

THE ATTITUDINAL CONSEQUENCES OF INDIVIDUAL VERSUS ORGANIZATIONAL
PAY FOR PERFORMANCE: THE MEDIATED MODERATION MODEL

By

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ABSTRACT OF THE THESIS

The Attitudinal Consequences of Individual versus Organizational Pay for Performance : The Mediated Moderation Model

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The present study investigates the relationship between pay for performance (PFP) plans and collective perceptions of organizational commitment. This study proposes a model of the process through which the intensity of individual PFP and organizational PFP affect collective perceptions of clan culture and collective organizational commitment differentially depending on collective perceptions of organizational trust. The proposed mediated moderation model was tested with a sample of 322 organizations and 9677 employees in South Korea. The results did not support the mediated moderation model. The intensity of individual PFP was not significantly related to the clan culture perceptions, and collective perceptions of trust did not moderate the relationship between the intensity of the two PFP plans and clan culture perceptions. Instead, the post-hoc analysis indicated that collective perceptions of clan culture mediate the relationship between the intensity of organizational PFP and collective organizational commitment. The theoretical and practical implications are discussed.

Acknowledgement and Dedication

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Table of Contents

Abstract	ii
Acknowledgement and Dedication	iii
Table of Contents	iv
Introduction	1
Literature Review and Theory Development	3
How HR practice elicits collective employee attitudes: Self-determination theory	3
Pay for performance and organizational culture (Hypothesis 1a & 1b)	3
The moderating role of trust in the relationship between the pay for performance practices and clan culture (Hypothesis 2a & 2b)	6
Clan culture and organizational commitment (Hypothesis 3)	8
The mediating role of clan culture (Hypothesis 4a,4b)	9
Methods	10
Sample and data collection	10
Measures	12
Aggregation tests	15
Confirmatory factor analyses	16
Analyses	17
Results	17
Post-hoc test	19
Discussion	20
Study contributions and implications	21
Limitations	22
Conclusion	23
References	24
Figures and Tables	28

INTRODUCTION

Pay for performance (PFP), when “organizations differentially compensate individuals and groups based on their contributions to an organization’s success” (Gerhart & Rynes, 2003; p.165), is one way of compensating employees. PFP can be largely divided into two types of plans, individual-based versus organizational-based PFP. Under the individual-based PFP, rewards are allocated based on individual job performance with the emphasis on equity. Meanwhile, in the organizational PFP, rewards are allocated based on organizational performance, with the emphasis on equality in many cases. As an increasing number of organizations implement PFP plans, understanding the collective employee outcomes of implementing the PFP plans is important for both researchers and human resource managers.

Different reward allocation rules of the two PFP plans can signal different organizational values to employees and elicit different collective attitudes of employees. To the best of my knowledge, peoples’ reactions to different PFP plans have usually been studied at the individual level. We have limited knowledge of the collective attitudinal consequence of the two PFP plans. Understanding the antecedents of the collective attitude is important, since it is a good predictor of group- or organizational level outcomes (e.g., Currall, Towler, Judge, & Kohn, 2005; Nishii, Lepak, & Schneider, 2008). Furthermore, previous literature has found that organizational performance is more strongly related to organizational level collective attitude rather than individual attitude (for example, Ostroff, 1992). Considering the role of implementing HR practices in enhancing organizational performance, it is necessary to understand the collective attitudinal consequence of PFP plans.

My study examines whether the intensity of individual PFP plan and organizational PFP plan contribute to different levels of collective organizational commitment through the collective

perception of clan culture. In addition, this study investigates collective perceptions of trust as a moderator in the relationship between the intensity of the two PFP plans and collective perceptions of clan culture. Finally, this study examines whether collective clan culture perceptions mediate the interactive effects of the intensity of the two PFP plans and the collective perceptions of trust on collective organizational commitment. As a theoretical foundation of the model, I utilize self-determination theory (Deci & Ryan, 1985) which focuses on basic human needs of belongingness.

Scholars have explored how individuals react differently to the two different PFP plans (for example, Cable & Judge, 1994) and how reward system influences organizational culture (for example, Kerr and Slocum, 1987). However, a limited number of studies have shown the entire mechanism through which the intensity of the two PFP plans affect the organizational culture, which in turn affects the collective employee attitudes. This study contributes to the HR literature by elucidating collective level attitudinal outcomes of the intensity of the PFP plans and the mediating mechanism of organizational culture in the relationship between organizations' PFP plans and the consequent attitudinal outcome.

