High-performance work system and employee creativity

The roles of perceived organisational support and devolved management

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Abstract

Purpose – The purpose of this paper is to examine the underlying mechanism through which high-performance work system (HPWS) influences employee creativity. In addition, this paper aims to examine contingent factors in the relationship between perceived organisational support and employee creativity.

Design/methodology/approach – The sample of the study included 268 employees and matched supervisors from two pesticide chemical companies in China. Hypotheses were tested with linear regressions.

Findings – The study shows that HPWS enhances perceived organisational support, which in turn promotes employee creativity. Moreover, the results also indicate that devolved management positively moderates the relationship between perceived organisational support and employee creativity.

Research limitations/implications – The unique environment of China may limit the generalisability of the findings. Future studies can extend these findings by conducting studies in other societal contexts.

Practical implications – When trying to inspire employee creativity, organisations need to pay attention to employees' perception of organisational support. One way of enhancing perceived organisational support is to implement HPWS. In addition, organisations need to encourage devolved management in order to inspire more creative behaviours.

Originality/value – This is the first study that explores the mediating role of perceived organisational support in the HPWS-employee creativity linkage. In addition, the study provides what is believed to be the first test of the moderating role of devolved management.

Keywords China, Quantitative, Employee creativity, High-performance work systems (HPWSs), Perceived organizational support, Devolved management

Paper type Research paper

Introduction

In the past decade or so, a great deal of research has been conducted on the individual and organisational outcomes of high-performance work systems (HPWSs), such as job performance (Shih *et al.*, 2013), voluntary turnover (Selden *et al.*, 2013), discretionary behaviour (Elorza *et al.*, 2016) and firm performance (Messersmith and Guthrie, 2010) (see also Kaufman, 2015 for an overview and critique). However, comparatively few studies have

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investigated the influence of HPWS on employee creativity (Chiang *et al.*, 2015). This is in spite of the fact that employee creativity contributes substantially to organisational innovation and competitive advantage (Amabile, 1988). This is an important research gap considering that sustainable organisational performance is hinged on organisational innovativeness and a highly skilled and committed workforce (e.g. Ehnert *et al.*, 2016; Pfeffer, 2010; Shipton *et al.*, 2016).

Another development in the field of HPWS-performance research is the focus on how and why HPWS influences employee attitudes and behaviour, rather than simply documenting this direct relationship (e.g. Messersmith *et al.*, 2011; Paauwe *et al.*, 2013; Shen *et al.*, 2014; see also Ostroff and Bowen, 2016 for a review). According to social-exchange theory, human resource management (HRM) practices that are perceived by employees to demonstrate organisations' commitment to staff will be reciprocated with positive attitudes and behaviour (Whitener, 2001; Zacharatos *et al.*, 2005). However, there remains insufficient research on the mechanisms through which HRM systems influence employee attitudes and behaviour, especially in the Chinese context (Shen *et al.*, 2014). Therefore, we explore the mediating role of perceived organisational support in the relationship between HPWS and employee creativity.

Furthermore, according to the interactionist perspective (Woodman and Schoenfeldt, 1990; Woodman *et al.*, 1993), employee creativity can be influenced by interaction among various factors, such as social (e.g. socio-emotional resource) and contextual components (e.g. management approach). Therefore, we can expect perceived organisational support and devolved management to interact to influence employee creativity. Devolved management requires giving employees more power and autonomy (Tang *et al.*, 2015). Employees working in organisations implementing devolved management can experience a high level of autonomy (Tang *et al.*, 2015), which inspires their creative behaviours (Zhang and Bartol, 2010). Under this condition, employees perceiving high level of organisational support are more willing to reciprocate through creativity. However, previous studies have paid little attention to the moderating role of devolved management in the relationship between perceived organisational support and employee creativity.

Our study fills the above research gaps, and therefore contributes to existing knowledge on HPWS-performance links, in three ways. First, we consider HPWS as an important antecedent of employee creativity. HPWS is an effective system that leads to superior organisational performance, yet few studies have focussed on its effect on employee creativity. Second, we examine the mediating role of perceived organisational support in the HPWS-employee creativity linkage, identify a new path through which HPWS inspires employee creativity (Chiang *et al.*, 2015), and provide further empirical evidence for social-exchange theory. Third, our study broadens the understanding of the impact of devolved management by exploring the moderating role of devolved management in the perceived organisational support-employee creativity linkage. The conceptual model of this study is summarized in Figure 1.

Literature review and hypotheses development

HPWS and employee creativity

A high-performance work system is a bundle of HRM practices designed to promote employees' skills, motivation and involvement to enable a firm to gain a sustainable competitive advantage

Figure 1.
The conceptual model of the study

(Datta *et al.*, 2005; Guthrie, 2001; Huselid, 1995), which includes employment security, extensive training, teams and decentralised decision making, information sharing and so on (Zacharatos *et al.*, 2005). HPWS can promote information exchange among employees, inspiring employees to generate creative ideas (Chiang *et al.*, 2015). Previous studies have suggested that firms that implement HPWS are more likely to invest in their employees; to value employees' participation in decision making; and to meet employees' need for promotion and development (e.g. Giannikis and Nikandrou, 2013; Rose and Wright, 2005). Therefore, we argue that the implementation of HPWS plays an important role in fostering employee creativity.

Employee creativity refers to the generation of novel and useful ideas by employees. It has been suggested to greatly influence organisational innovation (Amabile *et al.*, 1996; Jiang *et al.*, 2012) or firm performance (Gong *et al.*, 2013). Given the importance of employee creativity, numerous researchers have examined its antecedents, such as empowering leadership (Harris *et al.*, 2014), team-member exchange (Liao *et al.*, 2010), job dissatisfaction (Zhou and George, 2001) and employee learning orientation (Gong *et al.*, 2009). As employees are members of their respective organisations and experience many management practices, we expect employees' attitudes and behaviour to depend on management systems (Chiang *et al.*, 2015). Therefore, it is vital to examine the influence of management systems, such as HRM systems, on employee creativity. As systems of work practices that make a great contribution to superior organisational performance (Boxall and Macky, 2009), HPWS have been found to inspire creative ideas (Chiang *et al.*, 2015) and innovation (Messersmith and Guthrie, 2010). Therefore, we expect the implementation of HPWS to have a positive effect on employee creativity.

