National culture moderators of pay for individual performance and the financial performance of multinational enterprises

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Abstract
We examined the effectiveness of pay for individual performance (PFIP) in companies operating in multiple cultures. With the use of data from 308 multinational enterprises (MNEs) collected by IBM's WorkTrends™ project, we tested hypotheses regarding the moderating influence of the nine dimensions of the GLOBE country culture model on the relationship between PFIP and changes in financial performance over time. Multiple employees per firm (mean N = 24.7 employees) reported the extent there was a PFIP climate (PFIPc) in their firm. We matched these data at the firm level to changes in net income per employee over 4 years from the Wharton Research Data Service (WRDS). Consistent with predictions developed from contingency and cross-cultural theories, after including relevant controls, we found the positive relationship between PFIPc and subsequent MNE performance is greater in cultures higher in future orientation, institutional collectivism and uncertainty avoidance and also lower in in-group collectivism, power distance and humane orientation.

KEYWORDS
contingency theory, country culture, cultural congruence, firm financial performance, pay for individual performance climate
INTRODUCTION

Multinational enterprises (MNEs) are companies that have assets and employees in multiple countries and are becoming increasingly common and important to the world’s economy (Tan et al., 2020). A fundamental challenge for MNEs is managing the tension between global standardisation and local customisation of human resource (HR) practices. MNEs face pressure to standardise for efficiency and reduce costs through economies of scale (Stahl et al., 2012), but customising HR practices to local cultures can benefit employee engagement (Farndale et al., 2011) and firm performance (Thomas & Peterson, 2015). For example, when Lincoln Electric first opened in the Philippines, they tried to use their incentive (piece-rate) compensation system, and it did not work as well as in the United States until they adapted their practices to the local culture (Chilton, 1993). This case illustrates an important and unresolved question related to multinational firm success: How do companies customise HR practices to local cultures to enhance firm performance? According to contingency theory, alignment between firm characteristics and the environment where the firm operates influences workplace behaviours (Tosi & Slocum, 1984). Early research showed that when formality of a firm’s practices made up for uncertainty in the environment, firm performance improved (Burns & Stalker, 1961). Subsequent research supports the notion that alignment of HR practices with a firm’s environment creates synergistic forces that increase positive outcomes (Toh et al., 2008).

We focus on employee compensation because pay systems often serve as a crucial integrating mechanism that directs individual performance towards achieving organisational goals (Gomez-Mejia & Welbourne, 1991). The most commonly used compensation method to increase employee performance is pay for individual performance (PFIP) (Shaw et al., 2001) or basing employee pay on job performance (Gerhart & Fang, 2014). For example, in the United States, 95% of employers use some type of PFIP (e.g., merit or incentive pay), and it applies to most employees (Nyberg et al., 2016). PFIP benefits employees and employers by aligning employee interests with the interests of employers, leading to higher levels of individual performance (Nyberg et al., 2016; Shaw et al., 2001). PFIP is effective because it offers a clear link between one’s effort and reward, and studies support the positive relationship (Gerhart & Fang, 2014; Zhang et al., 2015).

The current study addresses several conceptual and methodological limitations in the scholarship. Conceptually, scholars have bemoaned the lack of research on the effectiveness of employee compensation practices in improving firm performance across different cultures (Festing & Sahakians, 2010; Gerhart, 2008). Although one recent study found support for culture as a moderator of the relationships between incentive practices and firm performance (Prince et al., 2020), significant additional research is needed to understand the generalizability of PFIP and its alignment with national culture (Gerhart & Fang, 2014). For example, research typically suggests congruence with national culture influences preference for PFIP (Frank et al., 2015; Hundley & Kim, 1997; Poutsma et al., 2015), as well as frequency of use (Schuler & Rogovsky, 1998), but we lack additional evidence of national culture moderating the effectiveness of PFIP in improving firm performance. Another conceptual issue is that studies typically analyse only a few cultural dimensions, thus providing insufficient tests of complete culture models (e.g., Schuler & Rogovsky, 1998). Instead, studies should consider all or most of the primary known dimensions. In one of the few studies to examine national culture as a moderator of incentives and firm performance, Prince et al. (2020) emphasised the need for research that addresses multiple culture dimensions, as we do in this study.
This scholarship also faces a number of methodological challenges. First, focusing on one HR practice increases precision of theoretical predictions and empirical tests. Past research examining the influence of culture congruence on the effectiveness of HR practices used omnibus measures reflecting many practices together, which do not afford a clear understanding of the independent effects of each practice (e.g., Rabl et al., 2014). Second, studies using single-item measures of HR practices or an insufficient number of informants per firm raise concerns about the reliability and validity of measures (Prince et al., 2020). Third, cross-sectional designs cannot demonstrate causation and foster concerns about common method variance, which suggests we should use longitudinal designs (Nyberg et al., 2016; Zhang et al., 2015).

Therefore, the purpose of this study is to examine how MNEs facilitate PFIP climate (PFIPc) to improve strategic alignment with the cultural values of the multiple countries in which they operate while also maintaining standardisation and how this affects objective measures of firm financial performance. Climate refers to ‘the meanings people attach to interrelated bundles of experiences they have at work’ (Schneider et al., 2013, p. 361), and meanings include values such as culture. Conceptualising (and subsequently operationalising) PFIP as a climate offers a distinct theoretical advantage in that it highlights the alignment between the meaning and values reflected in an HR practice and the values associated with national cultures (House et al., 2004). Together, we make three contributions. First, we leverage contingency theory to organise a framework to test the cross-cultural generalisability of PFIPc by examining how its congruence with culture predicts firm performance. This extends prior research by going beyond culture-based preferences for, or frequency of, PFIPc use. Second, existing research on the impact of culture often assesses cultural dimensions in isolation or only compares two countries (e.g., Korea vs. United States; Hundley & Kim, 1997). We extend this work by offering a holistic cultural congruency framework that includes all GLOBE dimensions (House et al., 2004) across 26 countries. This framework affords a complete understanding of the role culture plays in the effect of PFIPc on firm performance. We use the GLOBE model because it builds on prior models (e.g., Hofstede, 2001), contains a broader range of culture dimensions and was designed to address global management issues; thus, it should provide a more comprehensive evaluation of cultural contingencies relevant to HR management practices. Finally, we utilise more rigorous methods than previous research including actual measures of firm performance, multi-item measures of PFIPc, data collected from multiple employees in multiple firms, data from a large number of countries in different cultures and a longitudinal research design to enhance validity, causal inferences and generalisability.

It is important to recognise that researching the influence of cultural congruence on MNE performance requires a globally standardised measure of performance at the firm level because MNEs operate in countries that have different monetary units, taxes, accounting practices and so on. Analysing at the firm level using standard financial metrics puts all MNEs on the same comparable scale. Using the firm level of analysis means cultural congruence must be evaluated as the congruence between the degree to which a firm uses PFIPc across different countries based on the cultures of those countries. The unit of analysis is the firm operating across multiple cultures. This has the additional benefit of matching the decisions facing the firms. That is, the tension MNEs face between imposing consistency across operations versus adjusting practices to each country means the phenomenology for such firms is that each one must cope with a unique blend of different cultures simultaneously. This methodology allowed us to understand the interaction of
culture with PFIPc that MNEs face that would not have been possible otherwise. The net effect for the firm is that better overall fit across the globe improves firm performance. For this reason, our data on PFIPc and MNE financial performance (described below) use firm- and not country-level data. For each MNE, we predict firm financial performance from the culture fit across countries between the cultural dimensions and sample-weighted average PFIPc.