In the next section, I review previous literature and hypothesize about the relationships among the intensity of the two PFP plans, the collective perceptions of trust and clan culture, and collective organizational commitment. The proposed model is tested using the data of 322 organizations and 9,677 employees in South Korea. I then discuss the results and the implications of this study.

 Insert FIGURE 1 here

LITERATURE REVIEW AND THEORY DEVELOPMENT

How HR practices elicit collective employee attitudes: Self-determination theory

According to Deci and Ryan's (1985) self-determination theory (SDT), relatedness, i.e., "the need to feel belongingness and connectedness with others" (Ryan and Deci, 2000; p.73), is a basic psychological need of human beings. Satisfying this need renders people more self-motivated and mentally healthy. Based on this theory, an HR practice that fosters organizational culture which leads employees to feel that they are belonging to and are connected to people in the organization is expected to elicit positive collective employee attitudes. Therefore, in the present study, I posit that if organizations' use of PFP plans and employees' collective perceptions of trust foster a cohesive organizational culture that satisfies employees' need to belong, employees' collective attitude will be enhanced.

Pay for performance and organizational culture

Organizational culture reflects "the shared values, beliefs and assumptions held by members" (Kopelman, Brief, & Guzzo, 1990; p. 283). Organizational culture is an antecedent (Kopelman et al., 1990) as well as a consequence of certain HR practices (Brockbank, 1999; Kerr & Slocum, 1987). However, this study focused on the process through which organizational culture is formed according to the organization's implemented HR practices.

HR practices inform employees about "what organizations expects of employees and what rewards employees expect in return" (Ostroff & Bowen, 2000; p.233). Therefore, from the implemented HR practices, employees perceive what is valued in the organization. When the individual perceptions are shared among employees in the same organization, collective perceptions of organizational culture emerge (Ostroff & Bowen, 2000). Lau and Ngo (2004) found that training, performance pay, and team development fosters an organizational culture

that emphasizes innovation and entrepreneurship. Organizations' pay practices play an important role in formulating the organizational culture by sending a strong message of what is valued in the organization. Organizational pay practices "(specify) the terms of exchange" between employees and the employer (Kerr & Slocum, 1987; p. 130), which is closely related to employees' interest. Therefore, pay practices are highly salient practices that have a strong effect on the organizations' culture.

"Clan culture" (Ouchi, 1980) is "a control system based on socialization and internalized values and norms." (Kerr & Slocum, 1987; p. 132) In the clan culture, members of the organization perceive high interpersonal cohesion (Cameron & Quinn, 2006; Lund, 2003). Employees identify with their peers and have high sense of interdependence (Kerr & Slocum, 1987). The organization is perceived more like "extended families" and the place "where people share a lot of themselves" (Cameron & Quinn, 2006; p.41~42). In the clan culture, employees show high level of goal congruence, since every members' interest is harmonized (Ouchi, 1980). Employees' perception of whether their organizational culture is clan-like can be determined by PFP plans that the organization implements, since each PFP plan emphasizes different values and provides the reward based on different criteria.

In this study, I posit that the intensity of individual PFP will be negatively related to collective perceptions of clan culture. Since employees are rewarded according to their individual achievement, they become more motivated to do their job better when their pay increases based on their individual performance. However, as the proportion of pay that is provided based on individual performance increases, employees receive a stronger signal that they are independent workers whose fate is independent of other employees or the overall organization. Furthermore, individual PFP is generally perceived as a zero-sum game, such that

employees perceive that their peers' large rewards reduce the size of their own rewards (Pfeffer, 1998; Shaw, Dineen, Fang, & Vellella, 2009). Employees may perceive that everyone is only interested in their own well-being rather than others' or collective well-being, which hinders the development of the collective clan culture perceptions.