Among the affordances of an HPWS, employment security can encourage employees to adopt a long-term perspective on their careers (Pfeffer, 1998), take the initiative (Bartram *et al.*, 2014) and engage in creative behaviour. The provision of extensive training can broaden the knowledge and skills necessary for creativity (Amabile, 1983) and help employees to establish connections between their existing knowledge and new knowledge, leading to creative ideas and solutions (Chang *et al.*, 2014). The opportunity to participate in decision making promotes the acquisition, sharing and combining of knowledge, which encourages learning behaviour (Edmondson, 1999) and thereby facilitates creative behaviour (Hirst *et al.*, 2009). Information sharing can help employees to absorb new ideas and knowledge from others, which helps them to generate more creative ideas (Chiang *et al.*, 2015). High-quality work is another important component of HPWS. A well-designed job can make employees get more autonomy and feedback, and perceive the significance of their work, and thereby enhance their intrinsic motivation and encourage them to generate creative ideas (Shalley *et al.*, 2004). Therefore, we propose the following hypothesis:

H1. HPWS has a positive effect on employee creativity.

The mediating role of perceived organisational support in the relationship between HPWS and employee creativity

Perceived organisational support refers to employees' evaluation of the extent to which their organisation values their contribution and cares about their well-being (Bowen and Ostroff, 2004; Eisenberger *et al.*, 1986). It represents the exchange between employees and organisations (Eisenberger *et al.*, 1986). Employees' perceptions of organisational support depend on their firm's readiness to reward employees' job involvement and meet their need for praise and approval (Eisenberger *et al.*, 1986). HRM practices that emphasise investment in employees, participatory decision making and the provision of growth opportunities lead employees to feel supported by their firms and to consider themselves part of a social-exchange relationship (Allen *et al.*, 2003; Paauwe *et al.*, 2013). Therefore, employees within an effective HPWS are more likely to perceive their organisations as supportive and are better able to exhibit creativity and innovation.

In addition, some components of HPWS may positively affect perceived organisational support. For example, employment security encourages employees to feel that their organisations take a long-term perspective on their careers and invest time and resources in their development (Zacharatos *et al.*, 2005), enhancing perceptions of organisational support. The provision of extensive training is a form of investment in employees, again leading to stronger perceptions of organisational support (Wayne *et al.*, 1997). The opportunity to participate in decision making signals to employees that firms value their input (Allen *et al.*, 2003). This can enhance perceptions of justice (Bowen and Ostroff, 2004; Cohen-Charash and Spector, 2001), making employees feel that their organisations care about their well-being (Eisenberger *et al.*, 1986). Information sharing fosters a sense of trust and mutual support (Ghosal and Bartlett, 1994). Sharing views on performance, rewards and perceived fairness (Aggarwal *et al.*, 2007) leads employees to believe that firms value their contribution (Robinson *et al.*, 1994). High-quality work, a key element of HPWS (Zacharatos *et al.*, 2005), also makes employees feel that they are valued (Pfeffer, 1998). Therefore, we expect the implementation of HPWS to predict perceived organisational support, as follows:

H2. HPWS has a positive effect on perceived organisational support.

According to social-exchange theory, employees who receive socio-emotional benefits from their organisations are more likely to feel obligated to reciprocate these benefits in the form of positive attitudes and behaviour (Allen *et al.*, 2003; Maden, 2015). As a socio-emotional resource provided by the organisation (Wong *et al.*, 2012), perceived organisational support is expected to be associated with positive attitudes and behaviour, such as employee creativity. Previous studies have found that employees who perceive their organisations to be highly supportive are more likely to generate creative ideas and engage in creative activities (e.g. Eisenberger *et al.*, 1990; Ramus and Steger, 2000; Yu and Frenkel, 2013).

When employees perceive their organisations to be highly supportive, they are more likely to exhibit trust and confidence (Rich *et al.*, 2010), fostering their willingness to propose creative ideas and suggestions. As such organisations are perceived to tolerate failure and approaches based on trial and error (Edmondson, 1999), and to endorse creativity and risk-taking behaviour, employees are more likely to feel psychologically secure in taking the initiative (Kahn, 1990) or engaging in creative practices. Employees receiving a high level of organisational support are also more likely to exhibit a positive mood (Eisenberger *et al.*, 2001), which in turn facilitates creativity (Judge and Ilies, 2004). In addition, they are more willing to communicate and interact with others (Erdogan *et al.*, 2004), thereby gaining more information and knowledge and generating more creative ideas (Chiang *et al.*, 2015). They tend to feel more engaged with their work (e.g. Hakanen *et al.*, 2008; Rich *et al.*, 2010; Salanova *et al.*, 2005), which leads them to enthusiastically promote creative ideas (Chang *et al.*, 2013). In contrast, employees who perceive their organisations as relatively unsupportive tend to believe that their organisations do not appreciate their creative input (Luksyte and Spitzmueller, 2016), and thus invest less effort in creative behaviour. As perceived organisational support prompts employees to propose creative ideas, we propose the following hypothesis:

H3. Perceived organisational support has a positive effect on employee creativity.

In sum, the implementation of HPWS in firms can foster employees' perception of organisational support, which in turn promotes employee creativity. According to social-exchange theory, employees view HPWS as manifestations of organisational support, and thus reciprocate by engaging in creative activities. Combining the above arguments, we propose the following hypothesis:

H4. The positive effect of HPWS on employee creativity is mediated by perceived organisational support.

The moderating role of devolved management

From the interactionist perspective (Woodman and Schoenfeldt, 1990; Woodman *et al.*, 1993), individual creativity is the product of a complex interaction between myriad factors, such as social dynamics (e.g. socio-emotional resources) and contextual factors (e.g. management approaches). As outlined previously, perceived organisational support elicits confidence, positive attitudes and knowledge sharing, and thus promotes employee creativity. Although employees who perceive themselves to receive more organisational support are more likely to exhibit creative behaviour, the potential for creativity also depends on managers' behaviour (Amabile *et al.*, 1996; Choi *et al.*, 2016). One of the factors determining employee creativity is the choice of management approach. Devolved management, an important approach, involves giving employees more power and autonomy, flattening the organisation's structure and encouraging communication (Tang *et al.*, 2015), all of which have important effects on creativity (e.g. Harris *et al.*, 2014; Woodman *et al.*, 1993; Zhang and Bartol, 2010). Therefore, we expect devolved management to interact with perceived organisational support to influence employee creativity.