**CONTINGENCY THEORY PERSPECTIVE**

There are three sets of mechanisms proposed to underlie the success of HR practices across countries: universalistic, configurational and contingency (Delery & Doty, 1996; Lee, 2021). Under the universalistic approach, there are a set of generalisable HR best practices that increase firm performance regardless of country because national culture should have little or no impact on HR practice effectiveness (Gerhart, 2008). Through institutional pressures based on mimetic isomorphism, firms will mimic practices used in other countries with different cultures to increase international consistency (Fay, 2008; Festing et al., 2012). While there should be a convergence across countries on effective HR practices (Fay, 2008; Sparrow, 2002), evidence for convergence is weak suggesting contextual factors, such as national culture, may be at play (Festing & Sahakiants, 2010). Similar to, but distinct from, this approach, the configurational approach applies a holistic view on bundles of HR practices (Delery & Doty, 1996). According to this perspective, certain sets of HR practices produce a larger impact on firm performance than the combination of individual practices (Toh et al., 2008).

The final mechanism is the contingency approach. According to contingency theory, the environment (e.g., social, political and economic) in which organisations operate influence their success (Thomas & Peterson, 2015) suggesting there is no ‘one best way’ to run an organisation (Donaldson, 2001; Tosi & Slocum, 1984). Thus, firms should strive to achieve congruence between practices (e.g., PFIPc) and contingencies to yield greater firm effectiveness (Burns & Stalker, 1961). For example, researchers have examined industry (e.g., Chadwick et al., 2013) and external resources (Katila & Shane, 2005) as critical dependencies. In this way, MNEs are expected to think globally about enhancing overall firm performance by adapting locally (Doz & Prahalad, 1986). Research on contingency theory has typically approached this phenomenon via institutional or country culture perspectives (Festing et al., 2012).

According to the institutional perspective (DiMaggio & Powell, 1983), differences in macro-level socio-economic institutions across countries can influence the degree to which HR practices are adopted and are more or less effective. For example, a study of MNEs in Germany showed that the use of variable pay practices were influenced by shareholder value concerns (Kurdelbusch, 2002). Firms may also facilitate PFIPc due to country-related factors such as local laws, business systems and the skills of their HR staff (Sparrow, 2002), as well as market-based factors (Festing & Sahakiants, 2010). Supporting this perspective, research has shown that there are country-level factors such as labour market forces and the level of national education that can influence the effectiveness of HR practices in improving firm performance (Han et al., 2021).

While aligning practices with the environment can yield more desirable outcomes, contingency theorists acknowledge that this poses a challenge for MNEs due to differences...
in national culture (Donaldson, 2001). This gave way to the second theoretical perspective, which is referred to as the country culture perspective (Festing et al., 2012; Sparrow, 2009). This perspective addresses two questions. The first question is whether the importance, acceptability and facilitation of PFIPc is likely to be based on culture due to normative isomorphism, which is similarity created by the common practices of a profession (DiMaggio & Powell, 1983; Festing & Sahakiants, 2010). This question has been answered by a substantial body of research that demonstrates how cultures influence preference and use of compensation practices in different countries (Schuler & Rogovsky, 1998).

The second question is whether country cultures influence the effectiveness of PFIPc practices. It is expected that firms will facilitate PFIPc because it will improve performance, perhaps based on normative isomorphic pressures. Contingency theory has therefore been used to propose that HR practices should be matched with the cultural values of countries in which MNEs operate (Luthans et al., 1997). Schuler and Rogovsky (1998) suggest that when practices match the local culture, it signals to employees that the employer is aware of and sensitive to their culture, and this sets expectations for employee behaviour that are consistent with their employers. Sparrow (2009) further argues that when employee compensation practices are harmonised with the local culture, this reduces discrepancies in employer and employee understanding of the meaning of pay systems.

This study utilises the contingency perspective and focuses specifically on the alignment between HR practices and local cultures (this is referred to by some as the ‘culture-practice fit contingency perspective’; Prince et al., 2020, p. 10). According to this perspective, the greater the degree of variation across local host country environments, the more the systems should be adapted to local conditions (Bloom et al., 2003). We use this perspective because the countries in which MNEs operate differ for each MNE; thus, the blend of local cultures differs across MNEs. Moreover, this blend of cultures may change over time as MNEs move in or out of countries. When firms adapt to the variation of cultures, they should achieve higher global organisational performance. However, the sparse research to date has yielded inconsistent results regarding the success of adapting compensation systems to local contexts. For example, research shows that the use of individual bonuses can increase perceived MNE performance, but the moderator effects of the four GLOBE culture dimensions they examined were not consistently significant (Prince et al., 2020). Nevertheless, our thesis is that each MNE has a unique mixture of cultures in which it operates and adapting compensation practices to those cultures as a set should result in improved organisational performance (Bloom et al., 2003). When MNEs deploy international compensation systems that match their unique and changing set of local cultures, the compensation system can be a firm-specific and sustained source of competitive advantage (Barney, 1991; Bloom & Milkovich, 1998; Prince et al., 2020).

In addition, cultural fit provides insight into the effectiveness of compensation systems because culture interacts with theories of the motivational value of compensation. For example, agency theory suggests that firms adopt PFIPc as a control mechanism in order to ensure that employees act in the interest of the firm (Piercy et al., 2004; Prince et al., 2020). Firms tend to attract and retain employees who value the opportunity to earn more pay based on their own performance, and cultural values can influence the degree to which local employees have these values. Likewise, expectancy theory explains why employees are more likely to choose work behaviours for which they will be rewarded, and
cultural values can influence the degree to which these expectancies will improve performance (Dulebohn & Werling, 2007; Prince et al., 2020).

**BASELINE HYPOTHESES**

Recognising that culture is defined as a shared set of values among a group of individuals (House et al., 2004), we focus on the value congruency between national culture and PFIPc. Value congruence reduces uncertainty and yields better communication, greater predictability, higher attraction and stronger trust (Meglino et al., 1991). Thus, we theorise that the more congruent the underlying values of PFIPc are with the values of the country cultures where an MNE operate, the greater the firm performance (Newman & Nollen, 1996). However, in order to explore this effect, we must first confirm the important underlying assumption that MNEs will attempt to standardise while also adjusting to cultural differences. As noted, MNEs must balance this trade-off to enhance employee acceptance and PFIPc effectiveness. This assumption is often discussed at the conceptual level but rarely examined empirically.

**Hypothesis 1.** There will be less variance in PFIPc across cultures within an MNE than variance in PFIPc between MNEs within countries.

While research supports the relationship between PFIPc and individual performance, little research has demonstrated a relationship with firm performance. The effects of contingency theory are presumed to operate similarly across organisational levels (Donaldson, 2001), and research on HR practices shows effects aggregate across levels (e.g., Toh et al., 2008). Thus, as a baseline hypothesis, we argue that PFIPc will relate to organisational performance.

