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High-commitment HRM, organizational engagement, and deviant workplace behaviors: The moderating role of person-organization fit

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Abstract

This study examines the relationship between perceptions of high-commitment HRM, person-organization (P-O) fit, organizational engagement, and deviant workplace behaviors. Drawing on social exchange theory (SET) and P-O fit theory, a mediated moderation model is proposed in which P-O fit moderates the relationship between high-commitment HRM and organizational engagement, which, in turn, relates to deviant behaviors. Using two multilevel multisource datasets, from a shipping management company (Study 1) and an international seaport (Study 2), the results of generalized multilevel structural equation modeling (GSEM) revealed that the relationship between high-commitment HRM and deviant behaviors was mediated by organizational engagement. Furthermore, a significant indirect relationship was found from high-commitment HRM perceptions to deviant behaviors through organizational engagement for low, but not for high, P-O fit. Theoretical and practical implications are discussed.

KEYWORDS
deviant workplace behaviors, high-commitment HRM, organizational engagement, person-organization fit, social exchange theory, value congruence

INTRODUCTION

High-commitment HRM refers to a comprehensive set of HR practices—such as training and development, job security, promotion, and performance appraisal—that are aimed at enhancing employees' level of attachment to the organization and encouraging them to work towards the achievement of its goals (Whitener, 2001; Wood & De Menezes, 1998). The relationship between high-commitment HRM practices and different types of employee outcomes such as job satisfaction, organizational commitment, turnover intentions, and organizational citizenship behaviors (OCBs) has gained considerable attention from scholars, and there is now enough empirical evidence that supports the positive

effects of these practices (e.g., Boon et al., 2011; Mostafa & Gould-Williams, 2014). In recent years, scholars have started to direct attention towards understanding the mechanisms and boundary conditions of this relationship (Boon & Kalshoven, 2014; Brinck et al., 2019; Kooij & Boon, 2018; Marescaux et al., 2019; Mostafa et al., 2019). This study seeks to add to this body of research by examining *how* and *under which conditions* high-commitment HRM is related to employee outcomes. Contrary to most previous studies, we focus on a negative outcome: deviant workplace behaviors.

Deviant workplace behaviors are discretionary employee actions that harm the organization such as deliberately working slowly, coming into work late or withdrawing effort in the job (Bolino & Klotz, 2015). Such behaviors have plagued organizations for centuries and have recently become very common from employees

The authors are listed in order of contribution.

(Bennett et al., 2018). Recent estimates suggest that these behaviors cost organizations worldwide billions of dollars every year (Bennett et al., 2018; Mackey et al., 2021). Therefore, identifying the role of organizational factors, especially HRM, in helping reduce deviant workplace behaviors is of significant importance (Alias et al., 2013).

Drawing on social exchange theory (SET; Blau, 1964), which focuses on the notion of reciprocity between two different parties and suggests that people positively reciprocate when they are positively treated, and Lavelle et al.'s (2007) target similarity model of social exchange, which proposes that individuals hold distinctive exchange relationships with multiple referents, we first propose organizational engagement as a mediator through which high-commitment HRM relates to organization directed deviant behaviors. Organizational engagement involves being highly positive about the organization, strongly connected to it and willing to contribute to its success (Farndale et al., 2014; Saks, 2006). Next, we examine in which situations high-commitment HRM is most strongly related to organizational engagement and in turn, deviant behaviors. Integrating SET with person-organization fit theory, we propose person-organization (P-O) fit—the compatibility between the values of an employee and those of his/her organization (Cable & DeRue, 2002)—as a moderator. Specifically, the study proposes a mediated moderation model in which P-O fit moderates the relationship between high-commitment HRM and organizational engagement, which in turn is related to deviant workplace behaviors. Figure 1 shows the conceptual model of this study.

This study makes a number of contributions. First, while previous studies have provided valuable insights into the underlying mechanisms of the relationship between high-commitment HRM and employee outcomes, more research is still needed to gain a better understanding of the processes through which this relationship takes place (Kooij & Boon, 2018; Mostafa et al., 2015). Through examining the mediating role of organizational engagement, this study seeks to offer a better understanding of how high-commitment HRM is related to deviant behaviors. Second, the study contributes to the engagement literature. Because of its importance to organizations, employee engagement has become one of the most widely studied topics in management in the past few years. However, the focus of most of employee engagement studies was on work engagement, and very limited attention has been directed to organizational engagement (Bailey et al., 2017; Farndale et al., 2014; Saks et al., 2021). Work and organizational engagement are related but distinct constructs with different antecedents and consequences (Bailey et al., 2017; Farndale et al., 2014; Saks et al., 2021). Work engagement involves the harnessing of employees selves to their work roles (Jerónimo et al., 2020). It is about individuals being positive about their jobs and having much enthusiasm to do their daily tasks. However, organizational engagement involves the harnessing of employees' selves to their *organization* roles. It is about individuals being positive about the organization and acting as ambassadors for it (Farndale et al., 2014; Saks et al., 2021). By drawing on the target similarity model of social exchange and examining the relationship between high-commitment HRM and organizational engagement, the study responds to calls for research on the organizational antecedents of organizational engagement, particularly HRM, and advances the knowledge of how it could be enhanced (Bailey et al., 2017; Saks et al., 2021). Also, by examining the relationship between organizational engagement and deviant behaviors, the study responds to calls for research on the relationship between engagement and negative, rather than positive, performance outcomes (Shantz et al., 2013). Finally, by testing the moderating role of P-O fit, the study extends the literature on the boundary conditions of the relationship between high-commitment HRM and employee outcomes and responds to calls for research on the individual-level contingencies of this relationship (Brinck et al., 2019; Mostafa et al., 2019). This is important, especially that previous research findings suggest that the effectiveness of high-commitment HRM practices varies and such practices could sometimes undermine employee outcomes or even have no effect on them (Kooij & Boon, 2018; Mostafa et al., 2019). Assessing the moderating role of P-O fit also helps shed light on the boundary conditions of social exchange. This, in turn, should help provide better understanding of the relationship between employees and their organizations (Shore & Coyle-Shapiro, 2003).
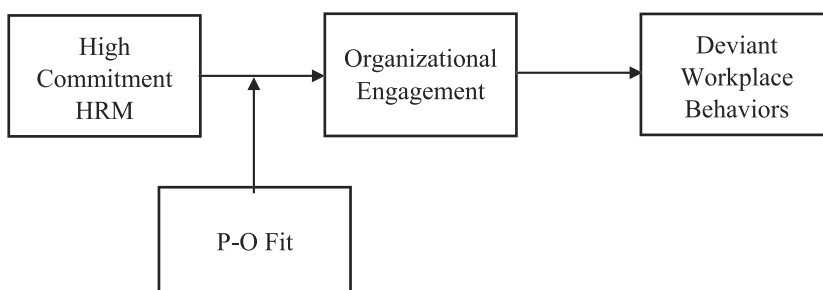

