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High-Commitment HRM and Employee Outcomes: The Contingent Role of Organizational Identification

Running Head: HRM, Identification and Employee Outcomes

Keywords: High-Commitment HRM; Organizational Identification; Quit Intentions;
Organizational Citizenship Behaviours; Social Exchange Theory; Social Identity Theory

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High-Commitment HR Practices and Employee Outcomes: The Contingent Role of Organizational Identification

Abstract

In this paper, we examine whether the relationship between high-commitment HR practices and two employee outcomes, quit intentions and organisational citizenship behaviours (OCBs), is contingent on organizational identification. Incorporating insights from both social exchange and social identity theories, we propose that the relationship between high-commitment HR systems, intention to quit and OCBs is attenuated when employees strongly identify with their organization. This proposition was tested and supported with employees of a Swedish relocation company and a Greek shipping organization. For high identifiers, as perceptions of HR practices deteriorated from high to low, they were associated with smaller increases in quit intentions, and smaller decreases in citizenship behaviours. But overall, high identifiers always had lower quit intentions and higher citizenship behaviours than low identifiers, which is managerially reassuring.

Keywords: High-Commitment HR Practices; Organizational Identification; Employee Work-related Outcomes; Social Exchange Theory; Social Identity Theory.

Introduction

For almost 20 years, scholars have examined the effects of high-commitment HR practices on employee work-related outcomes, with social exchange theory (SET) providing the dominant theoretical lens (Blau, 1964; Whitener, 2001). When organizations invest in high-commitment HR practices, they signal their long-term interest and concern for employees. In general, empirical evidence suggests that high-commitment approaches are positively related to desirable work outcomes, such as job satisfaction, organizational commitment, intention to remain, and citizenship behaviours (Boon & Kalshoven, 2014; Kehoe & Wright, 2013; Sun, Aryee, & Law, 2007). Studies have also begun to identify the processes through which high-commitment HR practices influence employee outcomes. These include perceptions of organizational support (Allen, Shore, & Griffiths, 2003), psychological contract fulfilment (Bal, Kooij, & De Jong, 2013), and procedural justice (Meyer & Smith, 2000).

However, emerging evidence suggests that high-commitment HR practices can sometimes have no effect or even undermine these same employee outcomes (Conway & Monks, 2009; Gould-Williams, 2004). Therefore, it is equally important to identify under what conditions high-commitment HR practices are more or less effective. While strategic organizational-level research suggests that the effectiveness of the overall HR system, and individual practices, are contingent on the organization's internal and external context, including labour market conditions, industry and business strategy (Hauff, Alewell, & Hansen, 2014; Jackson & Schuler, 1995), fewer studies have considered individual-level, employee contingencies.

Specifically, we examine the moderating role of organizational identification (OI) on the relationship between employee perceptions of high-commitment HR practices and two work-related outcomes, namely quit intentions and organizational citizenship behaviours (OCBs), which are defined as, "individual behaviours that are discretionary, not directly or explicitly recognized by the formal reward system and that in the aggregate promote the effective

functioning of the organization”, (Organ 1988, p.4). By examining OI, we also address van Knippenberg, van Dick and Tavares’s (2007) call for scholars to integrate social exchange and social identity theories (SIT; Tajfel, 1982), considering them jointly when exploring employee-organization relationships.

SIT (Tajfel, 1982) considers the extent to which individuals define themselves in terms of the characteristics of another person or social group. Within workplace settings, organizational identification (OI) is defined as the individual’s “perception of oneness with or belongingness to an organization... which he or she is a member” (Mael & Ashforth, 1992, p.104). When employees strongly identify, they define themselves by similar attributes (e.g., goals, values, and norms) that define the group (Mael & Ashforth, 1992), and a psychological merging of self and organization occurs (van Knippenberg & Sleebos, 2006). Thus, while SIT primarily considers the sense of psychological oneness between employee and organization, SET focuses on notions of exchange and reciprocity between psychologically distinct parties (Ashforth & Mael, 1989). Integrating SIT and SET, we anticipate that the outcomes of the exchange relationships will be contingent on employees’ sense of oneness with the organization.

We make the following research contributions: First, studies have generally focused on organizational-level assessments of the contingent role of HR practices on performance and work outcomes (see Hauff et al.’s, 2014 review). We advance current understanding about when high-commitment HR practices are more or less effective by examining individual-level, employee contingencies. Second, by focusing on employee perceptions rather than manager opinions, we offer a more accurate assessment of the role of high-commitment approaches on work-related outcomes. Third, we provide a “more integrated understanding” of psychological relations between employees and organizations (van Knippenberg et al., 2007, p.458) by considering SIT and SET together. Finally, we establish the generalizability of our findings with two distinct sets of employees - maritime officers and relocation company administrators.

High-Commitment HR Practices and Social Exchange

High-commitment approaches to people management are characterised by long-term relationships based on trust and mutuality (Hauff et al., 2014; Walton, 1985; Whitener, 2001). Initially proposed as an alternative to high control Tayloristic management systems whereby workers are treated as easily replaceable commodities, some scholars view Walton's high-commitment approach as universally applicable best practice (Arthur, 1992; Delery & Doty, 1996). However, other scholars contend that people management should be contingent on the organization's internal and external context, such as its ownership structure and industry life-cycle (Hauff et al., 2014; Jackson & Schuler, 1995). A third group of scholars asserts that high-commitment HR practices are applicable to core employees only, those "who use their heads more than their hands to provide value" (Horibe, 1999, p.xi, quoted in Lepak & Snell, 2002).

Consistent with Walton's (1985) original proposal and other studies (Boon & Kalshoven, 2014; Whitener, 2001), we contend that high-commitment practices should be applied to all employees to avoid their anticipated benefits from "decaying rapidly" (p.84). But, we acknowledge that employees' experiences of HR practices can vary and differentially impact their work-related attitudes and behaviours. So, following Nishii, Lepak and Schneider, (2008) and others (e.g. Conway & Monks, 2009; Kehoe & Wright, 2013), we elicit employee perceptions of HR practices rather than manager accounts of HR policy and worker reactions. Moreover, with employees simultaneously exposed to multiple HR practices, coupled with the successful implementation of any practice being reliant on those of others, following Hauff et al.'s, (2014) guidelines, we consider the effects of bundles or systems of HR practices.

Social exchange theory (SET) has become the dominant theoretical lens to explain the impact of high-commitment HR practices on employee work outcomes (Kehoe & Wright, 2013; Whitener, 2001). Social exchanges involve interdependent relationships in which unspecified bidirectional transactions occur based on normative rules of reciprocity (Gould-Williams,

2007; Gouldner, 1960). Basically, the donor (organization) provides “something of value” to the recipient (employee) who responds by providing “something of value” in return. When both parties to the relationship benefit, further cycles of mutually beneficial exchange are likely to follow. Investments in high-commitment HR practices aim to signal the organization’s desire to engage employees in such social exchanges and establish trusting, long-lasting relations. In turn, employee responses are likely to take the form of enhanced positive work-related outcomes (such as discretionary citizenship behaviours) and a desire to engage in further exchange cycles (greater intentions to remain; e.g., Kehoe & Wright, 2013; Sun et al., 2007).