**Hypothesis 2.** The extent of employer use of PFIPc will positively relate to organisational performance.

**CULTURAL CONGRUENCE CONTINGENCY HYPOTHESES AND RESEARCH QUESTIONS BASED ON GLOBE**

**GLOBE culture model**

Though aligning national culture and local HR practices has been discussed in the literature, tests are often done piecemeal, examining one or two dimensions at a time (e.g., Schuler & Rogovsky, 1998). Without systematic examination of a complete model, we risk underspecified models. We respond to calls to use a complete model (Frank et al., 2015; Gooderham et al., 2018; Poutsma et al., 2015) with the GLOBE culture model (House et al., 2004). The GLOBE project was a consortium of researchers who developed and measured country culture in 62 societies along nine dimensions. Table 1 defines these dimensions and provides examples of countries included in the current study that are high on each dimension.
Performance orientation

Cultures high in performance orientation encourage and reward innovation, higher standards and performance improvement (House et al., 2004). In these cultures, merit or task-related behaviours are more important than status. The value attributed to performance as a goal for employees in high performance orientation cultures aligns with the underlying value of PFIPc (Aycan, 2005; Gooderham et al., 2018; Prince et al., 2018; Rabl et al., 2014; Schuler & Rogovsky, 1998), which constitutes recognition (compensation) for high performance.

**Hypothesis 3.** Performance orientation will moderate the positive relationship between PFIPc and organisational performance such that higher Performance Orientation will enhance the relationship.

Future orientation

Cultures high on future orientation encourage and reward future-focused behaviours. We expect that high future orientation will strengthen the relationship between PFIPc and organisational performance because the values of planfulness, consistency and forward-thinking central to future orientation (House et al., 2004) align with the underpinnings of PFIPc. Workers in cultures high on future orientation will engage in delayed gratification by focusing on and trusting they will receive rewards in the future for their performance now.
(Gerhart & Fang, 2005, 2014; House & Javidan, 2004). Their performance contributes to long-term success that requires consistent aggregated efforts over time.

**Hypothesis 4.** Future orientation will moderate the positive relationship between PFIPc and organisational performance such that higher future orientation will enhance the relationship.

**In-group collectivism**

Cultures high on in-group collectivism emphasise cohesiveness, pride and group accomplishments (House et al., 2004). Behaviours focused on personal outcomes above and beyond others, such as those encouraged by PFIPc, are considered a violation of the social norms or rules and actively discouraged (Aycan, 2005; Gelfand et al., 2004; Newman & Nollen, 1996). Theoretical support for this is based on Gerhart (2008) and Early and Erez (1997) who proposed that with in-group collectivism employees are more likely to expect rewards based on equal distribution (i.e. equality). Whereas, in individualistic countries, employees will expect rewards to be allocated based on equity (i.e. merit or employee contributions; Gomez-Mejia & Welbourne, 1991). Individuals in high in-group collectivist cultures learn and are socially reinforced to believe that the immediate work group is more important than oneself. Organisations high in in-group collectivism should expect their employees to promote harmony by working towards a group goal, rather than an individual goal. PFIPc is more congruent with lower in-group collectivism because it is characterised by an obligation to oneself over a group. In such contexts, focusing on personal outcomes is not a violation of social norms, and employees would be expected to focus more on individual goals, consistent with PFIPc.

**Hypothesis 5.** In-group collectivism will moderate the positive relationship between PFIPc and organisational performance such that lower in-group collectivism will enhance the relationship.

**Institutional collectivism**

Cultures with high institutional collectivism reward and encourage collective action and distribution of resources and rewards (House et al., 2004). Unlike in-group collectivism, rather than competing to outperform co-workers to obtain greater individual rewards, workers may avoid standing out and seek to perform at comparable levels. However, there are conflicting augments (Brewer & Venaik, 2011). Higher collectivism could induce employees to perceive equality as an appropriate standard of distribution of rewards to maintain cohesion as a society (Leung, 1997). On the other hand, employees may be more likely to see their employer as the institutional referent (Kanungo & Jaeger, 1990) and shift their focus from society to the success of the organisation. Workers may be more likely to accept the goals established by their organisation because their employer shapes their views about what is important to the collective (Chatman et al., 1998). When the employer uses PFIPc, the employer is signalling that performance is important to the success of the organisation and its members. In these cultures, employees perform to conform to the values promulgated by their employer.
**Hypothesis 6.** Institutional collectivism will moderate the positive relationship between PFIPc and organisational performance such that higher institutional collectivism will enhance the relationship.

**Power distance**

Scholars have theorised that in countries with high power distance, employees are more likely to accept authoritarian management (Newman & Nollen, 1996; Schuler & Rogovsky, 1998). Thus, in high power distance cultures, employees are more accepting of managerial control (Gomez-Mejia & Welbourne, 1991; House et al., 2004). In low power distance cultures, employees are less concerned with the approval of authority (Aycan, 2005; Newman & Nollen, 1996) and may require more than directives from leaders to motivate performance. PFIPc could act as a substitute for leadership such that it motivates employees by identifying the behaviours necessary for higher pay (Podsakoff et al., 1996). There is also evidence of greater use of incentive pay in low power distance cultures (Rabl et al., 2014). However, in low power distance cultures, employees are not going to work harder just because the boss tells them. They need some other type of extrinsic reward, as well.

**Hypothesis 7.** Power distance will moderate the positive relationship between PFIPc and organisational performance such that lower power distance will enhance the relationship.

**Humane orientation**

Cultures high in humane orientation are characterised by a sensitivity to others, a strong need to belong and the promotion of altruism and generosity (House et al., 2004). In these cultures, social rewards are valued more than financial rewards, and thus, PFIPc would likely be less effective. In low humane orientation cultures, individuals are less concerned about others, including their superiors and co-workers. They tend to view their relationship with their employer less as a social exchange and more as an economic exchange (Brodbeck et al., 2002). As such, lower humane orientation is more consistent with PFIPc.

**Hypothesis 8.** Humane orientation will moderate the positive relationship between PFIPc and organisational performance such that lower humane orientation will enhance the relationship.

**Uncertainty avoidance**

Finally, in cultures high on uncertainty avoidance, people reduce the unpredictability of future events by adhering to rules, procedures and social norms (House et al., 2004). PFIPc tends to include a specified relationship between performance and pay and are thus more mechanistic and bureaucratic and therefore will align with uncertainty avoidance cultures (Gomez-Mejia & Welbourne, 1991). Schuler and Rogovsky (1998) and Sparrow (2009) proposed that standardised and transparent practices tend to reduce uncertainty and will be more effective in uncertainty
avoidance cultures. Low PFIPc is characterised by lack of certainty about how pay is determined, how to increase it and whether it is fair. Research shows higher loss aversion relates to higher work output when employees are compensated with variable pay (Aycan, 2005; Merriman & Deckop, 2007). Note that both Gooderham et al. (2018) and Prince et al. (2020) hypothesised the opposite, but neither found support.

**Hypothesis 9.** Uncertainty avoidance will moderate the positive relationship between PFIPc and organisational performance such that higher uncertainty avoidance will enhance the relationship.

In considering the final two dimensions of the GLOBE model—gender egalitarianism and assertiveness—we determined there was not sufficient research to support a hypothesis of a directional effect for each and therefore posit research questions. Cultures high in gender egalitarianism promote gender equality by reducing or managing gender disparities (House et al., 2004). These types of societies would be more likely to pay women equally to their male counterparts in the same positions. However, we are examining a compensation variable tied to performance, and we have little reason to believe that workers in high gender egalitarianism societies perform better than those in low gender egalitarianism societies and would therefore benefit more from being in alignment with PFIPc. As such, we ask:

**Research Question 1.** Does gender egalitarianism moderate the relationship between PFIPc and organisational performance?