FIGURE 1 The conceptual model

THEORETICAL FRAMEWORK

High-commitment HRM and deviant behaviors

High-commitment HRM mainly aims at generating a psychological bond between employees and their organization (Boselie et al., 2005). Through practices such as training and development, fair pay, job security, promotion, information sharing, and performance appraisal, it conveys to employees that the organization values their contribution and is desirous of engaging in a long-term relationship with them (Mostafa et al., 2015). This, in turn, encourages employees to become more connected to the organization and work towards the achievement of its goals (Boon & Kalshoven, 2014).

This study will focus on employee perceptions of high-commitment HRM rather than managerial reports. Prior research has shown that employee perceptions of high-commitment HRM differ remarkably from managers' reports (Liao et al., 2009) and the HR system as designed or intended. This difference is mainly because employees differ in their expectations, experiences and interpretations of HRM (Nishii & Wright, 2008). Employee perceptions of high-commitment HRM are also more strongly related with employees' attitudinal and behavioral outcomes than managerial ratings. Therefore, the focus on employee perceptions is viewed as essential for a better understanding of the link between high-commitment HRM and employee outcomes (Kehoe & Wright, 2013).

While several studies have examined the link between high-commitment HRM perceptions and employee behaviors that contribute to organizational effectiveness, such as citizenship behaviors (e.g., Boon et al., 2011; Mostafa et al., 2015; Mostafa & Gould-Williams, 2014), very little have considered the relationship between high-commitment HRM and deviant behaviors. Thus, while we know that high-commitment HRM helps enhance positive behaviors directed at the organization, we lack knowledge about whether employees refrain from deviant behaviors when they perceive high-commitment HRM. Deviant workplace behaviors are voluntary employee acts that impair organizational functioning (Klotz & Bolino, 2013). Such behaviors are theoretically distinct from citizenship behaviors, where research has shown that both are not opposites (Berry et al., 2007; Dalal, 2005; Sackett et al., 2006). In particular, meta-analytic reviews have revealed that both types of behavior are moderately negatively correlated (Dalal, 2005). Studies have also shown that the correlates of deviant and citizenship behaviors are different (Berry et al., 2007; Sackett et al., 2006) and that their influence on business unit performance varies (Dunlop & Lee, 2004). This suggests that both types of behavior are independent and can co-occur. In other words, the same employee may engage in acts that both harm and benefit the organization (Bolino & Klotz, 2015; Klotz & Bolino, 2013).

Deviant workplace behaviors could be directed at either the organization or its individuals. Organization directed deviant behaviors include actions such as putting little effort into work or deliberately working slowly. Deviant behaviors towards employees, on the other hand, include actions such as saying hurtful things to co-workers or being rude to them (Bennett & Robinson, 2000). Based on the target similarity effect (Lavelle et al., 2007), the focus in this study will be on organization directed deviant behaviors. The target similarity effect suggests that employees' attitudes and behaviors towards a target are mainly influenced by their perceptions of that target (Lavelle et al., 2007). This means that, if an employee perceives that he or she is fairly treated by the organization, then he or she will be likely to display attitudes and behaviors that benefit the organization, whereas good treatment by individuals such as colleagues and supervisors is more likely to lead to attitudes and behaviors that benefit individuals. Therefore, and because of the distinctions made by employees between various actors at work, it is important to align the target of the independent variable and dependent variable (Farndale et al., 2014; Lavelle et al., 2007). Prior research has shown that management practices are more strongly associated with behaviors towards the organization than behaviors towards individuals (Sackett et al., 2006). Therefore, the focus here will be on organization directed deviant behaviors.

Organizational engagement as a mediator of the relationship between high-commitment HRM and deviant behaviors

There is increasing evidence that high-commitment HRM is important for employee engagement (Bailey et al., 2017, p. 48). Employee engagement refers to the degree to which individuals are psychologically present in a specific organizational role. Employees usually engage themselves in more than one role (Saks, 2008). However, the two principal roles for individuals in organizations are their work role and their role as organizational members. Accordingly, employee engagement has been classified into two types: work engagement and organizational engagement (Saks, 2006). In recent reviews, it has been noted that most prior research on engagement has considered work engagement and only a small number of studies have examined organizational engagement (Bailey et al., 2017; Saks et al., 2021).

Again, based on the target similarity effect (Lavelle et al., 2007), the focus in the current study will be on organizational rather than work engagement. Previous research has shown that HRM practices such as training and development, job security, and promotion are more strongly related to organizational engagement than work engagement (Lavelle et al., 2007; Saks, 2006). Such practices are mainly intended to develop a high quality

relationship between the *organization* and its employees (Mostafa et al., 2015). Organizational engagement refers to a positive fulfilling "organization-related" state of mind, which is characterized by vigor, absorption, and dedication (Farndale et al., 2014). Employees high in organizational engagement view their organizational membership as exhilarating and energizing (vigor), exciting and captivating (absorption), and are highly involved with everything happening in it (dedication; Farndale et al., 2014).

SET helps explain why high-commitment HRM is positively related to organizational engagement. SET is based on the norm of reciprocity (Gouldner, 1960) and suggests that when individuals perceive positive treatment by others, they will reciprocate in positive ways (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005). Thus, certain obligations could be generated via interactions between two different parties who are interdependent. The "donor" provides something favorable to the "recipient" who will in return offer a desirable thing to the donor (Mostafa et al., 2015). This interdependence is largely determined by certain "rules" of reciprocity (Gouldner, 1960), which are generally regarded as the "defining characteristic" of social exchanges (Cropanzano & Mitchell, 2005, p. 876). Successful social exchanges usually evolve over time and are mainly characterized by high levels of trust and loyalty between the different parties involved (i.e., the donor and the recipient; Mostafa et al., 2015).