Although no definitive list exists indicating what, or how many, HR practices should be included in high-commitment systems (Boxall & Macky, 2009), Hauff et al.’s (2014) recent comparative review of five leading measures identified five or six central bundles. We adopt a broadly similar system here, comprising: i) training and development programs which equip employees with the necessary skills to effectively undertake their work and fulfil personal development; ii) career and promotion opportunities signalling the organization’s desire to maintain long-lasting relations and recognise valuable employee contributions; iii) job autonomy, whereby employees are trusted to plan and undertake work in ways they feel best; iv) open communication and frequent information exchange, enabling employees to constructively express their ideas; and v) developmental performance appraisals.

In general, empirical research is consistent with the social exchange perspective, for instance, finding there is a negative relationship between high-commitment HR practices and quit intentions, and conversely a positive relationship with OCBs (e.g., Kehoe & Wright, 2013; Mostafa, Gould-Williams & Bottomley, 2015). But, on occasion high-commitment systems reportedly had minimal or even undermining effects on these same employee outcomes. Gould-Williams (2004), for instance, found managers used the high-commitment approach and practices emphasising participation in decision-making, to divert blame to employees when

plans were unsuccessful. Similarly, Conway and Monks (2009) found that success of high-commitment HR approaches depended on whether supervisors, “actually believed in the philosophy” (p.153). Together, these findings support Nishii et al.’s (2008) work on the importance of understanding employee attributions of managerial motives for investing in HR systems, and our decision to examine employee-level contingent factors directly rather than second-hand via managerial opinions (e.g., Hauff et al., 2014). Next, we review the employee-organization relationship from the complementary SIT perspective.

Social Identity Theory and Organizational Identity

Social identity theory (SIT; Tajfel, 1982) considers the extent to which individuals define themselves in terms of group characteristics. In so doing, “members share the group’s prototypical traits” (Lee, Park, & Koo, 2015, p.2), thereby depersonalising their self-concepts so that “I” essentially becomes “We” (van Knippenberg & Sleebos, 2006). Moreover, this “psychological merging” of self and group suggests that individuals who strongly identify will care more deeply about the group’s welfare, evaluate fellow members favourably, and view them as trustworthy given their perceived similarity and common bond (Tajfel, 1982).

In the workplace, social identification has been described as offering a “powerful theoretical framework” (van Dick et al., 2004) for understanding employee attitudes and behaviours. Here, organizational identification (OI) reflects employee perceptions of oneness with the organization (Ashforth & Mael, 1989). The more employees’ identify, the greater will be the psychological merging of organization and self, leading to its “values, norms and interests being incorporated into their self-concept” (van Knippenberg & Sleebos, 2006, p.572). With this blurring of boundaries, employees are more likely to adopt the collective’s perspective, take the organization’s interests to heart (Lee et al., 2015) and view their co-workers (group members) as being more “like them”.

Similarly, the more individuals identify with the organization, the more such membership will be central to who they are (Tajfel, 1982). Consequently, employees are likely to engage in discretionary behaviours of benefit to the organization as an expression of their concern for its success and welfare. Moreover, social identity is an important determinant of people's self-esteem (van Dick et al., 2004). Thus, highly identified individuals would also be the most reluctant to lose their membership and quit such a valuable self-defining organization. Indeed, van Dick et al. (2004), contend that the motivational forces derived from the social identity the organization provides should encourage highly identified employees to act in group-beneficial ways. Given the inherent costs and uncertainty related to staff turnover, and the support discretionary citizenship behaviours can make to harmonious work environments, successful attainment of these goals should jointly benefit both the organization and employee. Empirical research supports these claims, finding OI is negatively related to quit intentions, but positively related to OCBs (van Dick et al., 2004; van Knippenberg et al., 2007; Newton & Teo, 2014).

Organizational Identification and Affective Commitment

An alternative way of viewing this employee-organization relationship is in terms of affective commitment, defined as the “emotional attachment to, identification with, and involvement in the organization” (Meyer et al., 2012, p.226). While there is an apparent conceptual overlap with OI, they remain distinct constructs. Indeed, Lee et al., (2015) argued that OI reflects a deep-down, visceral connection with the organization, while affective commitment captures a more superficial, emotional response. Consequently, OI can be considered relatively stable, largely impervious to the day-to-day vagaries of work, while affective commitment is more dynamic (Ashforth et al., 2008). So, for instance, if managers unilaterally alter employees' shift patterns, they might feel aggrieved and less committed to the organization. However, if shift patterns are adjusted in-line with their wishes, employees maybe more organizationally

committed. But, given the self-defining nature of OI, employees may not immediately adjust their sense of belonging which in the short-term is likely to remain unchanged.

Empirical evidence shows there is a strong correlation between OI and affective commitment, but they are discriminantly valid. For instance, Riketta's (2005) meta-analytic review found OI to more strongly correlate with OCBs and job involvement, and less strongly correlate with job satisfaction and absenteeism than affective commitment. Likewise, Lee et al., (2015) found that OI explained additional variance of in-role and extra-role performance above and beyond that already explained by general work attitudes (including affective commitment). Finally, Stinglhamber et al., (2015) found, using a two-wave panel design, that OI was related to temporal change in affective commitment, but affective commitment was not related to temporal change in OI, suggesting that OI maybe an antecedent of commitment.

Integrating Social Exchange and Social Identity Theories

As outlined above, SET and SIT suggest different psychological processes through which organizations may influence employee work-related outcomes. But until recently, these two theoretical perspectives have developed largely in isolation, thus limiting our understanding of employee-organizational psychological relations (Tavares, van Knippenberg, & van Dick, 2016). We propose that employees' evaluation of the quality of social exchanges (as evident by investments in high-commitment HR practices) and OI will interact when predicting work outcomes, including quit intentions and OCBs. For instance, positive perceptions of social exchange triggered by high-commitment HR practices may generate feelings of obligation that reduces the chance of employees quitting and increases OCBs *even if* identification is low. This is attributable to employees' normative response to reciprocate by providing something of value to the organization (Allen et al., 2003). On the other hand, employees with high OI are more likely to view the organization's successes as their own successes and strive for its continued success given the importance and emotional significance attached to such

membership. Thus, the likelihood of quitting will decrease and engaging in OCBs will increase *even if* employees' perceptions of high-commitment HR practices are not favourable and the quality of the exchange relationship is low (van Knippenberg et al., 2007).

However, with only finite resources, employees energised by the need to reciprocate will not be able to “double their efforts” when also highly identified. Similarly, highly identified employees will not be able to “double their efforts” when feeling the need to reciprocate. Hence, the joint effect will be less than the additive sum of the parts. Also, when *both* the quality of the social exchange relationship and OI are low, employees' intentions to quit will be high and desire to engage in OCBs will be low as there is little obligation to reciprocate, nor perceived sense of oneness with their organization.

In support of these propositions, van Knippenberg et al., (2007) found that employee perceptions of both supervisor and organizational support had a weaker relationship with withdrawal behaviours as identification with the organization increased. Similarly, Tavares et al., (2016) found that perceptions of organizational support were more strongly negatively related to quit intentions for employees with lower levels of OI. Assuming perceived organizational support is a reflection of the organization's investments in high-commitment HR practices, we predict that the relationship between employee perceptions of high-commitment HR practices and both quit intentions and OCBs will become weaker, the more strongly employees' identify with the organization. We therefore propose that:

Hypothesis 1: OI will moderate the relationship between high-commitment HR practices and employees' quit intentions such that the negative relationship between high-commitment HR practices and quit intentions will be attenuated when employees strongly identify with their organization.