Cultures higher in assertiveness are characterised by more directness, dominance and explicitness (House et al., 2004). Individuals in these cultures are generally more interested in their personal accomplishments and achievement-oriented actions. Although such self-oriented actions could be beneficial to performance, it is also likely that this could create conflict among workers and ultimately disrupt performance. As such, the prediction is uncertain, and we ask:

**Research Question 2.** Does Assertiveness moderate the relationship between PFIPc and organisational performance?

**METHODS**

**Data collection**

Survey data were collected by the IBM WorkTrends™ project (Kowske et al., 2010; Wiley, 2012). Employees at MNEs in 26 countries voluntarily participated in 2011 and 2012. We focused only on MNEs because they face the standardisation–customisation tension and on public companies because they have to report their financial performance in a standardised format, which allowed us to readily compare the performance of the organisations in our sample. The survey utilises panel sampling to maintain a large group of potential participants across the world who volunteer to take online surveys over time on various topics for small financial incentives. The WorkTrends™ project has maintained a panel for nearly 30 years, which is used to monitor opinions, attitudes and other information over time relevant to the world of work to support IBM’s engagement survey products. It is not open source.
After advertising for volunteers through website banner advertisements and links, potential panelists ‘opted-in’. Their names and addresses were authenticated through their country’s postal service. Panelists were selected if they specified that they worked full time for an organisation outside of their home that employed more than 100 employees. Respondents were eliminated if their ratings were more than two standard deviations from the group mean, they completed the survey in fewer than 10 min, they gave the same values across all items, their financial currency did not match their country or they responded incorrectly to two red-herring questions. For these reasons, the response rates cannot be estimated. The incident rate, defined as the percentage of respondents who qualified for the study, was 26% across countries.

The distribution of employees working for MNEs in different countries was, in order of frequency, as follows: the United States (30.6%), England (3.2%), Russia (3.2%), Finland (3.2%), Australia (3.2%), Canada (3.2%), South Africa (3.2%), Spain (3.2%), Sweden (3.1%), Japan (3.1%), the Netherlands (3.1%), Denmark (3.1%), Brazil (3.1%), Argentina (3.1%), Mexico (3.1%), France (3.1%), Italy (3.1%), Germany (3.1%), India (3.0%), China (3.0%), Turkey (3.0%), Switzerland (2.9%), South Korea (1.5%), Indonesia (1.3%), Saudi Arabia (7.0%) and United Arab Emirates (6.0%). The sample includes a greater number of U.S. MNEs presumably because the study was sponsored by a larger well-known U.S. company, so employees of U.S. companies were more accessible and likely to respond. Frequencies by industry are in the Supporting Information.

The financial currencies of these firms were as follows: U.S. dollars = 72.8%, Euros = 9.9%, Canadian dollars = 3.0%, Japanese yen = 2.8%, British pound = 2.3%, Swedish krona = 1.5%, all others < 1.0%.

Respondents provided the name of their company and their country. MNEs were identified using an internet search of the company names to determine if they had operations in multiple countries. The published GLOBE culture scores on the nine cultural dimensions for a country were matched and assigned to each individual survey response based on the data from House et al. (2004). Thus, the culture scores represent the cultures in which the firms conduct their operations and use PFIPc. GLOBE scores have been the subject of extensive research showing their reliability and validity (e.g., Javidan et al., 2006). Matching all sources of data yielded 4234 respondents, within 308 firms, across 26 countries.

On average, firms had locations in 5.7 countries. Firm names were matched with their financial data from the Wharton Research Data Service (WRDS) (Wharton, 2017). This database provided the number of employees and the net income (NI) of the firm (in U.S. dollars) for the years 2010 through 2014. WRDS data conform to accepted accounting practices and are at the firm level rather than country level because of inconsistencies in monetary units, taxes and accounting practices across countries. This standardised financial performance data at the firm level were a critical research design requirement because it allowed for comparisons across firms.

We chose a pre-post longitudinal comparison design for several reasons. First, we based our hypotheses on the view that some firms use PFIPc as a unique source of sustained competitive advantage (Barney, 1991). Although, some research suggests the positive effects of HR practices may diminish over time (Wright et al., 2005). A longitudinal design considers performance improvement over time to account for either sustained advantage or diminishing returns, thus enhancing the internal validity of the study through the use of pre-post measures. Therefore, we measured firm performance improvement over a long period of time (from 2010 to 2014) and measured whether employees perceived PFIPc during that period of time (2011 and 2012). Second, longitudinal designs reduce the concern for reverse causation. Third, this follows how other researchers have studied the long-term impact of HR practices (e.g., Richard et al., 2007).
Finally, compensation scholars have called for research on the effectiveness of compensation using longitudinal study designs (Shaw & Gupta, 2015).

**Variables**

**Measure of change (Δ) in NI per employee**

We calculated the variable NI for the fiscal years 2010 and 2014 from the data for each firm in U.S. dollars from the WRDS. NI is the income or loss after subtracting expenses and losses from all gains and revenues (in $ millions). The variable Employees was also obtained from this database (in 1000s), indicating the number of people employed by the company and subsidiaries.

The NI for the firm in 2010 was divided by the number of employees in 2010 and similarly for 2014. The change (Δ) in NI per employee for each firm was calculated as the NI per employee in 2014 less the NI per employee in 2010. The mean net change is a negative $6570 across the entire sample, indicating there was a decline in NI per employee over this time period for the entire sample. This does not mean the companies lost money on average but only that the income per employee declined. This is likely due to the slight drop in the growth of the world gross domestic product during this time period. This means the hypotheses will test whether this decline is smaller or positive for those firms using PFIPc. NI per employee has been referred to as a critical performance metric that enables straightforward comparisons across firms and focuses on employees as a source of competitive advantage (Bryan & Joyce, 2007). It is a measure of the effectiveness of firms’ use of human capital (D’Souza & Megginson, 1999). This is better than studying stock prices because they can be influenced by many things other than effective management of employees (Gerhart et al., 2009). In addition, it is more comparable than metrics that are country specific and highly relevant to MNEs who can decide in which countries to do business. We also control for industry sector as described below.

**Pay for individual performance climate**

Because organisations might use PFIP for only some jobs, in different ways (e.g., merit raises versus bonuses) or only to a limited degree, we used a measure of PFIPc. Recall that climate reflects perceptions or meanings associated with bundles of related experiences shared by employees (Schneider et al., 2013). Climate measures assess organisational functioning, are aggregated to the organisational level and are focused on important outcomes (Glick, 1985). Our climate measure was intended to meet all of these conditions. It measured an aspect of organisational functioning (an HR practice), it is aggregated to the organisational level and it focused on an important outcome (pay). We used four items from previous research (Rasch & Szypko, 2013) to measure the range of perceptions reflecting PFIPc. The first item (‘My pay is directly related to how well I perform’) directly assesses PFIPc. As the first item, it also created a context for responding to the following items. The next two items (‘I know specifically what I need to do to maximize my compensation’ and ‘I have a good understanding of how my pay is determined’) measure understanding of how the pay is determined, which is a necessary link to ensuring pay is motivational (Heneman & Schwab, 1985; Rasch & Szypko, 2013). The first of these two items also captures how to increase compensation, which is central to PFIPc. The last
item (‘I am paid fairly for the work I do’) measures justice perceptions related to pay and is consistent with the instrumentality rationale of fairness that evaluates the relationship between task performance and valued outcomes (Kanfer, 1991). These items are also similar to previous measures of pay for performance (e.g., Heneman et al., 1988). Analyses using just the first item yielded highly similar results and are available from the first author. Employees indicated the degree to which they agreed their organisation used these practices on a 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree).