Organizational engagement is a "two-way relationship between the employer and employee" (Saks, 2006, p. 603). The effective implementation of high-commitment HRM by an organization helps show that the organization values its employees, appreciates their work, and cares about their development and wellbeing. In particular, practices such as training and development, job security, promotion, fair compensation, communication, and performance appraisal will signal to employees that the organization recognizes their long-term worth, wishes to invest in them, and is eager to develop a long-term social relationship with them (Kehoe & Wright, 2013; Mostafa et al., 2015). Therefore, when employees perceive high-commitment HRM, as a response they will be more likely to devote their cognitive, emotional, and physical resources to the organization (i.e., higher organizational engagement; Saks, 2006). Accordingly, the following hypothesis is proposed:

> **Hypothesis 1.** Employee perceptions of high-commitment HRM are positively related to organizational engagement.

Three reasons help explain why organizational engagement could mediate the relationship between high-commitment HRM and deviant workplace behaviors. First, high-commitment HRM is likely to bring about great benefits to employees (Kehoe & Wright, 2013). As a result, increased engagement only is unlikely to offer a balance in the benefits gained by both parties involved in the social exchange (i.e., the organization and the employee), and additional contributions would be required by employees to "balance the scales" (Mostafa et al., 2015, p. 749). Such contributions would be in the form of withholding actions that could threaten the wellbeing of the organization such as putting little effort into work or deliberately working slowly. Second, engaged employees under high-commitment HRM are strongly connected to the organization and are more likely to engage in behaviors that support its effectiveness (Saks, 2008). Therefore, they have a low tendency to display negative behaviors that are not beneficial to the organization, especially because such behaviors could prevent the organization from achieving its goals. Finally, in line with SET, when the two parties of the exchange conform to the exchange rules, the outcome will be more loyal and trusting relationships (Cropanzano & Mitchell, 2005). Therefore, employees who are engaged with the organization because of the implementation of high-commitment HRM will refrain from deviant behaviors to maintain and prolong the positive reciprocal exchange. Employees will only display deviant behaviors when they feel that the benefits they receive are not compatible anymore with the contributions they make. This is more likely to reflect a lack of connection and involvement, rather than engagement, with the organization (Kehoe & Wright, 2013). Hence, it is expected that, based on SET, perceptions of high commitment HRM will reduce deviant workplace behaviors through enhancing organizational engagement.

> **Hypothesis 2.** Organizational engagement mediates the relationship between employee perceptions of high commitment HRM and deviant workplace behaviors.

P-O fit as a moderator

P-O fit could be broadly defined as the compatibility between an employee and the organization that occurs when their characteristics are well matched (Kristof-Brown et al., 2005). It has often been conceptualized as value congruence, which reflects "judgments of congruence between an employee's personal values and an organization's culture" (Cable & DeRue, 2002, p. 875). P-O fit has been found to be beneficial for both organizations and employees (Goetz & Wald, 2021; Kristof-Brown et al., 2005; Verquer et al., 2003).

We argue that P-O fit can act as a boundary condition for the high-commitment HRM – organizational engagement relationship. More specifically, this study integrates SET and P-O fit theory, and proposes that the relationship between high-commitment HRM and organizational engagement is likely to be weaker when

employees perceive high rather than low P-O fit. Edwards and Cable (2009) argue that P-O fit induces four mechanisms: (1) *communication*: when people have similar values as the organization, misunderstandings are less likely and communication improves, (2) *predictability*: employees with high P-O fit have similar goals and motives, which makes their actions easier to predict, (3) *attraction*: when P-O fit is high, employees have similar goals and less conflicts, which leads to more attraction and better interpersonal relationships, and (4) *trust*: when employees share values with the organization, they likely have similar ideas about what is important, and what is the right thing to do, which creates trust (Edwards & Cable, 2009).

Taken together, employees with high levels of P-O fit have a good understanding of the organization's needs and goals because their values and goals match strongly with those of the organization (Erdogan & Bauer, 2005). They also "feel involved with the broader mission of the organization" (Cable & DeRue, 2002, p. 876), and they tend to agree with the organizational goals and support them. As a result, for employees high on P-O fit, high-commitment HRM may be less effective in enhancing engagement because employees already agree with the messages and support the signals that the organization aspires to send via the different HRM practices. Thus, when P-O fit is high, the social exchange mechanism is likely to play a weaker role. As mentioned before, positive social exchange perceptions (i.e., perceptions of high-commitment HRM) will engender feelings of obligation to respond with increased levels of engagement to reciprocate by offering something beneficial and worthwhile to the organization. Under high levels of P-O fit, employees will already understand and support the goals of the company, and trusting relationships will be developed. Therefore, they will be more inclined to engage with the organization even if their perceptions of the exchange relationship are not positive, resulting in a weaker relationship between high-commitment HRM and organizational engagement. In contrast, when employees perceive P-O fit as low, communication, predictability, attraction, and trust will be lower, and goals will not be very clear and will be less supported. Therefore, the social exchange mechanism is likely to play a more important role; employees will likely rely more on perceptions of high-commitment HRM for building a trusting relationship with the organization and enhancing their organizational engagement, as shown in a stronger relationship between high-commitment HRM and organizational engagement.

> **Hypothesis 3.** P-O fit moderates the relationship between employee perceptions of high-commitment HRM and organizational engagement, such that the positive relationship between high-commitment HRM and

organizational engagement will be stronger for employees who are low, rather than high, in P-O fit.

Building on the arguments above, we expect that for employees with low P-O fit, the social exchange mechanism induced by high-commitment HRM will likely play a stronger role. For these employees, we expect high-commitment HRM to more strongly relate to a relational response to social exchange—organizational engagement—and in turn, deviant workplace behaviors as a behavioral response. In contrast, employees with high P-O fit will rely less on high-commitment HRM for clarifying organizational goals and building a positive relationship with the organization. For them, perceptions of high-commitment HRM are expected to be weakly related to organizational engagement, and in turn, deviant workplace behaviors.