Hypothesis 2: OI will moderate the relationship between high-commitment HR practices and employees' OCBs such that the positive relationship between high-commitment HR practices and OCBs will be attenuated when employees strongly identify with their organization.

Method

We conducted two studies to test the generalisability of the proposed hypotheses. Data were collected from administrators of a Swedish relocation firm (Study 1), and maritime officers working for a Greek international shipping company (Study 2). The focus was the interaction of employee perceptions of high-commitment HR practices and OI in determining quit intentions and OCBs. In Study 1, all variables were rated by employees, while in Study 2 the ship's captain rated officers' OCBs, and organizational commitment was controlled for.

Sample and Procedures

The relocation company in Study 1 employed around 380 personnel and comprised nine departments, six back-office (HR, Marketing, Finance, Sales, Quality control, and Intercultural training) and three customer-facing (Global mobility, Emigration, and Destination services). An email survey was sent to all employees in the customer-facing departments. Employees were account managers or junior consultants responsible for global and domestic, commercial and residential relocation, while more senior managers generally undertook back-office duties. In total, 278 employees completed the questionnaire, yielding a 79.4% response rate. Sixty percent of these employees were male, and 55% had worked with the organization for more than five years. As regards to age, 31% of the respondents were between 18 and 30, 40% were between 31 and 40, 18% were between 41 and 50, while the rest were over 50.

In Study 2, the on-shore HR manager approached all 41 masters of the company's tanker fleet, 27 of whom accepted the invitation to participate in a wide-ranging study about HRM systems, employee performance and wellbeing. Given the questionnaire's breadth, the focal constructs were measured using truncated scales comprising the three items with the highest factor loadings from Study 1. In addition, masters provided ratings of OCB's (on average 8 officers per vessel) which the relocation company's flatter organizational structure precluded (employee-supervisor ratio exceeded 15:1). In other respects, the two questionnaires were similar in structure, if not scope.

Each vessel is operated by a 25-27 person crew. The master distributed questionnaires to all deck and engine officers. The deck officers (2nd, 3rd and 4th) assist the Chief Officer who is responsible for the deck and cargo operations. Likewise, the engineering officers (2nd, 3rd and 4th) assist the Chief Engineer who is responsible for the engine department. Together, these officers are in charge of the safety, stability, navigation and maintenance of the vessel which entails frequent interaction with numerous on-shore departments, including Health, Safety and Security, Environmental, Technical and Operations. The final sample consisted of 219 deck and engine officers, yielding a response rate of 66%. All respondents were male – not surprising in this highly male dominated industry – and 59% had worked with the organization for more than five years. As regards to age, 36% of the respondents were between 18 and 30, 46% were between 31 and 40, 12% were between 41 and 50, and the rest were over 50 years old.

Measures

All items were measured on seven-point Likert scales, ranging from “strongly disagree” (1) to “strongly agree” (7).

High-Commitment HR Practices

Both studies used an abridged 10-item subset from Mostafa et al.'s (2015) 20-item scale to provide balanced coverage of the five original practice bundles, namely training, promotion, autonomous work design, performance appraisal and communication. The original scale derived from a collection of earlier influential studies, including Kehoe and Wright (2013), and Sun et al. (2007), remains highly consistent with Hauff et al.'s (2014) recent review of high-commitment practices. While often misleadingly labelled as high-performance (Gould-Williams, 2007), the choice of these practices was motivated by “softer” or “developmental” concerns linked to social-exchange, with implementation designed to promote worker commitment and well-being (Mostafa et al., 2015).

Two items measured each practice, namely: “My organization provides excellent opportunities for personal skills development” and “My organization offers opportunities for training and development” (training); “I have good opportunities of being promoted within this organization” and “Qualified employees in this job have the opportunities to be promoted to positions of greater pay / responsibility within this organization” (promotion); “My organization allows me to plan how I do my work” and “My organization gives me considerable opportunity for independence and freedom in how I do the work” (autonomous work design); “The organization’s appraisal system provides me with an accurate assessment of my strengths and weaknesses” and “I receive sufficient information on my performance at work” (performance appraisal); and “The communication between me and managers at work is good” and “Employees regularly receive formal communications regarding company goals and objectives” (communication). Cronbach’s alpha was 0.96 in Study 1 and 0.86 in Study 2.

Organizational Identification

OI was measured in Study 1 using a six-item scale developed by Mael and Ashforth, (1992), while in Study 2 an abridged version comprising three-items with the highest factor loadings

from Study 1. Sample items include, “This organization’s successes are my successes” and “When someone criticizes my organization, it feels like a personal insult”. Cronbach’s alpha was 0.95 in Study 1 and 0.86 in Study 2.

Intentions to Leave

Intentions to leave were measured using a four-item scale developed by O’Reilly, Chatman and Caldwell (1991) in Study 1 and an abridged three-item version comprising those with the highest factor loadings in Study 2. Sample items include, “I have seriously thought about leaving this organization” and “I would prefer another more ideal job to the one I have now”. Cronbach’s alpha was 0.94 in Study 1 and 0.79 in Study 2.

OCBs

OCBs were measured in Study 1 using four items developed by Lee and Allen (2002), and those with the three largest factor loadings were carried forward to Study 2. As both the originator of the exchange relationship and the focus of identification is the organization, our measure of OCBs is based on organizational rather than individual-level actions. As mentioned before, in Study 1 employees rated their own OCBs, while in Study 2 masters’ rated their officers. Sample items include “I (This employee) defend(s) the organization when other employees criticize it” and “I (This employee) offer(s) ideas to improve the functioning of the organization”. Cronbach’s alpha was 0.96 in Study 1 and 0.81 in Study 2.

Controls

Prior research shows that employees’ gender, age, education, and organizational tenure are related to both turnover intentions (Biron & Boon, 2013; Chang, Wang, & Huang, 2013) and OCBs (Mostafa et al., 2015; Tavares et al., 2016). Therefore, these variables were controlled for when analysing Study 1. However, in Study 2, only age and tenure were included, since all officers were male and possessed University degrees, along with organizational commitment.

We used an abridged three-item version of Meyer and Smith's (2000) scale to measure affective commitment, omitting items potentially overlapping with OI (Stinglhamber et al., 2015). The scale comprised, "I feel emotionally attached to this organization", "I feel a strong sense of belonging to my organization", and "This organization has a great deal of personal meaning for me". Cronbach's alpha was 0.75.

Analysis

The two-step SEM approach of Anderson and Gerbing (1988), was followed which involves validating the measurement model before estimating the associated structural model.

Measurement Validation

First, pairs of items measuring each high-commitment HR practice were averaged and the five scores treated as indicators of an overall high-commitment HR practice construct. Next, using AMOS 23, a confirmatory factor analysis was conducted to assess the relationships amongst the focal latent constructs and evaluate their reliability and validity. Model fit was good in Study 1 (χ^2 (df = 206) = 449.546, $p < 0.01$; CFI = 0.961, RMSEA = 0.065 and TLI = 0.948) and acceptable in Study 2; (χ^2 (df = 133) = 309.072, $p < 0.01$; CFI = 0.914, RMSEA = 0.078 and TLI = 0.890). All the factor loadings were significant ($p < 0.01$), providing support for convergent validity (Anderson & Gerbing, 1988). In addition, all constructs exhibited high internal consistency with composite reliability scores above 0.75 and average variance extracted (AVE) scores above 0.50. Discriminant validity was achieved as the square root of the AVE for each construct was greater than the corresponding inter-construct correlations (Fornell & Larcker, 1981). Finally, none of the correlations exceeded 0.80 suggesting that multicollinearity was unlikely to be unduly problematic, although sample size was modest (Kline, 2005; see Tables 1 and 2).