We examined aggregation using agreement (James et al., 1984) and reliability (LeBreton & Senter, 2008) (Supporting Information). The Rwg (.67), the ICC1 (.23) and the ICC2 (.74) for the PFIPc measure generally met the benchmarks for aggregation according to the literature (.70, .12 and .60, respectively) (James, 1982; LeBreton & Senter, 2008), and they are similar to other cross-cultural research measures such as the original GLOBE scale development research (Hanges & Dickson, 2004). Thus, we used the aggregated responses for each firm as our level of analysis. The alpha reliability was .80.

Control variables

For each firm, we collected the mean country-level scores on gross domestic product and unemployment rate from the World Bank database (World Bank, 2011). GDP per capita was the average of country-level GDP in current U.S. dollars for the years 2011 and 2012, which was calculated by dividing the GDP by the country's population. Change in (Δ) GDP per capita (2010–2014) was calculated as the difference between GDP per capita in 2010 and 2014 by country. Unemployment rate was the country-level rate averaged over 2011 and 2012. Firm size was the average number of employees in 1000s. To control for industry type, we used the North American Industry Classification System (NAICS; NAICS Association, 2018) code. Of the 20 codes in the system, 17 were present in our data set. We dummy-coded (1 = that industry, 0 = not that industry) the industries and included 16 of them in our models. We excluded manufacturing from our models to act as the referent because it was the largest group.

We incorporated measures of practices other than PFIPc as additional controls, using the same 5-point scale. These variables were Employee Input, Empowerment, Goal Setting, Teamwork and Training and Development and represent the main taxonomic categories of high-performance work practices (HPWPs; Posthuma et al., 2013). By adding these controls, we address the possibility that PFIPc effectiveness is combined or confounded with other HR practices as the configurational view may suggest. Psychometric properties of these measures met benchmarks for reliabilities (cited above) (see Supporting Information).

Analytic strategy

Prior to testing our hypotheses, we ran a series of preliminary analyses to determine our analytic strategy. The structure of the data is as follows: Workers are nested within multinational firms, and workers are also nested within countries. However, given they are multinational firms, firms are not nested within countries. This type of structure generally requires a cross-classified analysis (Raudenbush & Bryk, 2002) where the individual worker is Level 1, the firm is Level 2a and the country is Level 2b. However, such an approach is not viable provided the outcome variable is at a between level (Level 2a) and cannot be modelled at any other level.
Meaning, the culture variables (Level 2b) cannot be modelled as hypothesised. We considered an alternative hierarchical method to account for the nesting in the data by aggregating the individual-level variables to the firm level within each country, essentially treating every location of the firm as a distinct organisation. However, this approach is inappropriate theoretically and empirically. Theoretically, it calls into question the validity of our results as they apply to MNEs because it does not test multinational firms but treats each location of a firm as a distinct firm. Empirically, this truncates the variance in our outcome variable such that a firm located in two countries has the same change in NI per employee. Therefore, multilevel modelling was not an appropriate approach to test our hypotheses and research questions.

Instead, given the firm-level outcome variable, we aggregated our individual and country variables to the firm level by creating sample-weighted averages by number of respondents across countries in which the firm operated. In this way, aggregated individual-level variables represented firm-level variables. Further, we aggregated each GLOBE dimension of each country in which an organisation operated to create a national culture profile across the cultural dimensions for each firm. For example, the power distance score for one organisation represents the aggregated power distance score from all countries where the multinational firm exists. This approach makes sense for two reasons. First, we theorise that firms may benefit from being located in countries with particular cultural dimensions that work best with their organisational strategy. Second, this allows us to test our hypotheses and research questions at the appropriate level, given our outcome variable is at the firm level.

RESULTS

Table 2 includes the means, standard deviations, sample sizes and intercorrelations of the key study variables. The full correlation matrix with all controls is in the Supporting Information to conserve journal space. Note that a cluster of three culture dimensions share 50% or more variance. In-group collectivism and power distance are strongly related ($r = .84$), and both are strongly related to future orientation ($r = -.74$ and -.73, respectively). These dimensions show strong relations with average GDP per capita for the same reason, which is why it is a control. Nevertheless, the conceptual and empirical independence of the GLOBE dimensions are well-established (e.g., Hanges & Dickson, 2004). High correlations among the HPWP variables (e.g., employee input and empowerment) in the current study are also due to the effects of aggregating individual-level responses to the firm level. Aggregating virtually always increases correlations mainly because it reduces error (e.g., within-organisation differences in perceptions among employees; Ostroff, 1993). High correlations among culture variables have been noted by other researchers. They have therefore tested culture variables in independent models rather than in one model (e.g., Gooderham et al., 2018). We do the same in the current study. A test of all culture variables and their interactive effects in one model is in the Supporting Information.

To test Hypothesis 1, we calculated the average score for PFIPc within each country in which an organisation operated. For example, if a company was located in 6 countries, it had 6 means. We then calculated the standard deviations of those means for each company and averaged the standard deviations across companies yielding an average standard deviation of PFIP within companies. We compared this with the standard deviation across companies within countries. In support of Hypothesis 1, the average standard deviation of PFIPc across countries within companies was .19 compared with .51 across companies within countries.
### TABLE 2  Correlations between change in firm net income per employee from 2010 to 2014, controls, pay for individual performance climate and GLOBE culture dimensions

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Δ net income per employee</td>
<td>-6.57</td>
<td>378.68</td>
<td>308</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. PFIPc</td>
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<td>0.61</td>
<td>1165</td>
<td>.11</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Performance orientation</td>
<td>4.20</td>
<td>0.42</td>
<td>1147</td>
<td>-.02</td>
<td>.15**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4. Future orientation</td>
<td>3.99</td>
<td>0.42</td>
<td>1147</td>
<td>-.17**</td>
<td>.06</td>
<td>.76**</td>
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<td></td>
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</tr>
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<td>5. In-group collectivism</td>
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<td>1147</td>
<td>.11</td>
<td>.09**</td>
<td>-.47**</td>
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<td>6. Institutional collectivism</td>
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<td>-.11</td>
<td>-.08**</td>
<td>-.08*</td>
<td>.25**</td>
<td>-.19**</td>
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<td></td>
</tr>
<tr>
<td>7. Power distance</td>
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<td>0.35</td>
<td>1147</td>
<td>.24**</td>
<td>.02</td>
<td>-.48**</td>
<td>-.73**</td>
<td>.84**</td>
<td>-.30**</td>
<td></td>
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<td>8. Humane orientation</td>
<td>4.01</td>
<td>0.27</td>
<td>1147</td>
<td>.05</td>
<td>.20**</td>
<td>.31**</td>
<td>.34**</td>
<td>-.19**</td>
<td>.39**</td>
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<td></td>
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<td></td>
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<td>9. Uncertainty avoidance</td>
<td>4.23</td>
<td>0.55</td>
<td>1147</td>
<td>-.11</td>
<td>-.07*</td>
<td>.46**</td>
<td>.81**</td>
<td>-.73**</td>
<td>.22**</td>
<td>-.69**</td>
<td>.12**</td>
<td></td>
<td></td>
</tr>
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<td>10. Gender egalitarianism</td>
<td>3.39</td>
<td>0.29</td>
<td>1147</td>
<td>-.04</td>
<td>-.08**</td>
<td>-.52**</td>
<td>-.32**</td>
<td>-.14**</td>
<td>.22**</td>
<td>-.23**</td>
<td>.18**</td>
<td>-.14**</td>
<td>-.14**</td>
</tr>
<tr>
<td>11. Assertiveness</td>
<td>4.24</td>
<td>0.31</td>
<td>1147</td>
<td>.01</td>
<td>.11**</td>
<td>.67**</td>
<td>.30**</td>
<td>-.17**</td>
<td>-.55**</td>
<td>-.07*</td>
<td>-.14**</td>
<td>-.01</td>
<td>-.52**</td>
</tr>
</tbody>
</table>

**Note**: Pairwise deletion, N = 308–1147 (firms). Δ net income per employee in $1000s. GDP per capita ($10,000s US). Unemployment rate is the mean across countries in which firms operate. This table only includes hypothesised variables. Descriptive statistics and intercorrelations of hypothesised variables and controls are in the Supporting Information. Abbreviation: PFIPc, pay for individual performance climate.