In a devolved-management system, employees have more power and autonomy and thus more discretion in determining their own work; as a result, they are more likely to feel free of external controls or restrictions (Deci *et al.*, 1989; Spreitzer, 1995) and to believe that managers have faith in their decision-making abilities (Haar and Spell, 2009). To reciprocate these benefits, employees who perceive high levels of organisational support are more willing to adjust their work, think freely, take risks and solve problems, and consequently generate more creative ideas (Wang and Cheng, 2009). Therefore, we posit that devolved management strengthens the relationship between perceived organisational support and employee creativity.

Conversely, when managers do not implement devolved management, employees have less job autonomy, preventing them from determining their own work tasks (Amabile *et al.*, 1996; Oldham and Cummings, 1996). A lack of job autonomy can hinder creativity (Wang and Cheng, 2009). Under these circumstances, even if employees receive support and socio-emotional benefits from their organisations, they are less inclined to reward their organisations with creativity. In addition, an absence of devolved management may lead employees to believe that their decision-making abilities are not appreciated by managers. This perceived lack of appreciation is inconsistent with perceived organisational support, which may lead to frustration and confusion among employees. Such negative attitudes are likely to impede effort and persistence (Seo *et al.*, 2004), reducing employees' engagement in creative behaviour. Therefore, we expect devolved management to positively moderate the relationship between perceived organisational support and employee creativity, as indicated in the following hypothesis:

- H5.* Devolved management positively moderates the relationship between perceived organisational support and employee creativity.

Methods*Sampling and procedure*

We collected data from two companies in China. All the two companies are pesticide chemical firms located in Shandong Province. The participants were employees and matched supervisors. They were invited to participate in the survey and assured of confidentiality of their responses.

We collected two waves of data to reduce the potential common method bias (Podsakoff *et al.*, 2003). In the first wave, we administered 350 questionnaires to employees, and asked them to report their own demographics (e.g. sex and education background), their perception of HPWS, perceived organisational support and devolved management. About 40 days later, in the second wave, questionnaires were distributed to 80 supervisors

who are the leaders of the employees that have answered the questionnaires in the first wave data collection, asking them to rate their subordinates' creativity. Given the incompleteness of some instruments and the confidentiality policy of some companies, we excluded 82 questionnaires answered by employees and 10 questionnaires answered by supervisors with missing values. We finally received 268 matching questionnaires.

Measurement items

In order to ensure the validity, we used items in measures developed by previous studies. A five-point Likert scale was used to measure all variables. Considering the validity of measurement scales, all the scales were derived mainly from English literature. We used a back-translation technique (Brislin, 1980) to translate the questionnaire in English to Chinese. A bilingual management professor checked both the English and Chinese versions of the questionnaire and provided feedback on content validity and clarity of instructions, which also lead to several changes in item wording for the final version of the questionnaire.

HPWS. Various measures of HPWSs have been developed by previous studies. The HPWS measure adopted from Guthrie (2001) and Huselid (1995) was used in this study. Sample items include: our firms always provide training opportunities for us. The Cronbach's α for this measure was 0.88, suggesting acceptable measurement reliability.

Perceived organisational support. We selected four high-loading items from the source article (Eisenberger *et al.*, 1986) that seemed applicable to Chinese employees to measure perceived organisational support. A sample item was "our firms cares about employees' safety and health", the Cronbach's α for this measure was 0.86.

Devolved management. A three-item scale developed by Tang *et al.* (2015) was used to measure devolved management. A sample item was "In our firms communication between upper and lower level employees were frequent". The Cronbach's α for this measure was 0.81.

Employee creativity. We measured employee creativity using a 13-item scale from Zhou and George (2001). A sample item was "This employee suggests new ways to achieve goals or objectives". The Cronbach's α for this measure was 0.83.

Control variables. We introduced several employees' characteristics as control variables. These included: employees' sex, education background, supervisors' education background and so on. Specifically, we controlled tenure by controlling for the years since the manager worked. According to Gong *et al.* (2012), employee's proactive behaviour would affect employee creativity, so we also controlled for employee's proactive behaviour using the five-item scale from Parker *et al.* (2006) ($\alpha = 0.92$).

Data analysis and results

Testing the measurement model

Prior to hypotheses testing, confirmatory factor analyses (CFAs) were first conducted to evaluate the distinctiveness of the key variables, treating HPWS, perceived organisational support, devolved management and employee creativity as four distinct factors. As shown in Table I, this model fitted the data well: χ^2 (129) = 313.96, $p \leq 0.001$; comparative fit index = 0.92, Tucker-Lewis index = 0.91, root mean square error of approximation = 0.07. In addition, all of the loadings of indicators were significant, indicating convergent validity (Hair *et al.*, 2010).

To test the distinctiveness of the key four variables, we examined the four-factor CFA model in addition to alternative three-, two- and one-factor models. The model comparison results (see Table I) show that the four-factor model fit the data considerably better than alternatives, supporting the distinctiveness of the four variables. Thus, all the four variables were used in subsequent analyses. Table II reports the descriptive statistics and correlation matrix.

Table I.
Results of
confirmatory factor
analysis for four
variables studied

Table II.
Means, standard
deviations and
correlations

Testing the hypotheses
Using stepwise regression to test hypotheses including interactive effects has become the tendency in recent studies. As linear regression can produce accurate estimates of the strength of the relationships between interaction products without losing power, it is argued that linear regression is the better approach to test moderating relationships than SEM which requires a relatively large sample size (Goodhue *et al.*, 2007).

Table III shows the results of these regression results. Models 1 and 2 show the impacts of the control variables and HPWS on perceived organisational support, respectively. Then, we developed four additional models to test the mediating hypotheses. Model 3 specifies a regression equation on employee creativity with control variables. In Model 4, we added HPWS based on the control variables. In Model 6, we tested HPWS with perceived organisational support on employee creativity. Moreover, we developed two further models to test the moderating hypotheses. We added devolved management in Model 7, and the interaction in Model 8.