-Insert Tables 1 and 2 Here-

Common Method Bias

Common method bias has been found to diminish interaction effects (Siemsen, Roth, & Oliveria, 2010). Therefore, Podsakoff, MacKenzie, and Podsakoff (2012), contend that when studies are designed to test for interactions, common method bias “would not be able to account for any statistically significant effects observed” (p.565). Accordingly, concern for common method bias on the contingent relations between high commitment HR practices and OI on employee outcomes is to some extent allayed, but inflation of their associated first-order effects still remains (Siemsen et al., 2010).

We tested for method bias using the common factor approach (Podsakoff et al., 2012). Here, a measurement model is estimated allowing each indicator to load on its theoretical construct and the common factor. For Study 1, the measurement model comprised high-commitment HR practices, OI, quit intentions and OCBs since they were all rated by employees. For Study 2, the measurement model included commitment, but excluded OCBs since masters rated their officers. These models showed good fit in both studies (χ^2 (df = 187) = 382.743, $p < 0.01$; CFI = 0.969, RMSEA = 0.061, and TLI = 0.954 for Study 1, and χ^2 (df = 77) = 153.749, $p < 0.01$; CFI = 0.954, RMSEA = 0.068, and TLI = 0.929 for Study 2). More importantly, the common factor extracted 39% of the variance in Study 1 and 17% in Study 2, which is less than the 50% criterion identified by Fornell and Larcker, (1981) indicative of a meaningful construct. In summary, common method bias was not unduly worrisome.

Structural Models Estimation

To examine the moderating role of OI on the relationship between high-commitment HR practices and employee outcomes, Little, Bovaird & Widaman’s (2006), residual centering

approach was used. This approach has performed well in simulation studies comparing alternative latent interaction methods (unbiased parameter estimates), and is more powerful in detecting interactions than ordinary multiple regression. The approach is also relatively straight-forward to implement, especially when judged against earlier latent interaction methods which required imposition of numerous non-linear constraints on model parameters. Moreover, the relative contribution of the higher-order interaction and main effects is clearly identified as the orthogonalizing process ensures multicollinearity is not an issue.

The residual centering approach is a two-step procedure. First, two indicators are chosen, one from the independent variable (high-commitment HR practices) and one from the moderator (OI) and multiplied together (e.g., TRAINING*OI1). Next, the cross-product is regressed on all indicators of the independent and moderator variables (i.e., TRAINING, PROMOTION, AUTONOMY, APPRAISAL, COMMUNICATION, OI1, OI2, OI3, OI4, OI5, OI6 for Study 1, and OI1, OI2, OI3 for Study 2) and the residuals are saved, (e.g., TRAINING*OI1_res). This procedure is then repeated for all cross-products ($5 \times 6 = 30$ for Study 1, and $5 \times 3 = 15$ for Study 2). Second, when estimating the structural model, the sets of residuals are treated as indicators of the latent interaction term (i.e., high-commitment HR practices-OI). Lastly, correlated covariances are estimated between residual-centered indicators if the original cross-product had the same first-order indicator (e.g., TRAINING*OI1_res and TRAINING*OI2_res may share unique variance associated with indicator TRAINING).

In Study 1, the proposed structural model exhibited good fit (χ^2 (df =1179) =1865.920, $p < 0.01$; CFI = 0.969, RMSEA = 0.046, TLI = 0.962), with the predictor variables explaining 61.2% of the variance ($R^2 = 0.612$) in quit intentions and 46.2% of the variance in OCBs. High-commitment HR practices had a negative association with quit intentions ($\beta = -0.443$, $p < 0.01$) and a positive association with OCBs ($\beta = 0.549$, $p < 0.01$). OI also had a negative association with quit intentions ($\beta = -0.483$, $p < 0.01$) and a positive association with OCBs ($\beta = 0.316$, p

< 0.01). More importantly, the interaction between high-commitment HR practices and OI was positive and significant for quit intentions ($\beta = 0.109, p < 0.01$) and negative and significant for OCBs ($\beta = -0.143, p < 0.01$), providing support for Hypotheses 1 and 2. The positive interaction indicates that as employees' OI increased, the negative association between high-commitment HR practices and quit intentions decreased. Conversely, the negative interaction indicates that as employees' OI increased, the positive association between high-commitment HR practices and OCBs decreased. Finally, high-commitment HR practices have less of an impact on both quit intentions and OCBs when employees have higher levels of identification. Turning to the control variables, there were only two significant results. First, consistent with Biron and Boon (2013) and Chang et al. (2013), gender was negatively related to quit intentions ($\beta = -0.275, p < 0.05$), suggesting women were less likely to seek new employment than men. Second, consistent with Mostafa et al., (2015) and Tavares et al., (2016), employees with greater education were more likely to engage in OCB's than those less educated ($\beta = 0.378, p < 0.01$).

Figure 1 and 2 shows the interaction between high-commitment HR practices and OI for quit intentions and OCBs respectively. Following Aiken and West's (1991) procedure, we computed the regression slopes when scores on OI (moderator) were one standard deviation above and below the mean. The relationship between high-commitment HR practices and quit intentions was weaker for higher identifying ($\beta = -0.176, t = -1.768, p < 0.10$) than for lower identifying employees ($\beta = -0.492, t = -6.385, p < 0.01$). The same pattern was found between high-commitment HR practices and OCBs, where the strength of the relationship was weaker when employees were higher ($\beta = 0.228, t = 1.947, p < 0.10$) rather than lower in OI ($\beta = 0.593, t = 6.571, p < 0.01$). But against this backdrop, high identifiers always had lower quit intentions and higher citizenship behaviours than lower identifiers as the position of the lines make clear, which is clearly managerially reassuring.

-Insert Figures 1 and 2 Here-

In Study 2, the proposed structural model provided an adequate fit (χ^2 (df = 468) = 1054.145, $p < 0.01$; CFI = 0.907, RMSEA = 0.076, TLI = 0.890), with the predictor variables explaining 60% of the variance in quit intentions ($R^2 = 0.596$) and 57% of the variance in OCBs. High-commitment HR practices had a negative association with quit intentions ($\beta = -0.560$, $p < 0.01$) and a positive association with OCBs ($\beta = 0.710$, $p < 0.01$). OI also had a negative association with quit intentions ($\beta = -0.279$, $p < 0.01$) and a positive association with OCBs ($\beta = 0.106$, $p < 0.05$). More importantly, the interaction between high-commitment HR practices and OI was positive and significant for quit intentions ($\beta = 0.362$, $p < 0.01$), and negative and significant for OCBs ($\beta = -0.230$, $p < 0.01$), again giving support for Hypotheses 1 and 2. Finally, neither age nor tenure (controls) was related to quit intentions or OCBs.