In addition, the relationship between employees and an employer can be perceived as mutually exploitive (Slocum & Kerr, 1987) when the bigger portion of employees' pay is determined by individual performance. Employees may perceive that individual PFP plan is one way of controlling them by putting performance pressure on them and reducing labor costs (Arthur, 1992) by penalizing employees who do not perform well. When employees perceive that their interests and the employer's interest differ, the social ties among employees and employers become looser, which harms the promotion of collective clan culture perceptions. Therefore,

Hypothesis 1a: The intensity of individual PFP is negatively associated with the clan culture perceptions.

On the contrary, I anticipate that the intensity of organizational PFP will be positively related to the collective perception of the clan culture. Organizational PFP emphasizes the achievement of organizational level performance and the reward is equally distributed according to the size of the collective performance. Thus, interests of all employees are dependent on the fortune of the organization (McElroy, 2001). To increase each other's reward under the organizational PFP plan, employees develop strong social tie with each other to enhance their collective interests. Employees will share important information that can enhance mutual

performance, and consequently, increase the frequency and the quantity of the social exchange among themselves.

Although one potential problem of organizational PFP that hinders fostering the clan culture is the presence of free riders (Olson, 1965), researchers argue that employees can suppress shirkers by withholding help from slackers (Milgrom & Roberts, 1992) and ostracizing antisocial shirkers (Weitzman & Kruse, 1996). Because of these “increased social costs of damaging relationships” from shirking (Kwon, Kim, Kang & Kim., 2008; p.760), most employees are expected to adhere to group norms (Milgrom & Roberts, 1992).

In this way, as a higher portion of employees’ pay is determined by organizational performance, employees perceive their colleagues and their managers as partners who are bound together with the common destiny rather than competitors, enhancing the cohesion within the organization. Therefore,

Hypothesis 1b: The intensity of organizational PFP is positively associated with clan culture perceptions.

The moderating role of trust in the relationship between the pay for performance practices and clan culture

According to Mayer, Davis, and Schoorman (1995), trust is defined as “willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.” (p. 712). Trust emerges when trustor perceive benevolence that “the trustee cares about the trustor” and integrity that “the trustee adhere to a set of principles that the trustor finds acceptable” (Mayer & Gavin, 2005; p.874). Mayer and colleagues (1995) argued

that trust could foster cohesion. In this paper, I posit that high collective perceptions of trust in colleagues and employers can strengthen the positive relationship between organizational PFP and clan culture perceptions and weaken the negative relations between the relationship between individual PFP and clan culture perceptions. On the contrary, I expect that low collective perceptions of trust can weaken the positive relationship between the organizational PFP and clan culture perceptions and strengthen the negative relationship between individual PFP plan and the clan culture perceptions.

As individual performance determines a greater portion of pay, subsequent perceptions of mutual exploitation between employees and employers (Kerr & Slocum, 1987) and the concentration on self-interests among employees can hinder the achievement of collective clan culture perceptions. However, if people believe that their colleagues and employer care about them and have integrity (Mayer & Gavin, 2005), the perceptions of mutual exploitation and concentration on one's own interests under the individual PFP plan can be alleviated. Therefore, under individual PFP plan, high collective perceptions of trust in the employer and colleagues can help the organization recover the perception of the solidarity and oneness. However, low collective trust in the employer and colleagues under individual PFP plan can reinforce the perception of mutual exploitation and the necessity to concentrate on their own interest, which will additionally lower the social cohesion and family-like perception of the organization. Therefore,

Hypothesis 2a: Collective perceptions of trust will moderate the negative individual PFP–clan culture relationship, such that it will be weaker when employees' trust perceptions are high and stronger when trust perceptions are low.

When organizations allocate higher proportion of pay based on organizational performance, “one employee’s probability of earning a bonus is positively related to another employee’s probability” (Hatcher & Ross, 1991; p.172), fostering information sharing, cooperation, and ultimately likelihood of an emergence of clan culture. When employees have high collective perceptions that all members in the organization care about each other and abide by the principles agreed among all of them, the existing solidarity and feeling of oneness under organizational PFP plan will be enhanced. On the contrary, if employees perceive that they cannot trust the employer and/or their colleagues, the positive relationship between the intensity of organizational PFP and collective clan culture perceptions will be harmed. If employees do not trust the employer, doubting that the employer intentionally devalues employees’ contribution to organizational performance in order to reduce the reward based on organizational performance, collective perceptions of solidarity and oneness will be harmed. In addition, when employees do not trust their colleagues fearing the presence of the free riders (Olson, 1965) among them who behave opportunistically under the organizational PFP plan, the collective perceptions of clan culture will also decrease. Therefore, I hypothesize that,

Hypothesis 2b: Trust perceptions will moderate the positive organizational PFP–clan culture relationship, such that it will be stronger when trust perceptions are high and weaker when trust perceptions are low.