As Table III shows, the results in Model 4 indicate that HPWS has a significant and positive effect on employee creativity ($\beta = 0.41$, $p < 0.01$). The explanatory power of the equation is significant ($R^2 = 0.16$, $F = 9.12$, $p < 0.01$). Thus, *H1* was supported. The results in Model 2 indicate that HPWS has a significant and positive effect on perceived organisational support ($\beta = 0.44$, $p < 0.01$). The explanatory power of this equation is significant at the 0.01 level (with $\Delta F = 62.19$), thereby supporting *H2*. In Model 5, perceived

Model	χ^2	df	TLI	CFI	RMSEA
Four-factor model	313.96	129	0.91	0.92	0.07
Three-factor model 1: HPWS and perceived organisational support combined	629.01	132	0.75	0.79	0.12
Three-factor model 2: perceived organisational support and employee creativity combined	504.39	132	0.82	0.84	0.11
Three-factor model 3: employee creativity and devolved management combined	497.44	132	0.82	0.84	0.11
Two-factor model 1: HPWS, perceived organisational support and employee creativity combined	834.39	134	0.66	0.70	0.14
Two-factor model 2: perceived organisational support, employee creativity and devolved management combined	667.51	134	0.74	0.77	0.12
One-factor model	996.82	135	0.58	0.63	0.16

Notes: TLI, Tucker-Lewis index; CFI, comparative fit index; RMSEA, root mean square error of approximation

Variables	1	2	3	4	5	6	7	8	9	10
1. Sex	–									
2. Education	0.06	–								
3. Years working with leader	0.04	–0.05	–							
4. Supervisor's education	0.01	–0.04	–0.04	–						
5. Supervisor's tenure	–0.03	0.01	0.17**	–0.18**	–					
6. Employee's proactive behaviour	–0.03	–0.08	–0.01	0.09	–0.11	–				
7. HPWS	0.12*	–0.05	0.09	0.04	0.04	0.04	(0.88)			
8. Perceived organisational support	–0.04	–0.13*	0.02	0.05	–0.02	0.05	0.44**	(0.86)		
9. Devolved management	–0.01	–0.12*	0.05	0.07	–0.03	–0.01	0.23**	0.43**	(0.81)	
10. Employee creativity	–0.01	–0.11	–0.01	0.09	0.02	0.14*	0.41**	0.60**	0.40**	(0.83)
Mean	1.39	3.94	2.60	3.79	7.42	4.03	3.82	3.87	3.76	3.83
SD	0.49	0.68	4.84	0.54	7.10	0.75	0.62	0.80	0.84	0.67

Notes: $n = 268$. Cronbach's α appears along the diagonal in the brackets. * $p \leq 0.05$; ** $p \leq 0.01$

	Perceived organisational support		Employee creativity					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
<i>Control variables</i>								
Sex	-0.04	-0.09	-0.01	-0.05	0.02	-0.01	0.02	0.02
Education	-0.11	-0.09	-0.09	-0.07	-0.02	-0.02	-0.01	-0.01
Years working with supervisor	0.02	-0.01	-0.01	-0.04	-0.02	-0.04	-0.03	-0.03
Supervisor's education	0.04	0.02	0.08	0.06	0.06	0.05	0.05	0.05
Supervisor's tenure	-0.02	-0.03	0.05	0.03	0.06	0.05	0.06	0.05
Employee's proactive behaviour	0.04	0.02	0.13*	0.12*	0.11*	0.11*	0.12*	0.12*
<i>Independent variable</i>								
HPWS		0.44**		0.41**		0.19**		
<i>Mediator</i>								
Perceived organisational support					0.59**	0.51**	0.51**	0.56**
<i>Moderator</i>								
Devolved management							0.18**	0.18**
<i>Interaction</i>								
POS $\times$ DM								0.10*
R^2	0.02	0.21	0.04	0.20	0.37	0.40	0.40	0.41
ΔR^2	0.02	0.19	0.04	0.16	0.34	0.37	0.27	0.01
F	0.88	9.82**	1.59	9.12**	22.14**	21.59**	21.64**	19.87**
ΔF	0.88	62.19**	1.59	52.39**	140.31**	78.74**	78.94**	3.80*

Notes: $n = 268$. * $p \leq 0.05$; ** $p \leq 0.01$

Table III.
Results of hierarchical
regression analyses

organisational support has a positively significant effect on employee creativity ($\beta = 0.59$, $p < 0.01$). The explanatory power of this equation is significant at the 0.01 level (with $\Delta F = 140.31$), thus $H3$ was supported.

According to Baron and Kenny (1986), the mediation test should meet three conditions in the regression analyses: the relationship between the independent variable (i.e. HPWS) and the mediator (perceived organisational support) is significant; the relationship between the independent variable and the dependent variable (employee creativity) is significant; and when the mediator is present, if the independent variable is not significantly related to the dependent variable, full mediation is supported. If the relationship between the independent variable and the dependent variable is still significant but weaker, then partial mediation is supported. The results presented in Table III show that Condition 1 is supported, as HPWS was positively related to perceived organisational support ($\beta = 0.44$, $p < 0.01$, Model 2). Condition 2 is also supported, HPWS was positively related to employee creativity ($\beta = 0.41$, $p < 0.01$, Model 4). Condition 3 is supported, the relationship between HPWS and employee creativity is still significant when perceived organisational support was entered into the model ($\beta = 0.19$, $p < 0.01$, Model 6). Thus $H4$ was supported.

Then, we carried out regression analyses to examine the moderation hypothesis ($H5$). In order to minimise multicollinearity, all interaction variables were standard centred. $H5$ predicts that devolved management moderates the relationship between perceived organisational support and employee creativity. As shown in Table III, the interaction between perceived organisational support and devolved management was positively related to employee creativity ($\beta = 0.10$, $p < 0.05$, Model 8). In order to determine the nature of the

moderating effect, we computed slopes 1SD above and below the mean of devolved management to plot the interaction. Figure 2 shows this interaction pattern. Consistent with *H5*, perceived organisational support had a stronger positive relationship with employee creativity when the degree of devolved management was high ($\beta = 0.45, p < 0.01$) rather than low ($\beta = 0.33, p < 0.01$).

In addition, the direct effect of HPWS on employee creativity was significant ($\beta = 0.41, p < 0.01$, Table III, Model 4). Notably, we not only explore the direct effect of HPWS on employee creativity, but also examine the mechanisms between the HPWS-employee creativity. Based on our hypotheses, we would infer that HPWS would have a significant indirect effect on employee creativity via perceived organisational support. Thus, next, we examined whether HPWS was indeed associated with perceived organisational support and whether the indirect effect on employee creativity was significant.