Figures 3 and 4 depict these interactions. Consistent with Study 1, the simple slopes test revealed that the strength of the relationship between high-commitment HR practices and quit intentions was weaker when employees OI was higher ($\beta = -0.222$, $t = -2.109$, $p < 0.05$) rather than lower ($\beta = -0.582$, $t = -6.035$, $p < 0.01$). Similar results were found for OCBs, where the slope coefficients were smaller for employees higher in OI ($\beta = 0.388$, $t = 3.966$, $p < 0.01$) and larger for those lower in OI ($\beta = 0.678$, $t = 7.571$, $p < 0.01$). Again, high identifiers always had lower quit intentions and higher citizenship behaviours than officers who were low identifiers.

-Insert Figures 3 and 4 Here-

Multilevel Analysis

Since employees in Study 2 were actually nested within ships, an additional hierarchical linear modelling (HLM) analysis was conducted with STATA to test the findings' robustness. Preliminary tests revealed a moderate degree of within-unit shared variance, with ICC's of 0.148 and 0.239 for OCB's and quit intentions respectively. Nevertheless, the HLM results

were highly consistent with those of SEM reported above. Specifically, high-commitment HR practices ($\beta = -0.401, p < 0.01$) and OI ($\beta = -0.245, p < 0.01$) both had negative relationships with quit intentions. More importantly, their two-way interaction was again positive and significant ($\beta = 0.152, p < 0.05$). Also, high-commitment HR practices ($\beta = 0.522, p < 0.01$) and OI ($\beta = 0.148, p < 0.01$) both had positive relationships with OCBs and their interaction was again negative and significant ($\beta = -0.174, p < 0.01$), consistent with our predictions and previously discussed single-level SEM analysis. In the interests of completeness, we also estimated this model with organizational commitment as the dependent variable (rather than merely a control). Results mirrored those of OCB's with the negative interaction approaching statistical significance at conventional reporting levels, ($\beta = -0.136, t = -1.81, p < 0.07$). In other words, high-commitment HR practices had less influence on organizational commitment when employees exhibited higher rather than lower levels of identification.

Discussion

This research was designed to advance understanding of the relationship between high-commitment HR practices and employee work outcomes. Whilst few studies have adopted an individual-level perspective, those that have, have focused on process mechanisms linking employee and organization (e.g., Allen et al., 2003; Bal et al., 2013). In contrast, we show that the strength of the HR practices-work outcomes relationship is conditional on individual-level factors, specifically organization identification (OI). Thus, we complement the more established strategic, organizational-level approach to examining contingent factors in this context, such as industry life-cycle, unionisation, and ownership structure (Hauff et al., 2014; Jackson & Schuler, 1995), by showing that employee heterogeneity also counts.

The empirical findings support prior research regarding the main effects of HR practices (Hauff et al., 2014; Kehoe & Wright, 2013), and OI (van Dick et al., 2004; Riketta, 2005) on employee work-related outcomes. As expected, employees' favourable perceptions of high-commitment HR practices were positively related to organizational citizenship behaviour (OCB), and negatively related to quit intentions. Moreover, the main effects were of comparable size across the two distinct occupational groups (maritime officers, relocation assistants), and all explained substantial variance, with R^2 ranging from 46% (OCB, Study 1) to 60% (quit intentions, Study 2). This suggests both predictors are of practical relevance to managers aiming to improve employees' attitudes and behaviours. In other words, investments in high-commitment HR practices are important.

This study's primary contribution was to extend the understanding of the HR practices-work outcomes relationship by highlighting the contingent role of organizational identification. Interactions were statistically significant in all four cases. Thus, the relationship between high-commitment HR practices and *both* quit intentions and OCBs was contingent on OI, with the direct relationships being stronger when OI was lower and weaker when OI was higher. For high identifiers, as perceptions of HR practices *deteriorated* from high to low, they were associated with smaller increases in quit intentions, and smaller decreases in citizenship behaviours than comparable changes for low identifiers. Further, high identifiers always had lower quit intentions and higher citizenship behaviours than low identifiers (see Figures 1 to 4). This suggests that employees who strongly identify with the organization, it being more central to their sense of self, are more tolerant of "poorer quality" high management practices than those for whom the organization is less important.

Alternatively, the interactions can be viewed holding HR practices constant. When perceptions of HR practices were low, whether employees' OI was high or low made a big difference to

their work-related outcomes, whereas when perceptions of HR practices were high, employees' OI made little difference (and in Study 2, no difference at all). So, when HR practices are perceived unfavourably, whether employees are high or low identifiers has a notable impact on their work attitudes and behaviours, but when HR practices are perceived favourably, outcome differences are reduced, or even eliminated. Overall, these results are consistent with Newton and Teo's (2014) study outlining the "buffering" effect of OI on the work stressor-employee adjustment relationship – except OI only "cushioned" the fall, rather than eliminated (buffered) any change in employee outcomes at all.

Both social exchange and social identity theories provide compelling reasons for motivating individuals. When employees have favourable perceptions of HR practices, they more likely consider their social-exchange as being in deficit with the organization, evoking the need to reciprocate, which takes the form of enhanced work-related outcomes. Likewise, when employees strongly identify with the organization, the value and emotional significance attached to group membership (Tajfel, 1982) also provides a "motivating force" (van Dick et al., 2004, p.352), for organizationally beneficial behaviours. But with each "driver" independently engendering high levels of work engagement, employees having only finite energy and resources are unable to "double their efforts" when both conditions are met, hence the combined effect is *not* additive. Thus, managers aiming to enhance both employee identification and favourable perceptions of HR practices might encounter a "crowding out" effect ($1 + 1 < 2$) when existing levels of one (or both) are already relatively high.

Nevertheless, without jointly considering social exchange and social identity theories, this richer understanding of employee-organizational relations would have remained unseen (van Knippenberg et al., 2007; Tavares et al., 2016). Moreover, given consistent findings across two distinct occupational groups, relocation assistants and maritime officers, we are confident

about their broader generalisability. But further comparisons with back-office, senior staff at the relocation company, and ordinary maritime sailors would clearly strengthen these claims. Such comparisons could also test Walton's (1985) proposition that high commitment HR practices should be applicable to *all* employees, regardless of occupational level or group, not simply those most important for the organisation's economic success (Lepak & Snell, 2002).

From a social identity perspective, evidence of moderation raises some interesting managerial matters. Newton and Teo (2014) tested whether occupational stress was reduced when distal/proximal forms of identification were congruent with distal/proximal work outcomes. This claim was partially supported. For instance, OI (distal) reduced the negative impact of role conflict (stressor) when organizational commitment and quit intentions (distal) were the outcomes. Our findings are also consistent with Newton and Teo's distal-distal congruity. But, employees can identify with organizations at many different levels, including department, supervisor, team, and work itself (Riketta, 2005). So, managers might expect work-team identification to moderate the HR practices relationship with more proximal work-unit OCB's, or work-identification to moderate relations with job satisfaction. In this way, managers should carefully consider the outcomes they wish to prioritize before considering the type of identification they may need to promote.

Similarly, broadening work-related outcomes to include unethical behaviours might help to illuminate whether employees' OI is healthy or unhealthy. Galvin, Lange and Ashforth (2015) contend that individuals can over identify when their self-concept becomes dominated or subsumed by that of the group. This dark-side to identification might encourage employees to blindly follow what's good for the company at their own personal expense. For instance, in Study 2, maritime officers identified strongly with the shipping company (mean = 5.54). But, if some officers had over-identified, would they be more (not less) likely to engage in unethical

work behaviours as perceptions of HR practices improved? Expanding the portfolio of outcomes would enable the investigation of such topical issues.