Clan culture and organizational commitment

High interpersonal cohesion and a heightened sense of “we-ness” is major characteristics of the clan culture (Cameron & Quinn, 2006). According to SDT (Deci & Ryan, 1985), the motivation for interpersonal relatedness is an important factor of the psychological well-being of

the human being. Since clan culture satisfies peoples' innate "need to form and maintain strong (and) stable interpersonal relationship" (Baumeister & Leary, 1995; p.497), high collective perceptions of clan culture can provide pleasant work experiences to employees. Lund (2003) reported that the clan culture was positively associated with U.S. employees' job satisfaction. Furthermore, organizations with clan culture provide care to employees (Cameron & Quinn, 2006; Schuler & Rogovsky, 1998). The pleasant work experience in the clan culture can increase employees' collective organizational commitment (Meyer & Allen, 1991). Organizational commitment is "(an) attachment to the employing organization, including its goals and values" (Mowday, Steers, & Porter, 1979; p.226), which is an important antecedent of employee outcomes, such as turnover (Griffeth, Hom, & Gaertner, 2000; Mathieu & Zajac, 1990) and job performance (Mathieu & Zajac, 1990). Researchers found that group cohesiveness (Mathieu & Zajac, 1990) and clan culture enhance employees' organizational commitment (Cameron & Quinn, 2006). In the present study I propose that collective perceptions of the cohesive organizational culture will elicit collective organizational commitment. Thus, I hypothesize,

Hypothesis 3: Clan culture perceptions will be positively related to the collective perceptions of organizational commitment.

The mediating role of clan culture

Finally, I propose that clan culture perceptions will mediate the moderating effect of the PFP plan and trust perceptions on the collective organizational commitment. In this study, I expect the individual PFP to be negatively related to organizational commitment through lower clan culture perceptions, whereas organizational PFP will be positively related organizational commitment through the increased clan culture perceptions.

The higher proportion of employees' pay is based on individual performance and if employees' collective trust in the employer and colleagues decreased, the collective organizational commitment can decrease, since collective perceptions of clan culture decrease. On the other hand, when the higher proportion of employees' pay is determined by organizational performance and when employees increase their trust in their employer and colleagues, the collective organizational commitment can be increased due to the enhanced collective clan culture perceptions. In this way, organizational PFP can enhance the organizational commitment through the reinforced clan culture perceptions. Therefore, I hypothesize that,

Hypothesis 4a: The interactive effect of individual PFP and trust perceptions on organizational commitment will be mediated by clan culture perceptions.

Hypothesis 4b: The interactive effect of organizational PFP and trust perceptions on organizational commitment will be mediated by clan culture perceptions.

METHODS

Sample and data collection

The data was obtained from the fourth wave of Human Capital Corporate Panel Survey, which is a long-term survey conducted by the Korea Research Institute for Vocational Education and Training(KRIVET) in South Korea every two years since 2005. This survey provides both organizational level information such as general information, implemented human resource practices, and financial performances, as well as employee level information such as perceptions of the workplace and attitudes.

The 4th wave survey collected data from 500 organizations and 10,064 employees in 2011. The population for this survey is 4109 private South Korean organizations with more than 100 employees, the financial information for which is provided by Korea Investment Service (KIS). The survey population belongs to six industries, manufacturing, financial and insurance activities, information and communications, professional/scientific and technical activities, education, and arts/sports and recreation related services. Some industries are excluded in this survey, since they are classified either as an industry in which accumulation of human capital is meaningless or as an industry that does not have representativeness. The sample was selected based on the probability sampling method, considering the number of organizations within each industry and the size of organizations.