> **Hypothesis 4.** P-O fit moderates the indirect relationship between employee perceptions of high-commitment HRM on organizational engagement and, in turn, deviant workplace behaviors, such that the mediated relationship will be weaker under high P-O fit than under low P-O fit.

METHOD

To test the proposed model, two studies were conducted. In Study 1, data were collected from tanker ships operated by a world leading Greek shipping management company. In Study 2, data were collected from a Libyan international seaport. Collecting data within one firm per study helps keep the HRM system as designed or intended constant. Thus, what we capture in these studies is differences in individual perceptions rather than actual differences in policies and practices. In both studies, employees rated high-commitment HRM, P-O fit and organizational engagement, while supervisors rated employees' deviant behaviors. However, in Study 1, employees rated high-commitment HRM, P-O fit and organizational engagement at one point in time whereas in Study 2, to minimize common method bias concerns, employees' first rated high-commitment HRM and then, 1 week later, they filled in questionnaires on P-O fit and organizational engagement. The same measures were used in both studies. Furthermore, both datasets were analyzed using generalized multilevel structural equation modeling (GSEM) with STATA.

Measures

With the exception of demographic variables, all questionnaire items were rated on a seven-point Likert scale

ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The questionnaire in Study 2 was administered in Arabic. Therefore, following Brislin's (1980) recommendations, the questionnaire items in this study were translated from English into Arabic and then back translated into English.

High-commitment HRM

Twelve items were used to measure high-commitment HRM. These items measured six HRM practices: training and development, job security, promotion, compensation, communication, and performance feedback and appraisal. The six practices are central for high commitment and help create a long-term bond between employees and the organization (Boon & Kalshoven, 2014; Mostafa et al., 2015). Sample items include: "My organization offers opportunities for training and development" (training and development), "Employees in this organization are certain of keeping their jobs" (job security), "I have good opportunities of being promoted within this organization" (promotion), "My salary is in line with my tasks and responsibilities" (compensation), "Management keeps me well informed of how well the organization is doing" (communication), and "I receive sufficient information on my performance at work" (performance feedback and appraisal). Cronbach's alpha was 0.825 in Study 1 and 0.885 in Study 2.

P-O fit

A three-item scale developed by Cable and DeRue (2002) was used to measure P-O fit. A sample item from this scale is "The things that I value in life are very similar to the things that my organization values." Cronbach's alpha for this scale was 0.897 in Study 1 and 0.840 in Study 2.

Organizational engagement

Four items developed by Saks (2006) were used to measure organizational engagement. A sample item is "I am highly engaged in this organization." Cronbach's alpha was 0.887 in Study 1 and 0.781 in Study 2.

Deviant workplace behaviors

Questionnaires that are short in length need less time to complete and would, therefore, be more cost-effective when supervisors are required to take time out of their work to rate their employees (Nagy, 2002). To increase the likelihood of getting the questionnaires completed by supervisors and to increase the response rate, three items developed by Bennett and Robinson (2000) were used to measure organization directed deviant behaviors. These items were suitable for the two research contexts. A sample item is "This employee puts little effort into his work." This scale had a Cronbach's alpha of 0.763 in Study 1 and 0.858 in Study 2.

Control variables

Employee's age, tenure and education were controlled for as these demographic variables have been found to be related to P-O fit (Mostafa, 2016; Vigoda & Cohen, 2002), engagement (Besieux et al., 2018), and deviant behaviors in organizations (Miao et al., 2013; Penney et al., 2011).

STUDY (1)

Research context and sample

The data for this study was collected from tanker ships operated by a world leading Greek shipping management company. The company owns and operates top quality fleet of ocean tankers and provides comprehensive ship management services (i.e., technical management and supervision of maintenance, inspections and repairs, safety, quality and environmental compliance, and purchasing), besides commercial management services (i.e., operations, post-fixture administration, accounting, freight invoicing, and insurance).

The distribution and collection of questionnaires were undertaken by an employee of the company, a master mariner himself. The company represented by the shore vetting manager (HR manager) agreed to participate in this study and distribute the questionnaires to their 41 fleet of tankers. The vetting manger played an important linking role between the data collector (i.e., the master mariner) and each ship Master. He helped distribute the questionnaires to all 41 ships and communicated to each ship Master the importance of distributing the questionnaires to everyone on-board. A unique code on the top of each questionnaire was used to match employee responses with supervisor evaluations.

Only 27 ships out of the 41 returned responses for employees and their supervisors on-board. The final sample consisted of 322 responses from employees in the deck department (47%), the engine department (37%), and the stewards' department (16%) and their 80 direct supervisors (27 chief deck officers, 27 chief engineers, and 26 chief cooks). It is worth noting that a uniform HR policy is applied to all workers on the tanker ships.

The shipping industry is male dominated, and therefore, all employee and supervisor respondents were male. Most of employee participants (78%) belong to the age group of 31–40, 18% belong to the age group of 51–60,

and 5% belong to the age group of 20–30. As regards education, 84% of employees are degree qualified, and only 16% have high school qualification. More than half of the employees in the sample (53%) have been working with the company for 5–10 years, 32% have been working for between 10 and 15 years, and only 5% have been working with the company for more than 15 years.

Of the 80 supervisors in the final sample, only 4% were in the age group of 20 to 30, 32.5% were in the age group of 31 to 40 and 41% were in the age group of 41 to 50. Most of the supervisors in the sample are degree qualified (67.5% had a bachelor's degree and 1.3% had master's degree). Almost half of them (48%) have been working with the company for 5–10 years, 36% have been with the company for 10–15 years, and 20% have been working with the company for more than 15 years.