From a social exchange perspective, Hauff et al.'s (2014) unit-level analysis of German manufacturing and service organizations revealed only a minority (21%) had adopted a "pure" high-commitment HR approach, although another 19% used a "hybrid" commitment approach including elements of high-control practices (e.g., well-defined jobs, low employee discretion, work governed by clear rules and procedures). While the work-related and market performance outcomes of both approaches were similar when measured at the unit / departmental-level, the same may not be true at the individual employee-level. Managers might expect the HR practices-employee outcomes relationship to be weaker for the hybrid approach because trust, mutuality and long-term interest (social exchange) are less central. In contrast, OI might then be more important under such circumstances. Similarly, had we selected HR practices that emphasised membership, belonging, and oneness (social identity; Mael & Ashforth, 1992), a similar diminution of the main employee-organization relationship might be expected to occur.

While this study focused on the contingent role of OI, we are not excluding the possibility that unfavourable treatment and low perceptions of HR practices can undermine employees' OI, which in turn, reduces desirable work-related outcomes. However, Riketta's (2005) meta-analytic review suggests that HRM is undoubtedly only one of many predictors of OI, others including tenure, inspirational leadership and organizational prestige. SIT researchers have also shown in many minimal group experiments that mere designation can engender almost immediate in-group identification (Tajfel, 1982), while relatively high levels of reported anticipatory OI suggests newcomers may match organizational interests through a combination of emulation and affinity (Ashforth et al., 2008) *before* having any first-hand experience of its people management. Finally, acknowledging the trait-like quality of OI, individual episodes

of unfavourable treatment are likely to be discounted or forgiven, particularly if the organization is highly valued and important to defining an employee's self-concept; but a prolonged lack of benevolence and organization support is another story. Thus, until longitudinal data is available, issues of dynamics and causality surrounding this relationship will remain a "moot point".

Limitations and Directions for Future Research

Our work has some limitations which provide avenues for future research. First, in Study 1, all variables were measured using the same source. Thus, common method bias may inflate the first-order relationships between variables in this study. Fortunately, "interaction effects cannot be artefacts of common method bias" (Siemsen et al., 2010, p.456), which remain our central focus (Podsakoff et al., 2012), plus multisource data was collected in Study 2 to help mitigate such concerns. Second, the cross-sectional design of these studies precludes causal inferences being made. For instance, it is plausible that employees who engage in citizenship behaviours have more favourable views of high-commitment HR practices and strongly identify with the organization. Future studies might test these assumptions using longitudinal designs. Third, even though OI is posited to be dynamic in nature (Ashforth et al., 2008), consistent with most previous studies, identification was treated as static and relatively stable here (for an exception, see Stinglhamber et al., 2015). Future research may wish to consider the formation and evolution of OI with tenure. Fourth, in both Studies 1 and 2 data were collected from Western culture organizations. With evidence suggesting Eastern employees respond differently to high-commitment approaches compared to their Western counterparts, issues of generalizability across national culture warrant exploration (Su & Wright, 2012). Continuing this theme, Hauff et al., (2014) presented emerging evidence that a combination of both commitment oriented (high trust, long-term) and control-oriented (low discretion, well-defined jobs) systems are equally effective at the organizational performance level. Thus, it

would be useful to continue assessing whether employees respond more positively to these hybrid mid-range HR systems than conventional high-control and high-commitment extremes.

In spite of these limitations, our research has shown that high-commitment HR practices and OI provide alternative means to motivate employees. We anticipate that further research will provide a more nuanced understanding of the interactions between different types of identification and approaches to HRM.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Allen, D. G., Shore, L. M., & Griffeth, R. W. (2003). The role of perceived organizational support and supportive human resource practices. *Journal of Management*, 29(1), 99–118.
- Anderson, J. C., & Gerbing, D. D. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–23.
- Arthur, J. B. (1992). The link between business strategy and industrial relations systems in American steel mini-mills. *Industrial and Labor Relations Review*, 45(3), 488-506.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14(1), 20–39.
- Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in organizations: An examination of four fundamental questions. *Journal of Management*, 34(3), 325-374.
- Bal, P. M., Kooij, D. T. A. M., & De Jong, S. B. (2013). How do developmental and accommodative HRM enhance employee engagement and commitment? The role of psychological contract and SOC strategies. *Journal of Management Studies*, 50(4), 545-572.
- Biron, M., & Boon, C. (2013). Performance and turnover intentions: A social exchange perspective. *Journal of Managerial Psychology*, 28(5), 511-531.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: Wiley.

- Boon, C., & Kalshoven, K. (2014). How high-commitment HRM relates to engagement and commitment: The moderating role of task proficiency. *Human Resource Management*, 53(3), 403–420.
- Boon, C., Belschak, F. D., Den Hartog, D. N., & Pijnenburg, M. (2014). Perceived human resource management practices: Their effect on employee absenteeism and time allocation at work. *Journal of Personnel Psychology*, 13(1), 21-33.
- Boxall, P. & Macky, K. (2009). Research and theory on high-performance work systems: progressing the high involvement stream. *Human Resource Management Journal*, 19(1), 3-23.
- Chang, W. A., Wang, Y., & Huang, T. (2013). Work design–related antecedents of turnover intention: A multilevel approach. *Human Resource Management*, 52(1), 1-26.
- Conway, E. & Monks, K. (2009). Unravelling the complexities of high commitment: an employee-level analysis. *Human Resource Management Journal*, 19(2), 140-158.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, 39(4), 802-835.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Galvin, B. M., Lange, D., & Ashforth, B. E. (2015). Narcissistic organizational identification: Seeing oneself as central to the organization’s identity, *Academy of Management Review*, 40(2), 163-181.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2), 161-178.
- Gould-Williams, J. S. (2004). The Effects of High Commitment HR Practices on Employee Attitude: The Views of Public Sector Workers. *Public Administration*, 82(1), 63-81.
- Gould-Williams, J. S. (2007). HR practices, organizational climate, and employee outcomes: Evaluating social exchange relationships in local government. *International Journal of Human Resource Management*, 18(9), 1627-1647.

- Hauff, S., Alewell, D., & Hansen, N. K. (2014). HRM systems between control and commitment: occurrence, characteristics and effects of HRM outcomes and firm performance. *Human Resource Management Journal*, 24(4), 424-441.
- Jackson, S. E., & Schuler, R. S. (1995). Understanding human resource management in the context of organizations and their environments. *Annual Review of Psychology*, 46, 237-264.
- Kehoe, R. R., & Wright, P. M. (2013). The Impact of high-performance human resource practices on employees' attitudes and behaviors. *Journal of Management*, 39(2), 366–91.
- Kline, R. B. (2005). *Principles and practice of Structural Equation Modeling* (2nd ed.), New York: Guilford Press.
- Lee, E.-S., Park, T.-Y., & Koo, B. (2015). Identifying organizational identification as a basis for attitudes and behaviors: A meta-analytic review. *Psychological Bulletin*, 141(5), 1049-80.
- Lee, K., & Allen, N. J. (2002). Organizational citizenship behaviour and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology*, 87(1), 131–142.
- Lepak, D. P. & Snell, S. A. (2002). Examining the human resource architecture: The relationships among human capital, employment, and human resource configurations. *Journal of Management*, 28(4), 517-543.
- Little, T. D., Bovaird, J. A., & Widaman, K. F. (2006). On the merits of orthogonalizing powered and product terms: Implications for modeling interactions among latent variables, *Structural Equation Modeling*, 13(4), 497–519.
- Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behaviour*, 13(2), 103–123.
- Meyer, J. P., & Smith, C. A. (2000). HRM Practices and organizational commitment: Test of a mediation model. *Canadian Journal of Administrative Sciences*, 17(4), 319-331.
- Meyer, J. P., Stanley, D. J., Jackson, T. A., McInnis, K. J., Maltin, E. R., & Sheppard, L. (2012). Affective, normative, and continuance commitment levels across cultures: A meta-analysis. *Journal of Vocational Behavior*, 80(2), 225-245.