*p < .05. **p < .01.
This suggests that firms adjust their PFIPc across countries to some extent, but those differences are much smaller than differences between companies.

Table 3 reports a summary of the results of the remaining hypotheses and research questions, and Figure 1 shows the plots of the significant interactions. The full tables showing the relevant statistics for all the variables in the model are in the Supporting Information. Hypothesis 2 was supported such that PFIPc was positively related to firm performance ($\beta = .38$, $p = .001$) (Model I). The inclusion of PFIPc in the model explains 6% of the variance in NI per employee, meaning a one standard deviation increase in PFIPc is associated with a $1372, or a 21%, increase in NI per employee across all organisations and countries in this sample.

Hypothesis 3 was not supported because performance orientation did not significantly moderate the relationship between PFIPc and organisational performance ($\beta = -.30, p = .80$).

Hypothesis 4 was supported. Future orientation significantly moderated the relationship between PFIPc and organisational performance ($\beta = .26, p = .001$). The interaction term explained 5.5% of the variance in NI per employee. Cultures higher in future orientation enhanced this relationship. A one standard deviation increase in PFIPc in cultures high in future orientation was associated with a $985, or a 15%, increase in NI per employee.

Hypothesis 5 was supported. In-group collectivism moderated the relationship between PFIPc and firm performance, and the interaction term was negative as predicted ($\beta = -.15, p = .02$). The interaction term explained 1.9% of the variance in NI per employee. Cultures lower in in-group collectivism enhanced this relationship. However, performance appears higher regardless of PFIPc in cultures high in in-group collectivism. Nevertheless, a one standard deviation increase in PFIPc in cultures low in in-group collectivism was associated with a $569, or a 9%, increase in NI per employee.

Hypothesis 6 was supported. Institutional collectivism moderated the relationship between PFIPc and firm performance ($\beta = .22, p < .001$). Cultures higher in institutional collectivism enhanced the positive relationship between PFIPc and organisational performance. The interaction term explained 3.6% of the variance in NI per employee. In cultures high in institutional collectivism, a one standard deviation increase in PFIPc was associated with a $834, or a 13%, increase in NI per employee.

Hypothesis 7 was supported. Power distance moderated the relationship between PFIPc and organisational performance ($\beta = -.41, p < .001$). The interaction term explained 14.1% of the variance in NI per employee. Cultures lower in power distance enhanced the relationship. Power distance had the greatest NI impact. A one standard deviation increase in PFIPc in lower power distance cultures was associated with a $1554, or a 24%, increase in NI per employee.

Hypothesis 8 was supported. Humane orientation moderated the relationship between PFIPc and firm performance ($\beta = -.15, p = .04$). The interaction term explained 1.4% of the variance in NI per employee. Cultures lower in humane orientation enhanced this relationship. This means that in low humane orientation cultures, a one standard deviation increase in PFIPc was associated with a $569, or a 9%, increase in NI per employee.

Hypothesis 9 was supported. Uncertainty avoidance significantly moderated the relationship between PFIPc and firm performance ($\beta = .22, p < .001$). The interaction term explained 3.8% of the variance in NI per employee. Cultures high in uncertainty avoidance enhanced this relationship. A one standard deviation increase in PFIPc in high uncertainty avoidance cultures was associated with an $834, or 13%, increase in NI per employee.

Gender egalitarianism and assertiveness did not moderate the relationship between PFIPc and organisational performance ($\beta = .11, p = .12$ and $\beta = -.07, p = .32$, respectively).
Table 3 Multiple linear regression analyses predicting change in firm net income per employee (between 2010 and 2014) based on pay for improved performance (PFIP) moderated by GLOBE culture dimensions

<table>
<thead>
<tr>
<th>Culture dimension</th>
<th>Model 0 (controls only)</th>
<th>Model I (H2) (controls &amp; PFIPc)</th>
<th>Model II (controls, PFIPc &amp; culture) Performance orientation</th>
<th>Model III (H3) (controls, PFIPc, culture &amp; interaction) Performance orientation</th>
<th>Model IV (controls, PFIPc &amp; culture) Future orientation</th>
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<tbody>
<tr>
<td>Cultural dimension effect β</td>
<td></td>
<td></td>
<td>−.06</td>
<td>.02</td>
<td>−.26**</td>
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<tr>
<td>PFIPc × culture dimension β</td>
<td></td>
<td></td>
<td>−.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td></td>
<td></td>
<td>.05</td>
<td>.11</td>
<td>.11</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>−.04</td>
<td></td>
<td>.02</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Δ$R^2$</td>
<td>.06</td>
<td></td>
<td>.06</td>
<td>.06</td>
<td>.00</td>
</tr>
<tr>
<td>$F$ change</td>
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<td></td>
<td>17.26**</td>
<td>8.86**</td>
<td>0.07</td>
</tr>
<tr>
<td>DF model, total</td>
<td>25, 283</td>
<td>26, 283</td>
<td>27, 283</td>
<td>28, 283</td>
<td>27, 283</td>
</tr>
</tbody>
</table>

Table 3 (Continued)