Measurement validation

A confirmatory factor analysis (CFA) was conducted to assess the reliability and validity of the study constructs. In line with the recommendations of Williams et al. (2009), the fit of the measurement model was assessed using the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). CFI values of more than 0.95, and RMSEA and SRMR values of less than 0.05 are deemed ideal and indicate good fit. However, CFI values between 0.80 and 0.90, RMSEA values between 0.05 and 0.08, and SRMR values of between 0.05 and 0.10 are still viewed as acceptable and indicate adequate fit (Hair et al., 1998; Williams et al., 2009). The measurement model provided a satisfactory fit to the data ($\chi^2 = 713.45$, $df = 251$, $p < 0.01$; CFI = 0.89, RMSEA = 0.076, and SRMR = 0.078), and all factor loadings were significant ($p < 0.01$). The composite reliability scores for all constructs were greater than 0.75, and the average variance extracted scores were greater than 0.50, which suggests that all constructs had

high internal consistency. Discriminant validity was also achieved, where the square root of the average variance extracted of each construct exceeded the corresponding inter-construct correlations (Fornell & Larcker, 1981, see Table 1). Moreover, no correlation coefficient exceeded 0.75, which suggests that multicollinearity does not represent a problem (Kline, 2005).

Since high-commitment HRM, P-O fit, and organizational engagement were measured from the same respondents at the same time, the effects of common method bias were examined using the unmeasured latent method factor approach (Chang et al., 2010). This involved estimating a latent variable model in which the items of high-commitment HRM, P-O fit and organizational engagement loaded on their theoretical constructs and a latent common method factor. The fit of this model was good ($\chi^2 = 407.60$, $df = 172$, $p < 0.01$; CFI = 0.94, RMSEA = 0.065, and SRMR = 0.066). However, the variance extracted by the common factor was only 0.277, which is less than the 0.50 threshold suggested by Fornell and Larcker (1981) as indicative of a substantive construct. Thus, common method bias was not a problem.

Analytic strategy

Employee ratings were nested under supervisors and supervisors were grouped by ships. Furthermore, the intraclass correlation coefficient (ICC) for deviant workplace behaviors was 0.41, which suggests the presence of significant between-group variance. This means that the ratings are not independent of each other and could be influenced by a number of common sources (such as sharing the same supervisor and the same working conditions in the ship). If this dependence is not taken into account, the probability of type 1 error will increase because the standard errors will probably be underestimated (Byrne, 2012). Therefore, to account for the nested nature of the data, the proposed mediated moderation model was tested using generalized multilevel structural

TABLE 1 Inter-correlations and reliability estimates for Study 1

Construct	1	2	3	4	5	6	7
1. High-commitment HRM	0.75, (0.88)[a]						
2. P-O fit	0.57[b]	0.87, (0.90)					
3. Organizational engagement	0.62	0.72	0.81, (0.88)				
4. Deviant behaviors	−0.11	−0.17	−0.27	0.76, (0.80)			
5. Age	0.01	0.20	0.18	−0.00	-		
6. Education	0.01	−0.05	−0.05	−0.02	−0.05	-	
7. Organizational tenure	0.11	0.24	0.21	0.07	0.72	−0.03	-
Mean	5.76	5.69	5.69	1.64	1.89	1.61	1.67
SD	0.53	0.75	0.80	0.63	1.00	0.49	0.78

[a]Sub-diagonal entries are the latent construct inter-correlations. The diagonal shows the square root of the AVE with composite reliability in parentheses.
[b]All correlations above 0.15 are significant at $p < 0.01$, whereas correlations below 0.1 are non-significant.

T A B L E 2 Results of mediated moderation model for Study 1

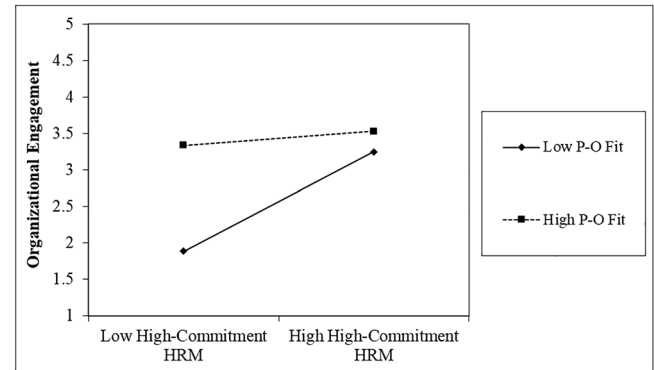|	P-O fit		Organizational engagement		Deviant behaviors	
	β (S.E.)	t	β (S.E.)	t	β (S.E.)	t
Age	0.029 (0.0437)	0.65	0.002 (0.038)	0.06	−0.025 (0.045)	−0.55
Education	−0.072 (0.093)	−0.78	−0.092 (0.074)	−1.25	−0.119 (0.072)	−1.66
Organizational tenure	0.188 (0.045)	4.22	0.073 (0.052)	1.39	0.108 (0.062)	1.75*
High-commitment HRM			0.388 (0.086)	4.54***	−0.092 (0.093)	−0.99
P-O fit			0.433 (0.091)	4.76***	0.019 (0.053)	0.36
Organizational engagement					−0.120 (0.049)	−2.45**
High-commitment HRM × P-O fit			−0.291 (0.104)	−2.80***	−0.017 (0.103)	−0.17

*$p < 0.10$. **$p < 0.05$. ***$p < 0.01$.

equation modelling (GSEM) with STATA. Mediation and moderation were tested simultaneously. In the model, organizational engagement (i.e., the mediator variable) was regressed on the controls, high-commitment HRM, P-O fit, and their interaction term (high-commitment HRM × P-O fit). Deviant workplace behaviors (i.e., the outcome variable) was regressed on the control variables, high-commitment HRM, P-O fit, their interaction term, and organizational engagement (Hayes, 2013). In line with recommendations (e.g., Hofmann & Gavin, 1998), the variables were all grand mean centered. The analysis was conducted using maximum likelihood estimation method with robust standard errors (Braun & Nieberle, 2017).

Results

Table 2 presents the results of the mediated moderation model. Hypothesis 1 suggests that high-commitment HRM will be positively related to organizational engagement. This hypothesis was supported (β = 0.388, $p < 0.01$). Hypothesis 2 predicted that organizational engagement mediates the relationship between high-commitment HRM and deviant workplace behaviors. As mentioned before, high-commitment HRM was positively related to organizational engagement. Organizational engagement was also negatively related to deviant behaviors (β = −0.120, $p < 0.05$). Moreover, the indirect effect of high-commitment HRM on deviant behaviors via organizational engagement was significant and negative (β = −0.047, $p < 0.05$, 95% CI = −0.088 to −0.005). Together, these results suggest that organizational engagement mediates the relationship between high-commitment HRM and deviant workplace behaviors, providing support for Hypothesis 2.