Different managers who are in charge of different areas completed the questionnaire collecting organizational level information. For example, managers in charge of strategic planning answered managerial items, managers in charge of human resource management responded to survey items related to HR practices, and managers in charge of human resource development answered HRD items. The questionnaire for employee level information was filled out by 7 to 15 team leaders and 22 to 41 team members in each organization. The data was collected mostly by interviews. However, the questionnaires were sent to respondents for general items which would require a lot of time to complete the questionnaire using an interview method. The response rate was not disclosed, so non-response analyses could not be conducted.

In this study, I excluded organizations with less than 10 employee respondents from the analysis to prevent the attenuation of the interrater agreement (Kozlowski & Hattrup, 1992; LeBreton & Senter, 2000; Lindell, Brandt, & Whitney, 1999). Three variables (trust, clan culture and organizational commitment) were measured at the individual level and aggregated to the

organizational level. Finally, the sample of this study comprised 322 organizations and 9,677 employees.

Measures

PFP practices. The independent variable of the study, an organization's PFP practices, was measured as the proportion of average performance related pay to annual average base pay. Specifically, HR managers answered how much monetary reward is paid based on individual and organizational performance when the basic salary is assumed 1200.

This information was provided by HR managers of each organization. Individual PFP was measured by the relative amount of average annual individual performance-based pay in the organization when average annual base pay is 1200. The mean was 27.18 and standard deviation was 66.46 (range 0 to 500). The skewness index was 3.57, which indicates that this measure is positively skewed. Therefore, the natural logarithm transformation was applied, and the natural log of independent PFP showed more normal distribution with the skewness index of 1.35.

Organizational PFP was measured by the relative amount of average annual organizational performance-based pay when average annual base pay is 1200. The mean was 83.81 and standard deviation was 167.54 (range 0 to 1200). The skewness index was 3.40, which indicates that this measure is positively skewed. Thus, the natural logarithm transformation was applied and the natural log of organizational PFP showed more normal distribution with the skewness index of .45.

Clan culture. To measure the clan culture, the survey asked employees to rate three items on a five-point Likert type scale. The three items were "My company has family-like atmosphere", "My company considers solidarity and feeling oneness as important", and "My

company consider working as a team as important”. These three items are part of 12 items, which are intended to measure the four kinds of organizational culture based on the competing value framework: clan, adhocracy, market, and hierarchy (Quinn, 1988). The Cronbach’s alpha reliability for this measure was .87.

Trust. To measure trust, the survey asked employees to rate two items on a five-point Likert type scale. The items were “In my company, colleagues trust each other” and “In this company, executives are trustworthy in all aspects.” The reliability of this measure (alpha coefficient) was .72.

Organizational commitment. To measure organizational commitment, the dependent variable of the study, employees were asked to rate three items, which cover the concept of affective commitment and continuance commitment on a five-point Likert type scale. The three items were “I regard the problem of this (my) company as my own,” “It is worthwhile to be loyal to this (my) company,” “If I decide to leave this (my) company, I will lose too many things in my life.” The alpha coefficient was .75.

Control variables. I controlled for organizational characteristics such as firm size and firm age. Firm size was controlled, because it can be associated with the use of other HR practices which might influence the collective employee attitude (Guthrie, 2000). The number of employees in the organization was used as a measure of firm size. Firm size was not normally distributed, with a skewness index of 6.07. Thus, the natural logarithm transformation was applied to this variable.

Firm age was selected as a control variable, since older firms have more time to establish HR practice within the organization (Guthrie, 2000) and send stronger message through these

practices. The firm age was not normally distributed, with a skewness index of 1.12. Thus, the natural logarithm transformation was also applied to this variable.

Annual labor cost of the organization was controlled. Pay is an important motivator and people are more likely to value pay among various work rewards (Gerhart & Fang, 2014). Thus, the amount of monetary reward provided to employees can influence employees' psychological attachment to the organization. Since the annual labor cost was not normally distributed, with a skewness index of 8.06, the natural logarithm transformation was applied to this variable.

I controlled for five HR practices, the organization's usage of internal training, external training, on the job training (OJT), suggestion system, and quality control circle, which are referred to as components of commitment-enhancing HR system (MacDuffie, 1995). MacDuffie (1995) argued that practices like "problem-solving groups, employee suggestions made and implemented, training of new employees, training of experienced employees" (p.203) enhance the commitment of employees. HR managers answered yes if the organization implemented the focal HR practice and answered no if they did not implement the focal practice. I used dummy coding, specifically, Yes coded as 1 and No coded as 0.

