIABLES

Variable	Mean	SD	1	2	3
1. High Performance Systems	3.607	0.64688	1		
2. Work Engagement	3.9212	0.74048	0.424**	1	
3. Psychological Ownership	3.5668	0.70047	0.496**	0.453**	1

Hint: **correlation is significant at 0.01

Hypothesis

Pearson correlation coefficient and hierarchical regression were utilised to check the hypotheses and predictability of the dependent variable by the independent variable. Results from the study confirmed hypothesis 1 as high-performance work systems was positively and statistically predicted by Psychological ownership [$r = 0.496$, $\beta = 0.496$, $p < 0.01$]. Hypothesis 2 predicted that work engagement will moderate the connection between HPWS and psychological ownership. As indicated in Table 1, a three-step level moderated hierarchical regression analysis was utilised. Firstly, the predictor variable, high-performance work systems, was put into the model, and it was significant. Nevertheless, at the second level of entry (that is the second step of the moderated hierarchical regression model), the moderating variable, work engagement, was put into the model together with the predictor variable of high-performance work system and this model was significant. As shown in Table 2, the first two relationships were statistically significant at 0.000, with a beta coefficient of .2663 and 3.884, respectively. Finally, the interaction term (that is, the product of high-performance work system and work engagement) was entered into the model resulting in

a previously significant relationship turning insignificant with a significant incremental variance in psychological ownership ($\Delta R^2 = .0024$, $R^2 = 32\%$). Therefore, the interaction, as depicted in Figure 2, shows that work engagement moderates the connection between HPWS and psychological ownership. This is consistent with Baron and Kenny's (1986) assertion that full moderation occurs when an introduction of interaction makes an already significant relationship insignificant. Hence, hypothesis 2 was supported. In the telecommunication industry, employees are energised or motivated to have a sense of ownership at the workplace when there is a high level of workers' involvement in the development of human resource policies and practices. The graph explains how an increase in employee involvement increases the level at which human resources policies can predict organisational ownership.

TABLE 2
PROCESS RESULTS FOR MODERATION ANALYSIS AMONG HIGH-PERFORMANCE
WORK SYSTEM, WORK ENGAGEMENT AND PSYCHOLOGICAL OWNERSHIP

Model 1. Outcome variable: Psychological Ownership

Summary:						
R	R-sq	MSE	F	df1	df2	p
.5673	.3218	.3260	38.6753	3.0000	223.0000	.0000

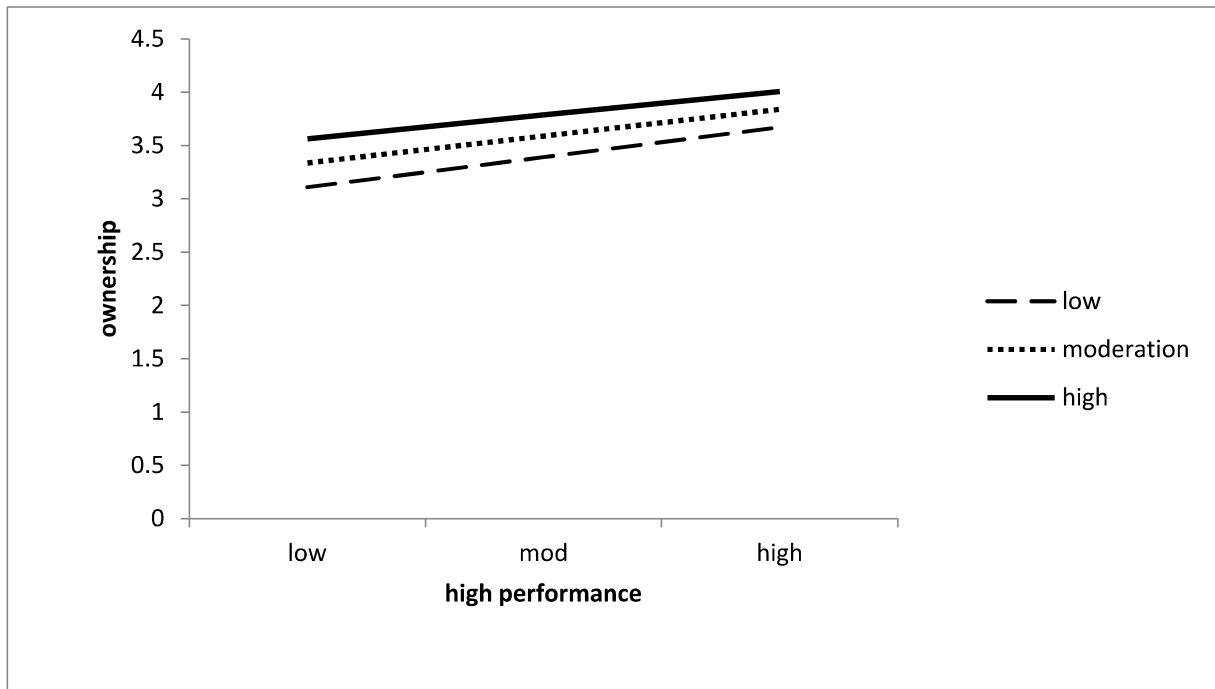
Variables			β	se	t	p
	LLCI	ULCI				
Constant			3.5881	.0385	93.1636	.0000
	3.5122	3.6640				
Work Engagement			.2663	.0633	4.2042	.0000
	.1415	.3911				
High-Performance Work Systems			.3884	.0622	6.2402	.0000
	.2657	.5110				
Interaction term (HPWS x Work Engmt)			-.0609	.0644	-.9456	.3454
	-.1879	.0660				