In predicting employee creativity, we treated HPWS as the predictor, perceived organisational support as the mediator and devolved management as the moderator. We included the same list of control variables as above including employee's proactive behaviour. We used the PROCESS macro method developed by Hayes (2012) with 5,000 times resampling under Model 14 specification. That is, devolved management only moderated the link between perceived organisational support and employee creativity. Consistent with the finding above, when devolved management is low (1SD below the mean, indirect effect: $B = 0.11, SE = 0.03, BC\ 95\% \text{ CI} = [0.07, 0.16]$), high (1SD above the mean, indirect effect: $B = 0.16, SE = 0.04, BC\ 95\% \text{ CI} = [0.11, 0.24]$) and mean (indirect effect: $B = 0.14, SE = 0.03, BC\ 95\% \text{ CI} = [0.10, 0.19]$), HPWS had a significant indirect effect on employee creativity. Table IV summarises the moderated mediation analysis of this model. In sum, *H5* is supported.

Discussion

Contributions to knowledge

This study makes several contributions. First, it enriches existing literature on employee creativity by showing that the implementation of HPWS inspires employee creativity. To our knowledge, previous studies have explored the relationship between HRM practices and employee creativity (e.g. Chang *et al.*, 2014; Chiang *et al.*, 2015; Jiang *et al.*, 2012). However, few studies in the HRM literature have focussed on the impact of HPWS,

Figure 2.
The moderating
effect of devolved
management
on perceived
organisational support
and employee creativity

which may lead to superior organisational performance (Combs *et al.*, 2006). Although Chiang *et al.* (2015) have proposed that HPWS promotes information exchange among employees that prompts them to engage in creativity, they have not examined the direct effect of HPWS on employee creativity. Our study demonstrates that HPWS have a positive effect on employee creativity.

Second, we demonstrate the mediating role of perceived organisational support in the HPWS-employee creativity relationship. Previous studies have suggested that it is crucial to explore mechanisms through which HRM systems influence employee attitudes and behaviour (e.g. Shen *et al.*, 2014). Partly motivated by this call to fill a gap in the literature, we propose and test a hypothesis regarding the influence of HPWS on employee creativity via perceived organisational support. The findings extend previous research on the relationship between HPWS and employee creativity (Chiang *et al.*, 2015). In addition, our observation that employees regard HPWS as a manifestation of organisational support and reciprocate with creative behaviour provides further empirical evidence for social-exchange theory.

Third, to gain in-depth insights into the relationship between perceived organisational support and employee creativity, we explore the positive moderating role of devolved management. Guided by the interactionist perspective, we find that the interaction between perceived organisational support and devolved management influences employee creativity. This finding also adds to the literature on devolved management (Tang *et al.*, 2015).

Fourth, this study contributes to the knowledge of HRM in China in general, which has become an important field of HRM research (Cooke, 2009). While a number of studies have highlighted the uniqueness of China as a context for people management due to its institutional and cultural characteristics (e.g. Cooke *et al.*, 2014; Warner, 2008), recent studies have also shown that certain HPWS practices may have universal effect on the Chinese workforce, particularly the younger generation (e.g. Qiao *et al.*, 2009; Shen *et al.*, 2014; Zhang and Li, 2009). Our study demonstrates that the positive effect of HPWS, such as development-oriented HR practices, and organisational support is also evident in the Chinese context, at least in the companies which we have studied.

Practical implications

The findings of this study have implications for management practice. First, our study suggests that the implementation of an HPWS plays an important role in the generation of novel and useful ideas. Therefore, it is important for firms to inspire employee creativity by implementing HPWS. For example, by promoting extensive training, firms can help employees develop knowledge and skills necessary for creativity, and thus to generate more innovative ideas.

Second, we find that perceived organisational support mediates the relationship between HPWS and employee creativity. This finding indicates that perceived organisational support, which is enhanced by HPWS, inspires employee creativity. Accordingly, organisations should develop management practices to engender employees' positive

Table IV.

Indirect effects of
HPWS (via perceived
organisational support)
on employee creativity
at low, mean and high
levels of devolved
management

	Indirect effect	SE	95% Confidence interval	
			Lower	Upper
Simple paths for low devolved management	0.11	0.03	0.07	0.16
Simple paths for mean devolved management	0.14	0.03	0.10	0.19
Simple paths for high devolved management	0.16	0.04	0.11	0.24

perception of organisational support to inspire employee creativity. Once HPWS has been implemented, employees should be encouraged to feel as supported as possible by their organisation, leading to more creative behaviour.

Third, our finding that devolved management contributes to employees' positive perception of organisational support and employee creativity suggests that even when employees perceive high levels of organisational support, management approaches still have an important influence on creativity. Therefore, organisations should give employees more power and autonomy, rather than imposing external controls and constraints. As Cooke and Saini's (2010) study revealed, the majority of managerial respondents from China and India believed that more autonomy and empowerment, amongst other HR practices, were needed from their firm for its HR strategy to support its innovation-oriented business strategy more effectively.

Limitations and future research

This study contains a number of potential limitations. The first relates to its finding that HPWS positively affects employee creativity. Although an HPWS is a bundle of HRM practices, the focus of the study is HRM content. Compared with HRM content, HRM processes are more difficult to imitate, and are thus more likely to create a sustained competitive advantage (Barney, 1991; Boxall and Steeneveld, 1999). In the past few decades, HRM researchers have turned their attention to HRM processes (e.g. Bednall *et al.*, 2014; Bowen and Ostroff, 2004; Hauff *et al.*, 2017). However, more studies are needed to broaden our understanding of the relationship between HRM processes and employee creativity.

Second, our study indicates that perceived organisational support only partially mediates the relationship between HPWS and employee creativity. Various other factors are responsible for mediating the relationship between HPWS and employee creativity. For example, a previous study showed that HPWS can promote information exchange, which fosters employee creativity (Chiang *et al.*, 2015). Further examination of other mediating variables may provide a more comprehensive picture of the above relationship. Future research should thus examine other mechanisms through which HPWS promotes employee creativity.

Third, our study investigates the moderating role of devolved management in the relationship between perceived organisational support and employee creativity. This represents only a preliminary exploration of devolved management. Future research should pay more attention to devolved management, especially its antecedents and consequences.

Fourth, the generalisability of our findings is limited, as our study was conducted only in certain locations and industrial sectors in China. Future studies should attempt to replicate our conclusions in other contexts, both in China and outside, to generalise our findings. Finally, also methodologically, future study can consider or control other kinds of employee or supervisor personalities in examining factors or mechanisms boosting individual creativity.