- Mostafa, A. M. S., Gould-Williams, J. S., & Bottomley, P. (2015). High-performance human resource practices and employee outcomes: The mediating role of public service motivation. *Public Administration Review*, 75(5), 747–757.
- Newton, C., & Teo, S. (2014). Identification and occupational stress: A stress-buffering perspective. *Human Resource Management*, 53(1), 89–113.
- Nishii, L. H., Lepak, D. P., & Schneider, B. (2008). Employee attributions of the “why” of HR practices: Their effects on employee attitudes and behaviors, and customer satisfaction. *Personnel Psychology*, 61(3), 53-545.
- O’Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, 34(3), 487–516.
- Organ, D. W. (1988). *Organizational citizenship behaviour: The good soldier syndrome*. New York: Lexington Books.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569.
- Riketta, M. (2005). Organizational identification: A meta-analysis. *Journal of Vocational Behaviour*, 66(2), 358-384.
- Siemsen E., Roth A., & Oliveira P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, 13(3), 456–476.
- Stinglhamber, F., Marique, G., Caesens, G., Desmette, D., Hansez, I., Hanin, D., & Bertrand, F. (2015). Employees’ organizational identification and affective organizational commitment: An integrative approach. *PLoS One*, 10(4), e0123955.
- Sun, L-Y., Aryee, S., & Law, K. S. (2007). High-Performance human resource practices, citizenship behavior and organizational performance: A relational perspective. *Academy of Management Journal*, 50(3), 558–577.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33(1), 1-139.

Tavares, S. M., van Knippenberg, D., & van Dick, R. (2016). Organizational identification and “currencies of exchange”: Integrating social identity and social exchange perspectives. *Journal of Applied Social Psychology*, 46(1), 34-45.

van Dick, R., Christ, O., Stellmacher, J., Wagner, U., Ahlswede, O., Grubba, C., ... Tissington, P.A. (2004). Should I stay or should I go? Explaining turnover intentions with organizational identification and job satisfaction. *British Journal of Management*, 15(4), 351–360.

van Knippenberg, D., & Sleebos, E. (2006). Organizational identification versus organizational commitment: Self-definition, social exchange, and job attitudes. *Journal of Organizational Behaviour*, 27(5), 571–584.

van Knippenberg, D., van Dick, R., & Tavares, S. (2007). Social identity and social exchange: Identification, support, and withdrawal from the job. *Journal of Applied Social Psychology*, 37(3), 457–477.

Walton, R. E. (1985). From control to commitment in the workplace. *Harvard Business Review*, 63(2), 77–84.

Whitener, E. M. (2001). Do “high commitment” human resource practices affect employee commitment? *Journal of Management*, 27(5), 515-535.

Table 1: Study 1 – Means, Standard Deviations, Correlations and Reliability Estimates

Construct	1	2	3	4	5	6	7	8
1. High-commitment HRM	0.87, (0.94)*							
2. Organizational Identification	0.74**	0.88, (0.95)						
3. Quit Intentions	-0.69	-0.72	0.88, (0.94)					
4. OCBs	0.62	0.59	-0.62	0.93, (0.96)				
5. Gender	-0.00	-0.00	-0.10	0.01				
6. Age	0.19	0.16	-0.11	0.22	-0.02			
7. Education	-0.08	0.01	-0.10	0.13	0.10	0.16		
8. Tenure	0.02	0.01	0.06	0.07	-0.13	0.62	0.01	-
Mean	4.53	4.36	3.49	4.58	0.60	2.13	1.44	1.71
SD	1.42	1.66	1.69	1.77	0.49	1.03	0.64	0.73

*Sub-diagonal entries are the latent construct inter-correlations. The first entry on the diagonal is the square root of the AVE, while the second entry in parentheses is the composite reliability score.

**All correlations above 0.1 are significant at $p < 0.01$

Table 2: Study 2 – Means, Standard Deviations, Correlations and Reliability Estimates

Construct	1	2	3	4	5	6	7
1. High-commitment HRM	0.74, (0.86)*						
2. Organizational Identification	0.37**	0.84, (0.88)					
3. Quit Intentions	-0.57	-0.62	0.76, (0.80)				
4. OCBs	0.69	0.48	-0.59	0.78, (0.82)			
5. Organizational Commitment	0.47	0.65	-0.66	0.54	0.72, (0.76)		
6. Age	-0.17	0.06	0.01	-0.12	0.15		
7. Tenure	0.03	0.16	-0.10	0.00	0.23	0.65	
Mean	5.83	5.54	2.42	5.81	5.55	1.88	1.74
SD	0.47	0.83	0.70	0.62	0.80	0.84	0.73

*Sub-diagonal entries are the latent construct inter-correlations. The first entry on the diagonal is the square root of the AVE, while the second entry in parentheses is the composite reliability score.

**All correlations above 0.2 are significant at $p < 0.01$ whereas correlations below 0.14 are nonsignificant

Figure 1: Moderating effect of OI on the relationship between high-commitment HRM and quit intentions (Study 1)