The implementation of employee stock ownership program (ESOP) was controlled, since ESOP was positively associated with employee commitment (for example, Kruse, 2002). Organizations were coded as 1 if they implemented ESOP, and they were coded as 0 if they did not.

The unionization of the organization was controlled. According to Freeman and Medoff (1984), unionized employees can have stronger psychological attachment to their organization and lower turnover intention, since they can solve problems in the workplace using the voice

mechanism of the union. Unionization was coded as 1 if the organization was unionized, and it was coded as 0 if it was not.

Additionally, the industry of the organization was controlled. Industry characteristics can influence the organizations' choice of PFP practices. Jackson and Schuler (1995) argued that industries have different characteristics in terms of "public vs. private sectors," "regulated vs. unregulated industries," and "high vs low stability or change," which influence the industry's form of HRM (p.251). In this study, sample organizations belonged to six industries: manufacturing, financial and insurance activities, information and communications, professional/scientific and technical activities, education, and arts/sports and recreation related services. Therefore, five industry dummies were included in the analyses.

Finally, to examine the pure effect of individual PFP and organizational PFP, I controlled for the relative amount of rewards that are provided as team-based PFP and business unit based PFP when annual base pay is 1200.

Aggregation tests

An interrater agreement index (Rwg(j): James, Demaree, & Wolf, 1984) and two interrater reliability indices (ICC(1) and ICC(2): Bliese, 2000) were examined to justify the aggregation of employee level measurement of the clan culture perception, trust, and organizational commitment to the organizational level. I calculated the interrater agreement using a uniform null distribution, since all skewness (ranged between -.493 to .001) and kurtosis (ranged between -.667 to .621) indices were within the acceptable range. For clan culture, the mean Rwg(j) was .87 (range .56-.99), ICC(1) was .13 ($F=6.16, p < .01$), and ICC(2) was .82. For trust, mean Rwg(j) was .82 (range .51-.97), ICC(1) was .15 ($F=5.68, p < .01$), and ICC(2)

was .84. Finally, for organizational commitment, mean Rwg(j) was .84 (range .52-.98), ICC(1) was .14 ($F=6.06, p < .01$), and ICC(2) was .84. All Rwg(j) estimates exceeded the suggested cutoff .80 (LeBrenton & Senter, 2007), and all ICC(2) estimates exceeded the suggested cutoff .80 (LeBrenton & Senter, 2007). Therefore, the aggregation of the three variables to the organizational level was justified.

Confirmatory factor analyses

To confirm whether the three constructs of trust, clan culture and commitment are distinct from each other, confirmatory factor analysis (CFA) was conducted using student version LISREL 9.1. Model fit was evaluated based on the indices of the chi-square statistic, comparative fit index (CFI), and root mean squared error of approximation (RMSEA). I compared three-, two-, and one-factor models. First, I examined the three-factor structure of the scale. The results indicated that the three-factor-model fit the data well ($\chi^2 = 722.63, df = 17, p < .001$; CFI= .99, and RMSEA= .07). A two-factor model in which trust and culture were collapsed into the same factor significantly decreased model fit ($\Delta\chi^2 = 985.62, \Delta df = 2, p < .001$; CFI= .97, and RMSEA= .10). Another two-factor model in which culture and commitment were collapsed into one factor also significantly decreased model fit ($\Delta\chi^2 = 4139.08, \Delta df = 2, p < .001$; CFI= .93, and RMSEA= .16). In addition, a two-factor model in which trust and commitment were combined to be the same factor resulted in a significant decrease in model fit ($\Delta\chi^2 = 2271.65, \Delta df = 2, p < .001$; CFI= .95, and RMSEA= .13). Finally, a one-factor model was tested. It appeared that the model fit of the one-factor model was the worst compared to all other models ($\Delta\chi^2 = 4457.56, \Delta df = 3, p < .001$; CFI= .93, and RMSEA= .16). Collapsing any variables into one factor resulted in a significant decrease in model fit. Therefore, it can be concluded that the

three-factor model fits the data the best. Two trust items had significant loadings (ranged .72 to .79, $p < .001$) on their intended latent variable. Three clan culture items also had significant loadings (ranged .78 to .85, $p < .001$) on their intended latent variable. Finally, three organizational commitment items had significant loadings (ranged .63 to .88, $p < .001$).