Conclusions

This study contributes to the HRM literature by investigating the relationship between HPWS and employee creativity and the mechanisms underlying this relationship. The results indicate that HPWS enhances employees' perception of organisational support, which in turn promotes employee creativity. In addition, devolved management is found to positively moderate the relationship between perceived organisational support and employee creativity.

References

- Aggarwal, U., Datta, S. and Bhargava, S. (2007), "The relationship between human resource practices, psychological contract and employee engagement: implications for managing talent", *IIMB Management Review*, Vol. 19 No. 3, pp. 313-325.
- Allen, D.G., Shore, L.M. and Griffeth, R.W. (2003), "The role of perceived organisational support and supportive human resource practices in the turnover process", *Journal of Management*, Vol. 29 No. 1, pp. 99-118.
- Amabile, T.M. (1983), "The social psychology of creativity: a componential conceptualization", *Journal of Personality & Social Psychology*, Vol. 45 No. 2, pp. 357-376.
- Amabile, T.M. (1988), "A model of creativity and innovation in organizations", in Staw, B.M. and Cummings, L.L. (Eds), *Research in Organisational Behavior*, Vol. 10, JAI Press, Greenwich, CT, pp. 123-167.
- Amabile, T.M., Conti, R., Coon, H., Lazenby, J. and Herron, M. (1996), "Assessing the work environment for creativity", *Academy of Management Journal*, Vol. 39 No. 39, pp. 1154-1184.
- Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.
- Baron, R.M. and Kenny, D.A. (1986), "The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations", *Journal of Personality and Social Psychology*, Vol. 51 No. 6, pp. 1173-1182.
- Bartram, T., Karimi, L., Leggat, S.G. and Stanton, P. (2014), "Social identification: linking high performance work systems, psychological empowerment and patient care", *The International Journal of Human Resource Management*, Vol. 25 No. 17, pp. 2401-2419.
- Bednall, T.C., Sanders, K. and Runhaar, P. (2014), "Stimulating informal learning activities through perceptions of performance appraisal quality and human resource management system strength: a two-wave study", *Academy of Management Learning & Education*, Vol. 13 No. 1, pp. 45-61.
- Bowen, D. and Ostroff, C. (2004), "Understanding HRM-firm performance linkages: the role of the 'strength' of the HRM system", *Academy of Management Review*, Vol. 29 No. 2, pp. 203-221.
- Boxall, P. and Macky, K. (2009), "Research and theory on high-performance work systems: progressing the high-involvement stream", *Human Resource Management Journal*, Vol. 19 No. 1, pp. 3-23.
- Boxall, P. and Steeneveld, M. (1999), "Human resource strategy and competitive advantage: a longitudinal study of engineering consultancies", *Journal of Management Studies*, Vol. 36 No. 4, pp. 443-463.
- Brislin, R.W. (1980), "Translation and content analysis of oral and written material", in Triandis, H.C. and Berry, J.W. (Eds), *Handbook of Cross-Cultural Psychology*, Vol. 2, Allyn & Bacon, Boston, MA, pp. 349-444.
- Chang, H.T., Hsu, H.M., Liou, J.W. and Tsai, C.T. (2013), "Psychological contracts and innovative behavior: a moderated path analysis of work engagement and job resources", *Journal of Applied Social Psychology*, Vol. 43 No. 10, pp. 2120-2135.
- Chang, S., Jia, L., Takeuchi, R. and Cai, Y. (2014), "Do high-commitment work systems affect creativity? A multilevel combinational approach to employee creativity", *Journal of Applied Psychology*, Vol. 99 No. 4, pp. 665-680.
- Chiang, Y.H., Hsu, C.C. and Shih, H.A. (2015), "Experienced high performance work system, extroversion personality, and creativity performance", *Asia Pacific Journal of Management*, Vol. 32 No. 2, pp. 531-549.
- Choi, S.B., Kim, K., Ullah, S.E. and Kang, S.W. (2016), "How transformational leadership facilitates innovative behavior of Korean workers: examining mediating and moderating processes", *Personnel Review*, Vol. 45 No. 3, pp. 459-479.
- Cohen-Charash, Y. and Spector, P.E. (2001), "The role of justice in organizations: a meta-analysis", *Organisational Behavior and Human Decision Processes*, Vol. 86 No. 2, pp. 278-321.

- Combs, J., Liu, Y., Hall, A. and Ketchen, D. (2006), "How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance", *Personnel Psychology*, Vol. 59 No. 3, pp. 501-528.
- Cooke, F.L. (2009), "A decade of transformation of HRM in China: a review of literature and suggestions for future studies", *Asia Pacific Journal of Human Resources*, Vol. 47 No. 1, pp. 6-40.
- Cooke, F.L. and Saini, D.S. (2010), "(How) does the HR strategy support an innovation oriented business strategy? An investigation of institutional context and organisational practices in Indian firms", *Human Resource Management*, Vol. 49 No. 3, pp. 377-400.
- Cooke, F.L., Saini, D.S. and Wang, J. (2014), "Talent management in China and India: a comparison of management perceptions and human resource practices", *Journal of World Business*, Vol. 49 No. 2, pp. 225-235.
- Datta, D.K., Guthrie, J.P. and Wright, P.M. (2005), "Human resource management and labor productivity: does industry matter?", *Academy of Management Journal*, Vol. 48 No. 1, pp. 135-145.
- Deci, E.L., Connell, J.P. and Ryan, R.M. (1989), "Self-determination in a work organization", *Journal of Applied Psychology*, Vol. 74 No. 4, pp. 580-590.
- Edmondson, A. (1999), "Psychological safety and learning behavior in work teams", *Administrative Science Quarterly*, Vol. 44 No. 2, pp. 350-383.
- Ehnert, I., Parsa, S., Roper, I., Wagner, M. and Muller-Camen, M. (2016), "Reporting on sustainability and HRM: a comparative study of sustainability reporting practices by the world's largest companies", *The International Journal of Human Resource Management*, Vol. 27 No. 1, pp. 88-108.
- Eisenberger, R., Fasolo, P. and Davis-LaMastro, V. (1990), "Perceived organisational support and employee diligence, commitment, and innovation", *Journal of Applied Psychology*, Vol. 75 No. 1, pp. 51-59.
- Eisenberger, R., Huntington, R., Hutchison, S. and Sowa, D. (1986), "Perceived organisational support", *Journal of Applied Psychology*, Vol. 71 No. 3, pp. 500-507.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P.D. and Rhoades, L. (2001), "Reciprocation of perceived organisational support", *Journal of Applied Psychology*, Vol. 86 No. 1, pp. 42-51.
- Elorza, U., Harris, C., Aritzeta, A. and Balluerka, N. (2016), "The effect of management and employee perspectives of high-performance work systems on employees' discretionary behavior", *Personnel Review*, Vol. 45 No. 1, pp. 121-141.
- Erdogan, B., Kraimer, M.L. and Liden, R.C. (2004), "Work value congruence and intrinsic career success: the compensatory roles of leader-member exchange and perceived organisational support", *Personnel Psychology*, Vol. 57 No. 2, pp. 305-332.
- Ghosal, S. and Bartlett, C.A. (1994), "Linking organisational context and managerial action: the dimensions of quality of management", *Strategic Management Journal*, Vol. 15 No. S2, pp. 91-112.
- Giannikis, S. and Nikandrou, I. (2013), "The impact of corporate entrepreneurship and high-performance work systems on employees' job attitudes: empirical evidence from Greece during the economic downturn", *The International Journal of Human Resource Management*, Vol. 24 No. 19, pp. 3644-3666.
- Gong, Y., Huang, J.C. and Farh, J.L. (2009), "Employee learning orientation, transformational leadership, and employee creativity: the mediating role of employee creative self-efficacy", *Academy of Management Journal*, Vol. 52 No. 4, pp. 765-778.
- Gong, Y., Zhou, J. and Chang, S. (2013), "Core knowledge employee creativity and firm performance: the moderating role of riskiness orientation, firm size, and realized absorptive capacity", *Personnel Psychology*, Vol. 66 No. 2, pp. 443-482.
- Gong, Y., Cheung, S.Y., Wang, M. and Huang, J.C. (2012), "Unfolding the proactive process for creativity integration of the employee proactivity, information exchange, and psychological safety perspectives", *Journal of Management*, Vol. 38 No. 5, pp. 1611-1633.