<table>
<thead>
<tr>
<th>Culture dimension</th>
<th>Model V (H4) (controls, PFIPc, culture &amp; interaction) Future orientation</th>
<th>Model VI (controls, PFIPc &amp; culture) In-group collectivism</th>
<th>Model VII (H5) (controls, PFIPc, culture &amp; interaction) In-group collectivism</th>
<th>Model VIII (controls, PFIPc &amp; culture) Institutional collectivism</th>
<th>Model IX (H6) (H5) (controls, PFIPc, culture &amp; interaction) Institutional collectivism</th>
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<tr>
<td>Cultural dimension effect β</td>
<td></td>
<td>.33**</td>
<td>.70**</td>
<td>.70**</td>
<td>−.12</td>
</tr>
<tr>
<td>PFIPc × culture dimension β</td>
<td></td>
<td>.26**</td>
<td>−.15*</td>
<td>.22**</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.20</td>
<td>.17</td>
<td>.19</td>
<td>.13</td>
<td>.16</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>.12</td>
<td>.08</td>
<td>.10</td>
<td>.03</td>
<td>.07</td>
</tr>
<tr>
<td>Δ$R^2$</td>
<td>.06</td>
<td>.12</td>
<td>.02</td>
<td>.07</td>
<td>.04</td>
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<tr>
<td>Culture dimension</td>
<td>Model V (H4) (controls, PFIPc, culture &amp; interaction)</td>
<td>Model VI (controls, PFIPc &amp; culture)</td>
<td>Model VII (H5) (controls, PFIPc culture, &amp; interaction)</td>
<td>Model VIII (controls, PFIPc &amp; culture)</td>
<td>Model IX (H6) (H5) (controls, PFIPc, culture &amp; interaction)</td>
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<td>------------------------------------</td>
<td>-----------------------------------------------------</td>
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<tr>
<td>Future orientation</td>
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<td>18.05**</td>
<td>6.04**</td>
<td>10.61**</td>
<td>10.92**</td>
</tr>
<tr>
<td>Power distance</td>
<td>Model X (controls, PFIP &amp; culture)</td>
<td>Model XI (H7) (controls, PFIPc, culture &amp; interaction)</td>
<td>Model XII (controls, PFIPc &amp; culture)</td>
<td>Model XIII (H8) (controls, PFIPc, culture &amp; interaction)</td>
<td>Model XIV (controls, PFIPc &amp; culture)</td>
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<td></td>
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<td>Power distance</td>
<td>Humane orientation</td>
<td>Humane orientation</td>
<td>Uncertainty avoidance</td>
</tr>
<tr>
<td></td>
<td>.50**</td>
<td>.57**</td>
<td>.11</td>
<td>.14</td>
<td>-.08</td>
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<tr>
<td>R^2</td>
<td>.21</td>
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<td>.12</td>
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<td>.12</td>
</tr>
<tr>
<td>Adj. R^2</td>
<td>.13</td>
<td>.28</td>
<td>.03</td>
<td>.04</td>
<td>.02</td>
</tr>
<tr>
<td>ΔR^2</td>
<td>.16</td>
<td>.14</td>
<td>.07</td>
<td>.01</td>
<td>.06</td>
</tr>
<tr>
<td>F change</td>
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<td>55.69**</td>
<td>9.89**</td>
<td>4.22*</td>
<td>9.03**</td>
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<td>27, 283</td>
<td>27, 283</td>
<td>27, 283</td>
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<td>Culture dimension</td>
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<td>-.05</td>
<td>-.07</td>
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<td>-----</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>PFIPc x culture dimension β</td>
<td>.22*</td>
<td>.11</td>
<td></td>
<td></td>
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<tr>
<td>$R^2$</td>
<td>.16</td>
<td>.11</td>
<td>.12</td>
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<td>Δ$R^2$</td>
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<td>.06</td>
<td>.01</td>
<td>.06</td>
<td>.00</td>
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<td>DF model, total</td>
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<td>27, 283</td>
<td>28, 283</td>
<td>27, 283</td>
<td>28, 283</td>
</tr>
</tbody>
</table>

Note: $\beta$ = standardised beta coefficients. All HPWPs centred. All VIFs < 10. H = hypothesis. RQ = research question. Model 0 is just controls. $R^2$ changes in models are based on changes from the baseline (Model I). Complete tables with all coefficients and analyses without controls are in the Supporting Information. *p < .05. **p < .01.
FIGURE 1  Plots of interactions between pay for individual performance climate (PFIPc) and statistically significant GLOBE cultural dimensions on change in organisational performance (change in net income per employee). These were created by plotting the level of organisational performance at one standard deviation above and below the mean for pay for individual performance (PFIP) and the culture variable.
DISCUSSION

We examined how MNEs customise PFIPc to improve strategic alignment with the cultural values of the countries in which they operate while also maintaining standardisation and how this affects firm performance. PFIPc was positively related to firm performance across cultures, and performance was enhanced when the underlying values of PFIPc aligned with the values of the cultures. Thus, adapting PFIPc practices to cultures appears to improve performance, but not all cultural dimensions offered improvements.

As predicted, future orientation enhanced the positive effects of PFIPc. This is consistent with the view that cultures that emphasise future planning and delayed gratification are congruent with PFIPc where effort is linked to outcomes. Cultures lower in in-group collectivism enhanced the effectiveness of PFIPc because individuals in those cultures are more likely to focus on their own interests and not the interests of the group. Consistent with this, PFIPc used in cultures high in institutional collectivism yielded higher firm performance. In these cultures, employees perceive their employers as the institutional referent with which to align their values. Low power distance cultures strengthened the relationship between PFIPc and firm performance. This is consistent with the view that PFIPc can act as a substitute for leaders’ directions. Similarly, PFIPc was more effective in cultures low in humane orientation where employees are less likely to expect humane treatment but instead focus on economic exchanges, which is more congruent with PFIPc. PFIPc was also more effective in cultures higher in uncertainty avoidance. PFIPc reduces uncertainty because of the direct linkage between work effort and rewards. Finally, performance orientation, gender egalitarianism and assertiveness did not significantly interact with PFIPc to modify performance.

Theoretical implications

Considering congruence with national culture as a key contingency for the effectiveness of PFIPc has broad theoretical implications. First, in accordance with contingency theory, our findings support the key principle that there is no ‘one best way’ for organisations to operate. We show that culture is an important contingency in the adaptation of HR practices and support the long-held argument that HR practices will be more effective if they align with the cultural values of countries in which MNEs operate (Luthans et al., 1997; Schuler & Rogovsky, 1998). The current study provides clearer and consistent support for hypotheses deriving from contingency theory in the prediction of pay practice success on actual firm performance than previous similar research (cf. Prince et al., 2020).

Second, we address the often mentioned, but rarely tested, tension MNEs face between standardising versus adapting practices to countries in which they operate. From our perspective, a resolution for this tension depends on using practices to greater or lesser degrees in multiple local cultures. This will enhance local performance, which will aggregate across countries to improve overall firm performance. By examining this tension directly, we find support for adapting, to some extent, to the cultures where the organisation operates while also maintaining some standardisation as an efficiency-enhancing, cost-saving choice. Moreover, we show that it is the match to the unique local cultures facing an MNE as a set that determines the effectiveness of its compensation strategy in terms of organisational financial performance.

Finally, we examine a complete cultural model. In doing so, we extend prior research by showing that two previously untested culture variables—future orientation and humane
orientation—had significant moderating effects on the relationship between PFIPc and firm performance. High future orientation enhanced this positive relationship, and high humane orientation reduced it.

We were also able to extend findings on the impact of collectivism. Prince et al. (2020) showed that in-group collectivism had a negative moderating effect on the relationship between individual bonuses and performance. We found a similar negative moderating relationship for a different type of individual incentive, PFIPc and firm performance. Thus, when employers use individual bonuses or PFIPc in cultures that are higher on in-group collectivism, there will be a negative impact on firm performance. Notably, the GLOBE model differentiates two types of collectivism: in-group and institutional collectivism (House et al., 2004). We found that the impact of institutional collectivism had the opposite effect of in-group collectivism. As hypothesised, institutional collectivism increased the positive relationship between PFIPc and firm performance, perhaps because PFIPc is consistent with enhancing the institution. This suggests that the validity of the long-held belief that individual incentives would not work in collectivistic cultures (Gomez-Mejia & Welbourne, 1991; Javidan & Dastmalchian, 2009) may depend on the type of collectivism studied and referent used. Other research based on psychological contract theory has also shown that the positive relationship between HR practices such as training and teamwork and employee organisational commitment is higher in countries where institutional collectivism is higher (Rode et al., 2016).