Analyses

To test the hypotheses, ordinary least squares (OLS) regression was conducted. To examine the direct, indirect, and total effect of independent variable on the dependent variables through the mediator, the conditional process analysis (Hayes, 2013) was conducted using SPSS Process macros written by Hayes.

RESULTS

Descriptive statistics and correlations among continuous variables are displayed in Table 1. As can be seen in Table 1, the correlation between the firm size and the labor cost was very high ($r = .93$, $p < .01$). Considering the potential problem of the multicollinearity, I excluded the labor cost from the analyses.

Insert TABLE 1 here

I examined whether the control variables significantly predicted organizational commitment and/or clan culture. The result indicated that larger organizations ($b = .85$, $t = 8.44$, $p < .01$) and older organizations ($b = .43$, $t = 2.04$, $p < .05$) reported significantly higher collective organizational commitment. Interestingly, organizations that implement internal training programs reported significantly lower collective organizational commitment ($b = -.26$, $t = -2.23$,

$p < .05$). In addition, larger organizations ($b = .63, t = 5.42, p < .01$) and organizations that adopted ESOP program ($b = .29, t = 2.32, p < .05$) showed significantly higher clan culture perceptions. However, organizations that adopted internal training programs reported significantly lower clan culture perceptions ($b = -.53, t = -3.91, p < .01$). Since only these four variables showed significant relationship with the dependent variable and the mediator, other control variables were excluded from the analyses.

Hypothesis 1a stated that the intensity of individual PFP will be negatively related to the collective perceptions of clan culture, whereas, Hypothesis 1b stated that the intensity of organizational PFP will be positively and significantly related to the collective perceptions of clan culture. However, as indicated in step 2 of Table 2, the intensity of individual PFP was not significantly related to clan culture and the sign contradicted Hypothesis 1a ($b = .04, t = .69, ns$). Thus, Hypothesis 1a was not supported. The results reported in step 2 of Table 2 indicate that as organizations allocated more monetary rewards based on organizational performance, the collective perceptions of clan culture were significantly enhanced ($b = .10, t = 2.26, p < .05$), which provided support for Hypothesis 1b.

In Hypotheses 2a and 2b, I expected the interaction effect of trust on the relationship between the intensity of the two PFP plans and collective perception of clan culture. As indicated in step 4 of Table 2, collective perception of trust did not significantly moderate the relationship between the intensity of individual PFP and collective perception of the clan culture ($b = -.04, t = -.65, ns$). In addition, collective perception of trust did not significantly moderate the relationship between the intensity of organizational PFP and the clan culture ($b = .02, t = .50, ns$). Therefore, Hypotheses 2a and 2b were not supported.

Insert TABLE 2 here

In Hypotheses 3, I posited that the collective perceptions of the clan culture will be positively associated with the collective organizational commitment. Step 3 of Table 3 shows that increased collective perception of clan culture is associated with increased collective organizational commitment ($b = .58, t = 15.84, p = .01$). Therefore, Hypothesis 3 was supported.

Insert TABLE 3 here

Post-hoc test

Hypotheses 4a and 4b stated that collective perception of clan culture would mediate the interactive effect of the intensity of the two PFP plans and trust perceptions on the collective organizational commitment. However, in Hypotheses 2a and 2b, the moderating effect of trust on the relationship between the intensity of the two PFP practices and the collective perception of the clan culture was not supported. Thus, testing the original mediated moderation model of hypotheses 4a and 4b was not possible. Instead, as a post-hoc analysis, I tested the mediating role of the collective perception of the clan culture in the relationship between the intensity of organizational PFP and the collective organizational commitment. Since the intensity of individual PFP was significantly associated with neither the collective perception of clan culture nor collective organizational commitment (see the step 2 of Table 3), I did not test the mediating role of clan culture in the relationship between the intensity of individual PFP and collective organizational commitment. The indirect effect of organizational PFP on collective organizational commitment through the collective perception of the clan culture was tested by SPSS Process macro written by Andrew Hayes. I used 5000 bootstrapping samples for this analysis. The result is shown in Table 4. The result showed that organizational PFP did not directly affect collective organizational commitment ($t = 1.33, ns$). However, the indirect effect

of organizational PFP on collective organizational commitment through the collective perception of clan culture was .06 with a bootstrap 95% confidence interval from .01 to .11. Since the confidence interval did not contain 0, the indirect effect was significant at the 95% confidence level (See TABLE 4). Therefore, the collective perception of the clan culture fully mediated the relationship between organizational PFP and the collective organizational commitment.