Hypothesis 3 stated that P-O fit moderates the relationship between high-commitment HRM and organizational engagement. The interaction term of high-commitment HRM and P-O fit was significant and negative (β = −0.291, $p < 0.01$). Figure 2 shows the simple slope plot for this interaction using Aiken and West's

F I G U R E 2 The moderating role of P-O fit in the relationship between high-commitment HRM and organizational engagement in Study 1

(1991) procedure. The relationship between high-commitment HRM and organizational engagement was weaker and non-significant for employees high in P-O fit (β = 0.170, SE = 0.120, $t = 1.41$, $p > 0.10$) than for employees low in P-O fit (β = 0.607, SE = 0.111, $t = 5.48$, $p < 0.01$), providing support for Hypothesis 3.

Hypothesis 4 predicted that P-O fit moderates the indirect relationship between high-commitment HRM and deviant behaviors through organizational engagement. As shown in Table 3, the indirect effect from high-commitment HRM to deviant behaviors via organizational engagement was significant and negative when P-O fit was low (β = −0.073, $p < 0.05$, 95% CI = −0.136 to −0.010) but not significant when P-O fit was high (β = −0.021, $p > 0.10$, 95% CI = −0.053 to 0.012). These results provide support for Hypothesis 4.

STUDY (2)

Research context and sample

Data for this study were collected from employees of an international Libyan seaport. The free zone port is located in the middle of the Mediterranean basin and

TABLE 3 GSEM results for P-O fit as a moderator of the indirect effect of high-commitment HRM on deviant behaviors via organizational engagement in Study 1

	β (S.E.)	Indirect effect	95% CI of indirect effect
Low P-O fit	−0.073 (0.032)	−2.26**	(−0.136, −0.010)
Mean P-O fit	−0.047 (0.021)	−2.20**	(−0.088, −0.005)
High P-O fit	−0.021 (0.017)	−1.25	(−0.053, 0.012)

Note: Unstandardized coefficients are presented. *S.E.* refers to standard errors and CI refers to confident intervals.
**$p < 0.05$.

operates as a free-trade economic zone with annual cargo throughput reaching 6 million tons. The final sample here consisted of 211 employees. The employees held different job roles and titles including port operators, engineers, financial auditors, technicians, researchers, and general employees. They worked in 32 different departments like marine services, tug operations, storage and stacking, shore equipment maintenance, marine equipment maintenance, revenue, transportation and staff, and needs planning. The same HR policy applies to all departments in the seaport. A code created by the data collector was put on the top of each questionnaire and was used to match employee responses at the two time points, and then match employees and supervisors' responses.

Most of the respondents (98%) in this study are male. Only 10% of the respondents belong to the age group of 20 to 30, 38% belong to the age group of 31 to 40, and the rest are above 40. As regards education, 35% of the respondents have a high school qualification only, 32% have a diploma, 28% have a bachelor's degree, and the remainder have a master's degree. Finally, 36% of the respondents in the sample have been working in the port for more than 15 years, 31% have been working for between 5 and 10 years, 24% have been working for between 10 and 15 years, and the rest have been working in the port for less than 5 years.

Of the 32 supervisors in the final sample, 14% were in the age group of 41 to 50, and the rest were equally divided between the two age groups of 51 to 60 and 31 to 40. Most supervisors in the sample (44%) are educated to a bachelor's degree level, 25% have a diploma, 16% have a master's degree, and the rest are educated only to high school level. Half of the supervisors have been working in the port for more than 15 years, 34% have been working for 10–15 years, and the rest have been working in the port for 5–10 years.

Measurement validation

The measurement model in Study 2 provided a satisfactory fit to the data ($\chi^2 = 552.43$, $df = 251$, $p < 0.01$; CFI = 0.88, RMSEA = 0.076, and SRMR = 0.061), and all factor loadings were significant ($p < 0.01$). The composite reliability scores for all constructs were more than 0.75, and the average variance extracted scores were almost 0.50 or more, which suggests that all constructs had high internal consistency. As shown in Table 4, discriminant validity was also achieved, where the square root of the average variance extracted of each construct exceeded the corresponding inter-construct correlations (Fornell & Larcker, 1981).

Analytic strategy

The same analysis procedure used in Study 1 was used in Study 2. The ICC for deviant workplace behaviors in Study 2 was significantly lower than one (was 0.013). However, since employee ratings were nested under supervisors, GSEM was deemed as appropriate to test the hypotheses.

Results

Results of the mediated moderation model for Study 2 are presented in Table 5. In line with Study 1, high-commitment HRM was positively related to organizational engagement ($\beta = 0.247$, $p < 0.01$). Thus, hypothesis 1 was supported. Organizational engagement was also negatively related to deviant behaviors ($\beta = −0.290$, $p < 0.05$), and the indirect effect of high-commitment HRM on deviant behaviors via organizational engagement was significant and negative ($\beta = −0.072$, $p < 0.01$, 95% CI = −0.126 to −0.018). Together, these results provide support for Hypothesis 2.

The interaction of high-commitment HRM and P-O fit on organizational engagement was significant and negative ($\beta = −0.098$, $p < 0.05$). In line with Study 1, the relationship between high-commitment HRM and organizational engagement was weaker and non-significant when P-O fit was high ($\beta = 0.115$, SE = 0.077, $t = 1.49$, $p > 0.10$) and stronger when P-O fit was low ($\beta = 0.379$, SE = 0.105, $t = 3.59$, $p < 0.01$). Therefore, Hypothesis 3 was also supported. Figure 3 shows the simple slope plot for the interaction between high-commitment HRM and P-O fit.