-
- Goodhue, D., Lewis, W. and Thompson, R. (2007), "Research note-statistical power in analyzing interaction effects: questioning the advantage of PLS with product indicators", *Information Systems Research*, Vol. 18 No. 2, pp. 211-227.
- Guthrie, J.P. (2001), "High-involvement work practices, turnover, and productivity: evidence from New Zealand", *Academy of management Journal*, Vol. 44 No. 1, pp. 180-190.
- Haar, J.M. and Spell, C.S. (2009), "How does distributive justice affect work attitudes? The moderating effects of autonomy", *The International Journal of Human Resource Management*, Vol. 20 No. 8, pp. 1827-1842.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2010), *Multivariate Data Analysis*, Pearson Education, Upper Saddle River, NJ.
- Hakanen, J.J., Perhoniemi, R. and 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*, Vol. 73 No. 1, pp. 78-91.
- Harris, T.B., Li, N., Boswell, W.R., Zhang, X.A. and Xie, Z. (2014), "Getting what's new from newcomers: empowering leadership, creativity, and adjustment in the socialization context", *Personnel Psychology*, Vol. 67 No. 3, pp. 567-604.
- Hauff, S., Alewell, D. and Hansen, N. (2017), "HRM system strength and HRM target achievement-towards a broader understanding of HRM processes", *Human Resource Management*, Vol. 56 No. 5, pp. 715-729.
- Hayes, A.F. (2012), *An Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, Guilford Press, New York, NY.
- Hirst, G., Knippenberg, D.V. and Zhou, J. (2009), "A cross-level perspective on employee creativity: goal orientation, team learning behavior, and individual creativity", *Academy of Management Journal*, Vol. 52 No. 2, pp. 280-293.
- Huselid, M.A. (1995), "The impact of human resource management practices on turnover, productivity, and corporate financial performance", *Academy of Management Journal*, Vol. 38 No. 3, pp. 635-672.
- Jiang, J., Wang, S. and Zhao, S. (2012), "Does HRM facilitate employee creativity and organizational innovation? A study of Chinese firms", *The International Journal of Human Resource Management*, Vol. 23 No. 19, pp. 4025-4047.
- Judge, T.A. and Ilies, R. (2004), "Affect and job satisfaction: a study of their relationship at work and at home", *Journal of Applied Psychology*, Vol. 89 No. 4, pp. 661-673.
- Kahn, W.A. (1990), "Psychological conditions of personal engagement and disengagement at work", *Academy of Management Journal*, Vol. 33 No. 4, pp. 692-724.
- Kaufman, B.E. (2015), "Evolution of strategic HRM as seen through two founding books: a 30th anniversary perspective on development of the field", *Human Resource Management*, Vol. 54 No. 3, pp. 389-407.
- Liao, H., Liu, D. and Loi, R. (2010), "Looking at both sides of the social exchange coin: a social cognitive perspective on the joint effects of relationship quality and differentiation on creativity", *Academy of Management Journal*, Vol. 53 No. 5, pp. 1090-1109.
- Luksyte, A. and Spitzmueller, C. (2016), "When are overqualified employees creative? It depends on contextual factors", *Journal of Organisational Behavior*, Vol. 37 No. 5, pp. 635-653.
- Maden, C. (2015), "Linking high involvement human resource practices to employee proactivity", *Personnel Review*, Vol. 44 No. 5, pp. 720-738.
- Messersmith, J.G. and Guthrie, J.P. (2010), "High performance work systems in emergent organizations: implications for firm performance", *Human Resource Management*, Vol. 49 No. 49, pp. 241-264.
- Messersmith, J.G., Patel, P.C. and Lepak, D.P. (2011), "Unlocking the black box: exploring the link between high-performance work systems and performance", *Journal of Applied Psychology*, Vol. 96 No. 6, pp. 1105-1118.