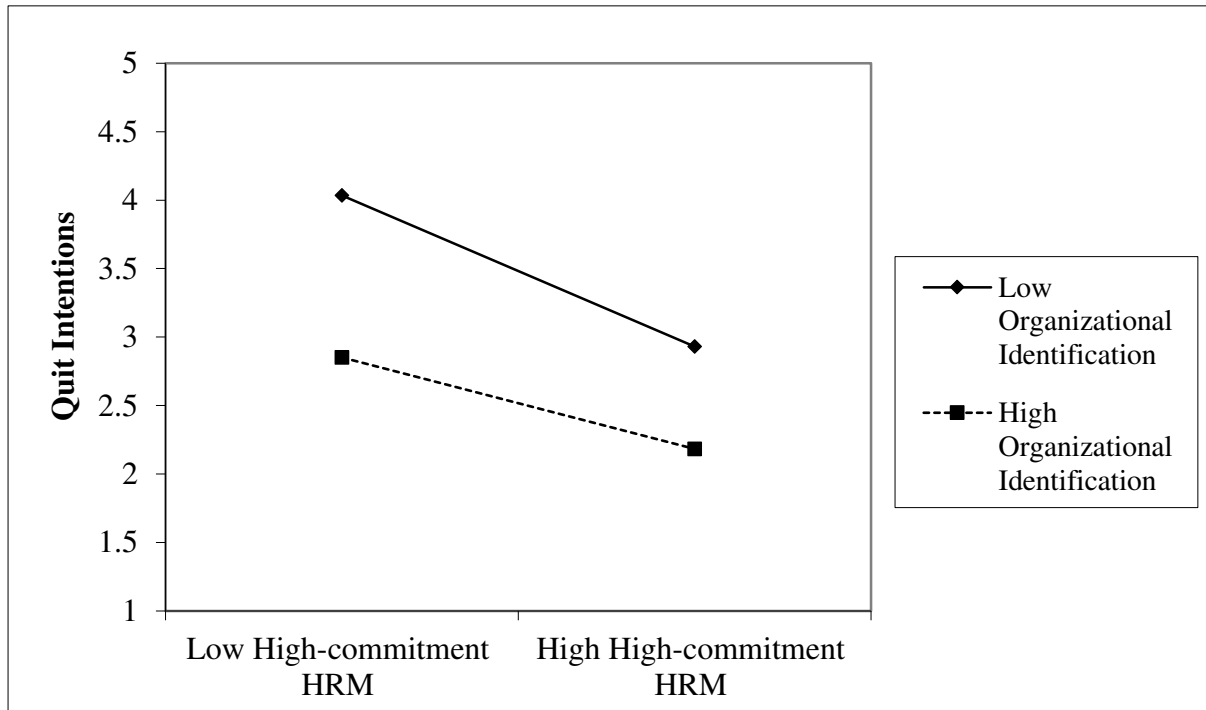


Figure 2: Moderating effect of OI on the relationship between high-commitment HRM and OCBs (Study 1)

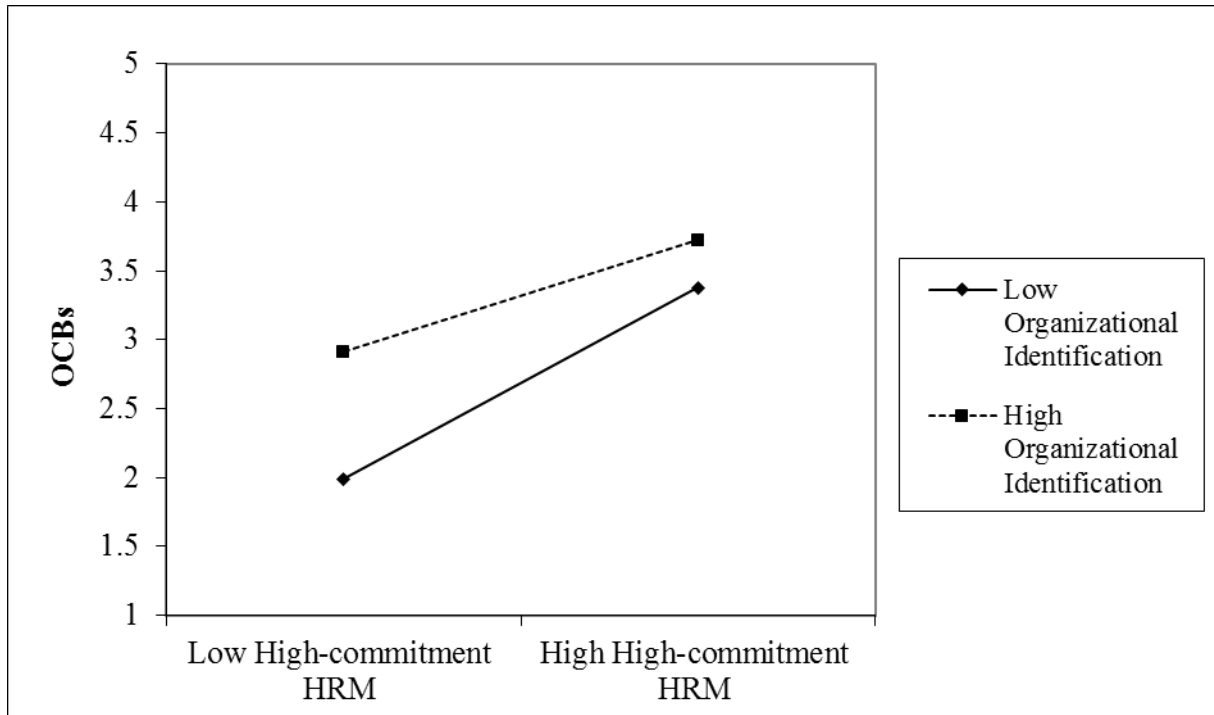


Figure 3: Moderating effect of OI on the relationship between high-commitment HRM and quit intentions (Study 2)

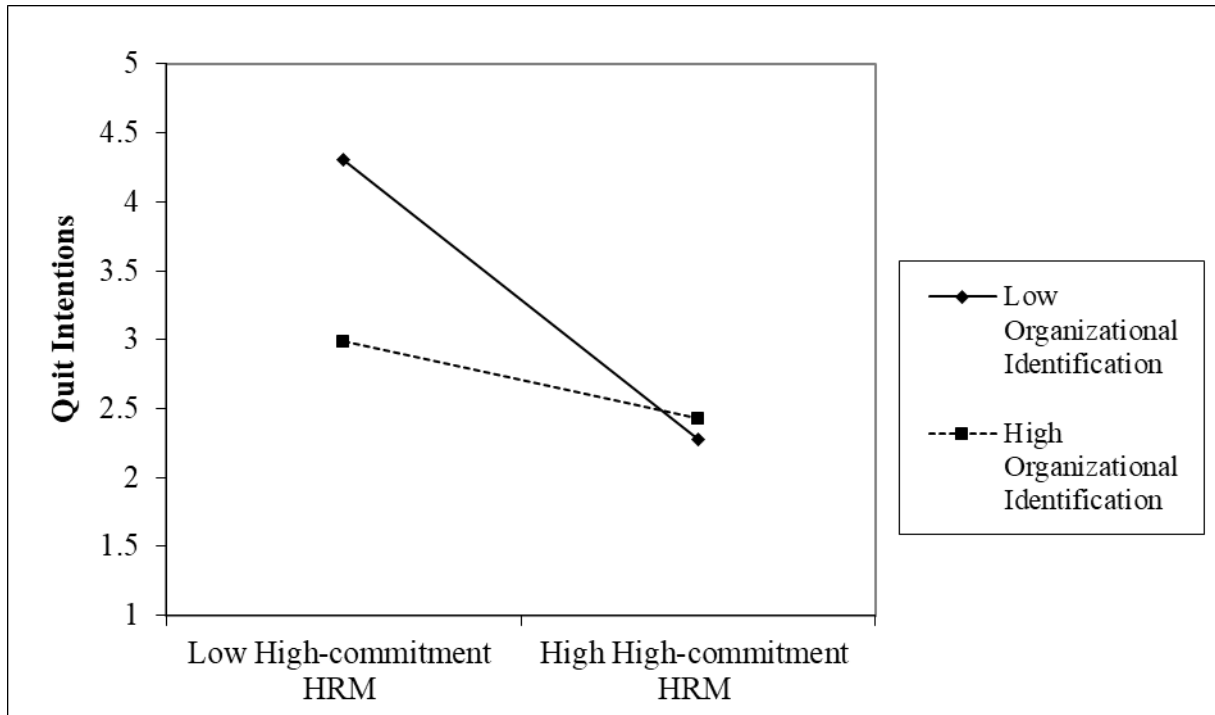


Figure 4: Moderating effect of OI on the relationship between high-commitment HRM and OCBs (Study 2)