Finally, as shown in Table 6, the indirect effect from high-commitment HRM to deviant behaviors via organizational engagement was significant and negative when P-O fit was low ($\beta = −0.110$, $p < 0.01$, 95% CI = −0.181

T A B L E 4 Inter-correlations and reliability estimates for Study 2

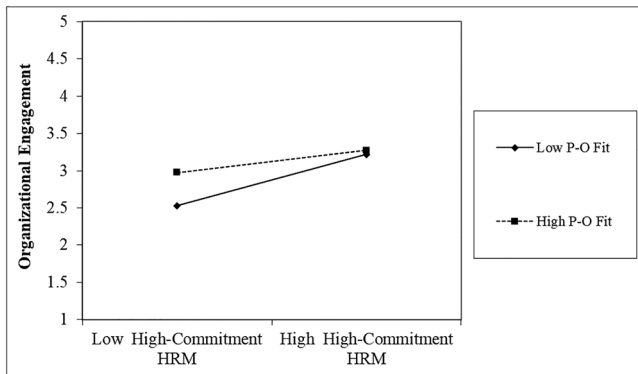| Construct	1	2	3	4	5	6	7
1. High-commitment HRM	0.82, (0.93)[a]						
2. P-O fit	0.67[b]	0.81, (0.85)					
3. Organizational engagement	0.44	0.41	0.70, (0.79)				
4. Deviant behaviors	−0.53	−0.54	−0.48	0.82, (0.86)			
5. Age	0.06	0.02	0.11	−0.05	-		
6. Education	0.23	0.05	0.20	−0.10	0.06	-	
7. Organizational tenure	0.16	0.04	0.05	−0.08	0.66	0.18	-
Mean	4.22	4.52	5.04	3.22	2.56	3.95	2.86
SD	1.17	1.35	1.16	1.37	0.88	0.92	1.01

[a]Sub-diagonal entries are the latent construct inter-correlations. The diagonal shows the square root of the AVE with composite reliability in parentheses.
[b]All correlations above 0.20 are significant at $p < 0.01$, whereas correlations below 0.15 are non-significant.

T A B L E 5 Results of mediated moderation model for Study 2

	P-O fit		Organizational engagement		Deviant behaviors	
	β (S.E.)	t	β (S.E.)	t	β (S.E.)	t
Age	0.022 (0.160)	0.14	0.179 (0.081)	2.21**	0.032 (0.159)	0.20
Education	0.052 (0.126)	0.41	0.223 (0.102)	2.19**	−0.007 (0.091)	−0.08
Organizational tenure	0.034 (0.126)	0.27	−0.140 (0.112)	−1.25	−0.054 (0.094)	−0.57
High-commitment HRM			0.247 (0.065)	3.81***	−0.253 (0.105)	−2.42**
P-O fit			0.125 (0.078)	1.60	−0.229 (0.110)	−2.08**
Organizational engagement					−0.290 (0.117)	−2.47**
High-commitment HRM × P-O fit			−0.098 (0.049)	−2.01**	0.003 (0.078)	0.04

**$p < 0.05$; ***$p < 0.01$.

F I G U R E 3 The moderating role of P-O fit in the relationship between high-commitment HRM and organizational engagement in Study 2

to −0.039) but not significant when P-O fit was high (β = −0.033, $p > 0.10$, 95% CI = −0.087 to 0.021). Thus, Hypothesis 4 was also supported.

DISCUSSION

Drawing on SET and P-O fit theory, this study examined *how* and *when* employee perceptions of high-commitment HRM are related to deviant workplace behaviors. Specifically, the study examined organizational engagement as a mediator and P-O fit as a moderator of this relationship. Overall, the findings provide support for the proposed mediated moderation model where the relationship between high-commitment HRM and deviant behaviors was mediated by organizational engagement and a significant indirect relationship was found from high-commitment HRM perceptions to deviant behaviors through organizational engagement for low, but not for high, P-O fit.

Theoretical implications

The study provides a better understanding of the processes or mechanisms through which high-commitment HRM relates to deviant behaviors. As noted before, deviant behaviors are independent of citizenship behaviors, and while we know that high-commitment HRM helps enhance positive behaviors directed at the organization, we lack knowledge about whether employees refrain from deviant behaviors when they perceive high-commitment HRM. The study findings suggest that high-commitment HRM induces a social exchange process, which helps increase employee levels of engagement with

TABLE 6 GSEM results for P-O fit as a moderator of the indirect effect of high-commitment HRM on deviant behaviors via organizational engagement in Study 2

	β (S.E.)	Indirect effect	95% CI of indirect effect
Low P-O fit	−0.110 (0.036)	−3.03***	(−0.181, −0.039)
Mean P-O fit	−0.072 (0.028)	−2.60***	(−0.126, −0.018)
High P-O fit	−0.033 (0.028)	−1.21	(−0.087, 0.021)

Note: Unstandardized coefficients are presented; *S.E.* refers to standard errors and CI refers to confident intervals.
***$p < 0.01$.

the organization and, in turn, reduce deviant behaviors. The finding that perceptions of high-commitment HRM are positively related to organizational engagement contributes to the engagement literature in which the focus has been mainly on work rather than organizational engagement. As noted before, work and organizational engagement are distinct constructs with different antecedents (Farndale et al., 2014; Saks et al., 2021). This study, therefore, contributes to our understanding of the drivers of organizational engagement and shows the importance of high-commitment HRM as an organizational-level antecedent. Extending SET with the target similarity model of social exchange helps to better understand the social exchange based mechanism connecting high-commitment HRM with organizational engagement, and in turn, deviant behaviors towards the organization. Our findings suggest that the implementation of high-commitment HRM signals the organization's inclination to establish trusting social exchange relationships with employees whom, in turn, will be more likely to reciprocate by becoming more positive about the organization, strongly connected to it and willing to contribute to its success. However, it is worth noting that the association between high-commitment HRM and organizational engagement in both studies was modest ($R^2 = 0.38$ in Study 1, and 0.19 in Study 2). Thus, even though high-commitment HRM is a significant predictor of organizational engagement, it is not the only predictor. Future studies could consider other antecedents of organizational engagement such as leadership and resilience (Saks et al., 2021).

The direct negative relationship found between organizational engagement and deviant behaviors lends support to previous research regarding the desirable effects of organizational engagement on employee work-related outcomes (Farndale et al., 2014; Mostafa & Shen, 2019; Saks, 2006). This confirms that when the two parties of a social exchange process conform to the exchange rules, the outcome will be more loyal and trusting relationships, and that organizationally engaged employees will refrain from acts that harm the organization to maintain and prolong the positive reciprocal exchange. This also suggests that organizational engagement is important and is of practical relevance to managers aiming to improve employee behaviors.