Moreover, prior research did not find significant moderating effects of either uncertainty avoidance or power distance on the relationship between individual bonuses and firm financial performance (Prince et al., 2020). However, using a different type of individual incentive, PFIPc, we found that both of these culture variables had a significant impact. High future orientation enhanced this positive relationship, and high power distance reduced it. Thus, we demonstrated that contingency theory appears to provide a good basis upon which to explain the moderation effects of country cultures, albeit in previously unverified ways. It also provided a better explanation than alternative theories, such as a universalistic perspective that would argue for a one best way to design compensation systems (Delery & Doty, 1996).

Study limitations and future research

Several study limitations could be addressed by future research. First, we intentionally focused on only one practice controlled for the other HPWPs. However, future research should similarly focus in-depth on other HPWPs. Second, other country-level factors such as legal environments, political systems, privately versus state-owned enterprises and economic factors may be important to consider. Further, while the sample had to be limited to large public companies who report their financial data, including small and private companies could have implications for findings. Finally, we did not control for job type because it was not in the dataset. Past research has found that PFIPc is more common in jobs where objective performance can be measured or is evaluated through performance appraisals (Gerhart & Fang, 2014). Not controlling for job type means variance in the results due to jobs will be error variance, reducing effect sizes, but probably not causing a systematic alternative explanation of the findings.

The study also suggests a broader direction for future research. Although the contingency approach to predicting the success of HR practices has been successful in this study, the configurational approach (Delery & Doty, 1996; Toh et al., 2008) might also be incorporated in future research. This line of research has only focused on configurations of HR practices. Future
research could simultaneously examine configurations of countries in which MNEs operate (Edwards et al., 2020). We expect that when MNEs have a country culture profile that matches the configuration of HR practices, firm performance will be higher.

Finally, MNEs tend to conduct business in particular geographic regions with similar cultures (Osegowitsch & Sammartino, 2007; Rugman, 2005). A potential advantage of this approach is more homogeneity in the dimensions of culture to consider (Ronen & Shenkar, 2013). This aligns with recent calls for HR to be more strategic by creating fit with opportunities in the form of clusters of cultures in the environment (Lee, 2021). Conversely, rather than looking at country clusters, future scholarship may consider individual worker values as moderating factors as to the effectiveness of PFIP on performance (e.g., Gorgievski et al., 2018).

**Practical implications**

We recommend MNEs tailor the use of PFIPc to the set of national cultures in which they do business, with a simultaneous consideration of the benefits of the efficiencies of consistency across countries. This means using PFIPc in countries where it fits with the culture. Where it is not a fit, MNEs could explore the use of other employee motivational practices that have worked in some countries, such as job design, recognition and organisational justice. Of course, they should also consider the common practices in those countries as important input along with the companies’ usual and preferred practices.

To synthesise these findings in a practical way, we created country culture profiles to investigate the likelihood of PFIPc effectiveness. The ideal profile would be high on future orientation, institutional collectivism and uncertainty avoidance and low on in-group collectivism, power distance and humane orientation. The more the country matches that profile, the more likely PFIPc would enhance performance of the organisation. To generate the profiles, we gave a country a score of 1 if their GLOBE culture rating was above or below the medians in House et al.’s (2004) study on the respective dimensions of the ideal profile, then summed the scores. These scores ranged from 0 to 6. As illustrated in Table 4, Austria, England, Finland and the Netherlands match that ideal profile. However, countries such as Argentina, Italy, Russia and Turkey are very poor matches to this ideal profile. When viewed from the perspective of macro cultural groupings, Table 4 suggests PFIPc is likely to be effective in Anglo or English-speaking cultures (e.g., England, Canada and United States), as well as Confucian Asia (e.g., Japan, Singapore), Germanic Europe (e.g., Austria, Germany) and Nordic Europe (e.g., Finland and Sweden). PFIPc is less likely to be effective in Latin American cultures (e.g., Argentina, Brazil and Colombia), Latin European cultures (e.g., Spain and Italy), Middle Eastern and North African cultures (e.g., Morocco and Turkey) and Eastern European cultures (e.g., Georgia and Russia).

We also added the scores on PFIPc collected from employees in companies in each country from our study to Table 4. There is a general tendency for countries expected to be high on the ideal profile to have higher actual PFIPc, but there are many exceptions. For example, Argentina is lower on the ideal profile but has a relatively high PFIPc score (3.20), whereas Finland is higher on the ideal profile but has a relatively low PFIPc score (2.93). This analysis is limited by the small number of companies in each country, and we may not necessarily expect that those MNEs in countries where cultures align with PFIPc are all utilising PFIPc in the way our findings suggest they should. Nevertheless, this post hoc analysis suggests there are some mismatches and also practical opportunities for improvement in the use of PFIPc in MNEs.
<table>
<thead>
<tr>
<th>PFIPc less likely to be effective</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>PFIPc more likely to be effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecuador</td>
<td>Argentina (3.20)</td>
<td>Brazil (3.59)</td>
<td>China (3.63)</td>
<td>Albania</td>
<td>Australia (3.26)</td>
<td>Austria</td>
</tr>
<tr>
<td>Georgia</td>
<td>Bolivia</td>
<td>Costa Rica</td>
<td>Egypt</td>
<td>Germany (3.23)</td>
<td>Canada (3.43)</td>
<td>England (3.17)</td>
</tr>
<tr>
<td>Iran</td>
<td>Colombia</td>
<td>El Salvador</td>
<td>France (2.84)</td>
<td>Indonesia (3.59)</td>
<td>Denmark (3.27)</td>
<td>Finland (2.93)</td>
</tr>
<tr>
<td>Morocco</td>
<td>Guatemala</td>
<td>Greece</td>
<td>India (3.96)</td>
<td>Israel</td>
<td>Hong Kong</td>
<td>Netherlands (3.05)</td>
</tr>
<tr>
<td>Thailand</td>
<td>Portugal</td>
<td>Hungary</td>
<td>Kazakhstan</td>
<td>Japan (3.08)</td>
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<tr>
<td>Venezuela</td>
<td>Slovenia</td>
<td>Italy (3.30)</td>
<td>Kuwait</td>
<td>Malaysia</td>
<td>Singapore</td>
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<tr>
<td></td>
<td>Spain (3.04)</td>
<td>Nigeria</td>
<td>Mexico (3.52)</td>
<td>New Zealand</td>
<td>South Africa (3.03)</td>
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<tr>
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<td>Philippines</td>
<td>Namibia</td>
<td>Taiwan</td>
<td>Sweden (2.93)</td>
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<tr>
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<td>Russia (3.18)</td>
<td>Poland</td>
<td>US (3.36)</td>
<td>Switzerland (3.04)</td>
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<tr>
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<td>Qatar</td>
<td>South Korea (3.23)</td>
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</tbody>
</table>

**Note:** Each country got a score of 1 (0 otherwise) if the GLOBE country culture score was above the median on future orientation, institutional collectivism and uncertainty avoidance; and below the median on in-group collectivism, power distance and humane orientation. Countries in this study shown in *italics*. Estimates in parentheses indicate the mean of PFIPc in that country from our data sets. Saudi Arabia and the United Arab Emirates were not included because of inadequate data. Abbreviation: PFIPc, pay for individual performance climate.
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CONFLICT OF INTEREST
The authors declare that they have no conflicts of interest.

ETHICS STATEMENT
This research is exempt (Old Dominion University Institutional Review Board [IRB] #1897011-1).

DATA AVAILABILITY STATEMENT
The data that support the findings of this study are available from the corresponding author upon reasonable request.

REFERENCES


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