R-square increase due to interaction(s):		R ² -chnng	F	df1	df2	p
	HPWS x Work Engmt			.0024	.8941	1.0000
	223.0000	.3454				

Conditional indirect effects of X on Y:				Psychol Att.	Effect	BootSE
BootLLCI	BootULCI	t	p			
HPWS -> Work Engmt -> Psycho Ownsp				-.7438	.4337	.0642
.3072	6.7580	.0000		.0000	.3883	.0622
.5110	6.2402	.0000		.7438	.3430	.0907
.5217	3.7831	.0002				

Note: N = 224. p is significant at .05; β denotes beta coefficient, LLCI, lower limit confidence interval, ULCI, upper limit confidence interval, Psychol Ownsp, Psychological Ownership, Work Engmt, Work Engagement, HPWS, High-Performance Work System

FIGURE 2
WORK ENGAGEMENT AS A MODERATOR OF HIGH-PERFORMANCE WORK SYSTEMS- PSYCHOLOGICAL OWNERSHIP



DISCUSSION

This study sought to assess the moderating role of work engagement in the connection between HPWS and psychological ownership. The outcomes of the study revealed that there is a positive connection between high-performance work systems and psychological ownership, and HPWS is statistically significant in predicting psychological ownership. In addition, work engagement moderates the connection between HPWS and psychological ownership. Our findings corroborate the works of previous scholars who investigated the connection between high-performance work systems and organisational outcomes such as productivity and performance. For instance, Boselie and Dietz (2003) found that human resource practices such as staff development and training, employee involvement and empowerment, communication and compensation systems significantly predict positive work output. According to Schuler and Jackson (1987), HPWS not only impacts and aligns workers’ conduct and behaviours with the planned goals of the organisation, but also enhances their work performance.

Our study contributes to a burgeoning body of research as it gives proof of the connection between HPWS and psychological ownership in a context that has not been given much attention in the literature. Likewise, it has given some primary evidence of the moderating role of work engagement in the connection between HPWS and psychological ownership. As a result, organisations must pay attention to their human resource management practices and policies as they have a significant effect on employees’ sense of ownership as regards the organisation. In addition, because employees play a critical role in achieving competitive advantage as well as sustaining the long-term success of organisations, they should adopt and put in place human resource management practices and policies that help to attract and retain key employees for the attainment of their overall objectives.

Also, the results of the present study contribute to the social exchange theory (Blau, 1964). Consistent with the social exchange theory, workers in a labour relationship will have a sense of obligation to reciprocate a company’s conducive and enabling work environment socially and emotionally, for instance,

through their devotion, trust, attachment and faithfulness (Brief & Motowidlo, 1986; van der Heijden, van Engen & Paauwe, 2009). As argued by Rhoades and Eisenberger (2002), good human resource practices, satisfactory work conditions and experiences, including manager support and procedural equity, have a strong connection with the perceived degree of support given by an organisation to its staff. Accordingly, employees might feel obliged to reciprocate when they observe that their firms utilise HR practices they see as beneficial, including flexible work design, participatory decision-making and performance-based reward systems that show that the organisation trusts and values the unique contributions of its employees (Liao et al., 2009). It is, therefore, critical for organisations to recognise that employees are increasingly becoming conscious of, and demanding for safe and conducive work environments where they can contribute significantly to the achievement of the overall goals of an organisation. This implies that organisations must prioritise the health and safety needs of their employees so as to guarantee accident-free work environments at all times.