As regards the moderating role of P-O fit, the findings revealed that when P-O fit is low, the relationship between high-commitment HRM and organizational engagement will be stronger than when P-O fit is high. Thus, employees with high P-O fit are likely to understand and support the values and goals of the organization. As a result, they are already highly engaged in the organization and they do not rely on the social exchange mechanism induced by high commitment HRM. This is also visible in Figures 2 and 3; only for low P-O fit, positive perceptions of high-commitment HRM are positively related to organizational engagement and consequently reduce deviant behaviors. For employees with high P-O fit, high-commitment HRM does not help to increase organizational engagement and in turn reduce deviant behaviors. In other words, only for employees with low P-O fit, social exchange (induced by high-commitment HRM) seems to play a role. These findings enhance our understanding of SET by highlighting the boundary conditions of the target similarity model of social exchange, and suggest an interaction between social exchange and P-O fit processes in shaping organizational engagement and organization directed deviant behaviors. They also address calls for HRM research that takes into consideration variations between employees (Lepak & Snell, 1999). The differences between the high and low P-O fit in this study imply that employees' level of fit needs to be considered when using high-commitment HRM to augment organizational engagement and minimize deviant behaviors. One way of doing this as suggested by research is to focus on P-O fit in the selection process (Arthur et al., 2006; Meglino & Ravlin, 1998). Selective staffing is typically already included in high-commitment HRM (Datta et al., 2005; Whitener, 2001). However, it is less clear whether selective staffing is based on value congruence or other criteria. Future studies could further explore the role of selective staffing. Future research may also consider other ways of enhancing organizational engagement of high and low P-O fit employees.

Practical implications

This study has a number of implications for practice. The findings showed that high-commitment HRM is useful in

enhancing organizational engagement, which in turn helps in reducing deviant behaviors towards the organization. Therefore, organizations should pay careful attention to the communication as well as the implementation of high-commitment HRM practices such as training and development, job security, promotion, fair pay, and performance feedback and appraisal, to guarantee that they will be positively viewed by employees. Clear communication together with consistent implementation can help ensure that designed practices are perceived as planned and intended and could, therefore, result in the anticipated effects (Boon & Kalshoven, 2014). Organizations should also understand the importance of organizational engagement and consider including it in employee surveys, if not available already. Such engagement data helps to identify in which groups organizational engagement is lowest, and the data can be linked to (changes in) high-commitment HRM implemented by the company to be able to explore over time how high-commitment HRM affects employees' organizational engagement for specific groups. Organizations need to understand that there is much to gain by enhancing organizational engagement and should provide enough resources to engender higher levels of employee connectedness to the organization and willingness to contribute to its success (Saks et al., 2021).

The findings also revealed that relationship between high-commitment HRM and both engagement and deviant behaviors varied between employees who are high and employees who are low in P-O fit. High-commitment HRM seems particularly beneficial for employees low in P-O fit. Such employees are likely to experience a lack of direction and trust because their values do not match with those of the organization. Employees high in P-O fit are likely to already experience trust and goal clarity, so their level of organizational engagement is already high regardless of high-commitment HRM. This implies that it is important for organizations to realize that a set of high-commitment HR practices may not have a similar impact on all employees. This is in line with the idea of HR differentiation – different types of employees have different needs and there is no one size fits all approach to managing people.

Limitations and future research directions

This study has limitations. First, although the study model was based on existing theory, the likelihood of reverse causality could not be ruled out because the data for each variable were only collected at one point in time. Future studies using longitudinal designs are needed to draw causal conclusions. Second, the focus of the study was on one mediator (i.e., organizational engagement) and one moderator (i.e., P-O fit) of the relationship between high-commitment HRM and deviant behaviors. Future research may wish to consider the mediating role of other factors such as organizational engagement climate (i.e., individuals shared perceptions regarding the involvement and energy willingly focused by workers towards the attainment of organizational objectives; Albrecht, 2014). Research could also consider the moderating role of other types of person-environment fit (e.g., person-supervisor fit, person-vocation fit and person-job fit), as well as variables such as proactive personality, extraversion and other personality traits. Third, we specifically focused on employee perceptions of high-commitment HRM. Prior studies have shown that perceptions of high-commitment HRM could differ from intended HRM because employees' interests and preferences together with the communication of HRM influence perceptions (Den Hartog et al., 2004). Future studies could, therefore, differentiate between content and process, and include intended together with perceived HRM and examine how they would be related to organizational engagement and deviant behaviors. Fourth, the study also relied on employee *perceptions* of fit with their organizations rather than *actual* fit. Actual fit involves comparing between separate assessments of employee and organizational characteristics. The use of perceptions in the study was mainly because perceived fit is viewed as a better predictor of employee attitudes and behaviors (Kristof-Brown et al., 2005). However, future studies could rely on *actual* measures of fit. Fifth, even though multisource data were used to test the proposed mediated moderation model in Study 1, common method bias could not be completely excluded because data on high-commitment HRM, P-O fit and organizational engagement were collected from the same source at the same time. However, it is important to note that, when assessing perceptual and engagement variables, it is hard to avoid the use of self-reported data (Boon & Kalshoven, 2014). Furthermore, the interaction effects found in this study, and were one of its main objectives, together with the results of the common method factor approach suggest that common method bias was not a serious problem in the study (Siemsen et al., 2010). Also, data on high-commitment HRM, P-O fit and organizational engagement were collected at two points in time to help minimize such concerns. Finally, we tried to establish the generalizability of our findings by conducting two different studies. However, data for both studies came from employees working in a single industry (i.e., shipping) and the samples of both studies were mainly male because, as noted before, the industry is male dominated. Research in other industries and organizations, which also involves female respondents, is needed to further establish the generalizability of the findings.

In spite of these limitations, this study has shown that both P-O fit and organizational engagement play an important role in explaining the relationship between high-commitment HRM and deviant workplace behaviors. The study, therefore, contributes to elucidating the connection between high-commitment HRM and employee outcomes.

CONFLICT OF INTEREST
The authors declare that here is no conflict of interest

DATA AVAILABILITY STATEMENT
The study data are available upon request.

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