- Oldham, G.R. and Cummings, A. (1996), "Employee creativity: personal and contextual factors at work", *Academy of Management Journal*, Vol. 39 No. 3, pp. 607-634.
- Ostroff, C. and Bowen, D.E. (2016), "Reflections on the 2014 decade award: is there strength in the construct of HR system strength?", *Academy of Management Review*, Vol. 41 No. 2, pp. 196-214.
- Paauwe, J., Guest, D. and Wright, P. (2013), *HRM & Performance: Achievements & Challenges*, Wiley, Chichester.
- Parker, S.K., Williams, H.M. and Turner, N. (2006), "Modeling the antecedents of proactive behavior at work", *Journal of Applied Psychology*, Vol. 91 No. 3, pp. 636-652.
- Pfeffer, J. (1998), *The Human Equation*, Harvard Business School, Boston, MA.
- Pfeffer, J. (2010), "Building sustainable organizations: the human factor", *The Academy of Management Perspectives*, Vol. 24 No. 1, pp. 34-45.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- Qiao, K., Khilji, S. and Wang, X. (2009), "High-performance work systems, organisational commitment, and the role of demographic features in the People's Republic of China", *International Journal of Human Resource Management*, Vol. 20 No. 11, pp. 2311-2330.
- Ramus, C.A. and Steger, U. (2000), "The roles of supervisory support behaviors and environmental policy in employee 'ecoinitiatives' at leading-edge European companies", *Academy of Management Journal*, Vol. 43 No. 4, pp. 605-626.
- Rich, B.L., Lepine, J.A. and Crawford, E.R. (2010), "Job engagement: antecedents and effects on job performance", *Academy of Management Journal*, Vol. 53 No. 3, pp. 617-635.
- Robinson, S.L., Kraatz, M.S. and Rousseau, D.M. (1994), "Changing obligations and the psychological contract: a longitudinal study", *Academy of Management Journal*, Vol. 37 No. 1, pp. 137-152.
- Rose, E. and Wright, G. (2005), "Satisfaction and dimensions of control among call centre customer service representatives", *The International Journal of Human Resource Management*, Vol. 16 No. 1, pp. 136-160.
- Salanova, M., Agut, S. and Peiro, J.M. (2005), "Linking organisational resources and work engagement to employee performance and customer loyalty: the mediation of service climate", *Journal of Applied Psychology*, Vol. 90 No. 6, pp. 1217-1227.
- Selden, S., Schimmoeller, L. and Thompson, R. (2013), "The influence of high performance work systems on voluntary turnover of new hires in US state governments", *Personnel Review*, Vol. 42 No. 3, pp. 300-323.
- Seo, M.G., Barrett, L.F. and Bartunek, J.M. (2004), "The role of affective experience in work motivation", *Academy of Management Review*, Vol. 29 No. 3, pp. 423-439.
- Shalley, C.E., Zhou, J. and Oldham, G.R. (2004), "The effects of personal and contextual characteristics on creativity: where should we go from here?", *Journal of Management*, Vol. 30 No. 6, pp. 933-958.
- Shen, J., Benson, J. and Huang, B. (2014), "High-performance work systems and teachers' work performance: the mediating role of quality of working life", *Human Resource Management*, Vol. 53 No. 5, pp. 817-833.
- Shih, H.A., Chiang, Y.H. and Hsu, C.C. (2013), "High performance work system and HCN performance", *Journal of Business Research*, Vol. 66 No. 4, pp. 540-546.
- Shipton, H., Budhwar, P., Sparrow, P. and Brown, A. (2016), *Human Resource Management, Innovation and Performance*, Palgrave Macmillan, Basingstoke.
- Spreitzer, G.M. (1995), "Psychological empowerment in the workplace: dimensions, measurement and validation", *Academy of Management Journal*, Vol. 38 No. 5, pp. 1442-1465.
- Tang, G., Wei, L.Q., Snape, E. and Ying, C.N. (2015), "How effective human resource management promotes corporate entrepreneurship: evidence from china", *International Journal of Human Resource Management*, Vol. 26 No. 12, pp. 1586-1601.

- Wang, A.C. and Cheng, B.S. (2009), "When does benevolent leadership lead to creativity? The moderating role of creative role identity and job autonomy", *Journal of Organisational Behavior*, Vol. 31 No. 1, pp. 106-121.
- Warner, M. (Ed.) (2008), *Human Resource Management 'with Chinese Characteristics': Facing the Challenges of Globalization*, Routledge, London.
- Wayne, S.J., Shore, L.M. and Liden, R.C. (1997), "Perceived organisational support and leader-member exchange: a social exchange perspective", *Academy of Management Journal*, Vol. 40 No. 1, pp. 82-111.
- Whitener, E.M. (2001), "Do 'high commitment' human resource practices affect employee commitment? A cross-level analysis using hierarchical linear modeling", *Journal of Management*, Vol. 27 No. 5, pp. 515-535.
- Wong, Y.T., Wong, C.S. and Ngo, H.Y. (2012), "The effects of trust in organisation and perceived organisational support on organisational citizenship behaviour: a test of three competing models", *The International Journal of Human Resource Management*, Vol. 23 No. 2, pp. 278-293.
- Woodman, R.W. and Schoenfeldt, L.F. (1990), "An interactionist model of creative behavior", *Journal of Creative Behavior*, Vol. 24 No. 1, pp. 279-290.
- Woodman, R.W., Sawyer, J.E. and Griffin, R.W. (1993), "Toward a theory of organisational creativity", *Academy of Management Review*, Vol. 18 No. 2, pp. 293-321.
- Yu, C. and Frenkel, S.J. (2013), "Explaining task performance and creativity from perceived organisational support theory: which mechanisms are more important?", *Journal of Organisational Behavior*, Vol. 34 No. 8, pp. 1165-1181.
- Zacharatos, A., Barling, J. and Iverson, R. (2005), "High-performance work systems and occupational safety", *Journal of Applied Psychology*, Vol. 90 No. 1, pp. 77-93.
- Zhang, X. and Bartol, K.M. (2010), "Linking empowering leadership and employee creativity: the influence of psychological empowerment, intrinsic motivation, and creative process engagement", *Academy of Management Journal*, Vol. 53 No. 1, pp. 107-128.
- Zhang, Y.C. and Li, S.L. (2009), "High performance work practices and firm performance: evidence from the pharmaceutical industry in China", *The International Journal of Human Resource Management*, Vol. 20 No. 11, pp. 2331-2348.
- Zhou, J. and George, J.M. (2001), "When job dissatisfaction leads to creativity: encouraging the expression of voice", *Academy of Management Journal*, Vol. 44 No. 4, pp. 682-696.

Further reading

- Chatterjee, D. and Ravichandran, T. (2013), "Governance of interorganisational information systems: a resource dependence perspective", *Information Systems Research*, Vol. 24 No. 2, pp. 261-278.
- Srivastava, A., Bartol, K.M. and Locke, E.A. (2006), "Empowering leadership in management teams: effects on knowledge sharing, efficacy, and performance", *Academy of Management Journal*, Vol. 49 No. 6, pp. 1239-1251.

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