Strengths, Limitations and Future Research Directions

A key strength of this study is its contribution to the HPWS literature by studying the connection between HPWS and psychological attachment in the telecommunication industry, an industry, which has received little scholarly attention. While there have been a plethora of studies linking HPWS with certain necessary employee attitudes and behaviours, little is known about the connection between HPWS and psychological ownership. As the study of HPWS and employee work outcomes requires empirical evidence from various cultural contexts, this study increases understanding of the effect of coherent and consistent human resource practices on employees' sense of ownership and attachment to organisations in the context of sub-Saharan Africa. In particular, we highlight the need for consistent investment in the human capital of organisations as it has implications for employees' perceptions, attitudes and behaviours.

Aside from its various contributions, this study has some limitations that must be acknowledged and considered in future research. First, the respondents utilised in the research worked in a single industry (i.e., telecommunication); hence, its findings cannot be generalised in relation to other sectors of the Ghanaian economy. In addition, HR practices and policies vary greatly across industries, but empirical evidence examining why these differences exist are scarce in the literature. Building on this research, future studies could explore and compare the differences in HR practices and policies across different sectors. Similarly, future studies may assess whether the outcomes of this research are generalisable to other industries, for example, the financial, mining, oil and gas, and education sectors. Secondly, this study gathered data through one-time self-reports for the evaluation of the variables; however, this could raise the likelihood of common method variance (Podsakoff et al., 2003). Even though we gathered data from multiple sources as a strategy to reduce common method variance, it cannot be entirely ruled out. It would, therefore, be insightful to extend this study by conducting longitudinal studies that could give a more convincing proof of the connection among the study variables. Another limitation of this study is that we did not control for demographic characteristics of respondents in establishing the relationship among the study variables. It is possible that psychological ownership could differ based on age and the number of years an employee has served in an organisation. Thus, there is a need to assess the impact of demographic characteristics of respondents in the HPWS-Psychological ownership relationship.

REFERENCES

- Aryee, S., Walumbwa, F., & Otaye, L. (2012). Impact of high-performance work systems on individual- and branch-level performance: Test of a multilevel model of intermediate linkages. *Journal of Applied Psychology, 97*(2), 287.
- Avey, J., Avolio, B., Crossley, C., & Luthans, F. (2009). Psychological ownership: Theoretical extensions, measurement and relation to work outcomes. *Journal of Organizational Behavior, 30*(2), 173-191.
- Bakker, A., & Schaufeli, W. (2015). Work engagement. *Wiley Encyclopedia of Management*, pp. 1-5.

- Bakker, A., Albrecht, S., & Leiter, M. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology, 20*(1), 4-28.
- Bakker, A., Schaufeli, W., Leiter, M., & Taris, T. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & stress, 22*(3), 187-200.
- Bandura, A. (1997). Insights. Self-efficacy. *Harvard Mental Health Letter, 13*(9), 4-6.
- Becker, B., & Huselid, M. (2006). Strategic human resource management: Where do we go from here? *Journal of Management, 32*(6), 898–925.
- Bohlander, G., & Snell, S. (2007). *Managing human resources*. USA: Thomson Learning.
- Brief, A., & Motowidlo, S. (1986). Prosocial organisational behaviors. *Academy of Management Review, 11*(4), 710-725.
- Brown, G., Lawrence, T., & Robinson, S. (2005). Territoriality in organisations. *Academy of Management Review, 30*(3), 577-594.
- Campbell Pickford, H., Joy, G., & Roll, K. (2016). Psychological ownership: Effects and applications. *Saïd Business School WP, 32*, 1-25.
- Dawkins, S., Tian, A.W., Newman, A., & Martin, A. (2017). Psychological ownership: A review and research agenda. *Journal of Organizational Behavior, 38*(2), 163-183.
- Dittmar, H. (1992). *The social psychology of material possessions: To have is to be*. New York: St. Martin's Press.
- Guthrie, J., Liu, W., Flood, P., & MacCurtain, S. (2008). High performance work systems, workforce productivity and innovation: A comparison of MNCs and indigenous firms. *The Learning, Innovation and Knowledge Research Centre Working Paper Series (WP 04-08)*, p.124.
- Huselid, M. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal, 38*(3), 635-672.
- Jensen, J., Patel, P., & Messersmith, J. (2013). High-performance work systems and job control: Consequences for anxiety, role overload, and turnover intentions. *Journal of Management, 39*(6), 1699-1724.
- Kehoe, R., & Collins, C. (2017). Human resource management and unit performance in knowledge-intensive work. *Journal of Applied Psychology, 102*(8), 1222.
- Leiter, M., & Bakker, A. (2010). *Work engagement: Introduction. Work engagement: A handbook of essential theory and research*, pp. 1-9. New York: Psychology Press.
- Lerner, J., & Tetlock, P. (1999). Accounting for the effects of accountability. *Psychological Bulletin, 125*(2), 255.
- Liao, H., Toya, K., Lepak, D., & Hong, Y. (2009). Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality. *Journal of Applied Psychology, 94*(2), 371.
- Liu, J., Wang, H., Hui, C., & Lee, C. (2012). Psychological ownership: How having control matters. *Journal of Management Studies, 49*(5), 869-895.
- Macky, K., & Boxall, P. (2007). The relationship between ‘high-performance work practices’ and employee attitudes: An investigation of additive and interaction effects. *The International Journal of Human Resource Management, 18*(4), 537-567.
- Md-Sidin, S., Sambasivan, M., & Muniandy, N. (2009). Impact of psychological ownership on the performance of business school lecturers. *Journal of Education for Business, 85*(1), 50-56.
- O'Reilly, C. (2002, September/ October). The wrong kind of ownership. *Across the Board*, pp. 19-20.
- Parker, S., Wall, T., & Jackson, P. (1997). “That’s not my job”: Developing flexible employee work orientations. *Academy of Management Journal, 40*, 899-929.
- Patel, P., Messersmith, J., & Lepak, D. (2013). Walking the tightrope: An assessment of the relationship between high-performance work systems and organisational ambidexterity. *Academy of Management Journal, 56*(5), 1420-1442.
- Peng, H., & Pierce, J. (2015). Job-and organisation-based psychological ownership: Relationship and outcomes. *Journal of Managerial Psychology, 30*(2), 151-168.

- Pierce, J., Kostova, T., & Dirks, K. (2001). Toward a theory of psychological ownership in organisations. *Academy of Management Review*, 26(2), 298-310.
- Pierce, J., Kostova, T., & Dirks, K. (2003). The state of psychological ownership: integrating and extending a century of research. *Journal of General Psychology*, 7, 84–107.
- Pierce, J., O’driscoll, M., & Coghlan, A. (2004). Work environment structure and psychological ownership: The mediating effects of control. *The Journal of Social Psychology*, 144(5), 507-534.
- Podsakoff, P.M., MacKenzie, S. B., Lee, J-Y., & Podsakoff, N.P. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
- Rousseau, D.M. (1998). Why workers still identify with organisations. *Journal of Organizational Behavior*, 19(3), 217-233.
- Rousseau, D.M., & McLean Parks, J. (1993). The contracts of individuals and organizations. *Research in Organizational behavior*, 15, 1-1.
- Schaufeli, W., Salanova, M., González-Romá, V., & Bakker, A. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71-92.
- Schuler, R., & Jackson, S. (1987). Linking competitive strategies with human resource management practices. *Academy of Management Perspectives*, 1(3), 207-219.
- Snape, E., & Redman, T. (2010). HRM practices, organisational citizenship behaviour, and performance: A multi-level analysis. *Journal of Management Studies*, 47(7), 1219-1247.
- Subramony, M. (2009). A meta-analytic investigation of the relationship between HRM bundles and firm performance. *Human Resource Management*, 48(5), 745-768.
- Sun, L., Aryee, S., & Law, K. (2007). High-performance human resource practices, citizenship behavior, and organisational performance: A relational perspective. *Academy of Management Journal*, 50(3), 558-577.
- van der Heijden, J. A. (2009). Expatriate career support: Predicting expatriate turnover and performance. *The International Journal of Human Resource Management*, 20(4), 831-845.
- van Dyne, L., & Pierce, J. (2004). Psychological ownership and feelings of possession: Three field studies predicting employee attitudes and organisational citizenship behavior. *Journal of Organizational Behavior*, 25(4), 439-459.
- Zhang, J., Bal, P., Akhtar, M., Long, L., & Ma, Z. (2019). High-performance work system and employee performance: the mediating roles of social exchange and thriving and the moderating effect of employee proactive personality. *Asia Pacific Journal of Human Resources*, 57(3), 369-395.