 Insert TABLE 4 here

DISCUSSION

The present study was conducted to examine the differential influence of individual PFP and organizational PFP on employees' collective organizational commitment and a mediating mechanism of firm-level clan culture perceptions. I expected that the intensity of the two PFP practices would trigger different employees' organizational culture perceptions, resulting in different organizational attitudes. The quantitative analyses confirmed this expectation. The main findings of the present study are explained below.

Consistent with the expectations, the intensity of organizational PFP enhanced the collective perception of clan culture. However, the intensity of individual PFP did not have a negative effect on collective perception of clan culture. In addition, collective trust did not significantly moderate the relationship between the intensity of PFP practices and collective perception of the clan culture. This result might have emerged due to the high correlation between the trust and clan culture perceptions ($r = .86, p < .01$).

Consistent with my expectations, high collective perception of clan culture was associated with higher collective organizational commitment. This implies that when organizations have a culture that satisfies basic human need for relatedness (Deci & Ryan, 1985),

they can expect generally more positive attitudes from their employees. Finally, in the post-hoc test, I found that clan culture perceptions fully mediated the relationship between the intensity of organizational PFP and organizational commitment.

The sample of this study was collected in South Korea with highly collectivistic national culture (Hofstede, 1983). The results that the intensity of organizational PFP enhanced collective organizational commitment through enhanced collective clan culture allude to a possibility that employees' average organizational commitment can be enhanced when organizations' implemented HR practices foster an organizational culture that is consistent with the core value of the national culture. As more reward is provided based on organizational performance, employees receive a signal that the organization values collective performance and group harmony, which is consistent with the core value of the collectivistic culture. Therefore, people from collectivistic national culture might have shown enhanced collective organizational commitment under the organizational PFP plan.

Although recent studies have shown that people from the collectivistic culture also prefer equity-based reward allocation (Bozionelos & Wang, 2007) and individual PFP (Chiang & Birtch, 2006) to equality-based allocation rule and organizational PFP plan, the results of the present research do not support this trend. The collectivists' preference for equity rule and individual based PFP as assessed subjectively by survey may differ from the collectivists' objective reaction to actual PFP practices.

Study contributions and implications

This study contributes to the HR literature in the following ways. This study suggested that clan culture mediates the relationship between the intensity of organizational PFP plan and

collective organizational commitment. In addition, the present study compared the potential difference in the attitudinal outcome of individual PFP and organizational PFP using actual organizations' PFP data rather than a survey that asks participants to report the extent to which they have positive perceptions of each PFP plans. Furthermore, this investigation extends our knowledge about how organizations' PFP practices foster collective organizational commitment. In contrast, the existing studies that deal with employee outcomes of implementing PFP usually emphasize individual level outcomes.

This investigation also provides practical implications for HR managers who are interested in knowing how their organization's use of individual and/or organizational PFP would affect the organization's average level of organizational commitment. This study suggests that as higher proportion of employees' pay is contingent on organizational performance, enhanced organizational commitment is expected through fostering clan work culture. Even though I proposed a negative relationship between the intensity of individual PFP and clan culture perceptions, the actual data collected from South Korean organizations showed the opposite tendency. This result might have emerged because the Korean employees are likely to hold internalized and strong collectivistic values that could weaken the effect of individual-based HR practices.

Limitations

The present study has few limitations. First, I proposed that individual PFP would be negatively associated with the collective perceptions of the clan culture, since employees concentrate on their own interests, which hinders fostering cohesive clan culture. However, although individuals are rewarded based on their own performance, performance evaluation

criteria might also include altruistic behaviors, such as helping coworkers. In this case, pursuit of enhanced individual performance may also heighten social cohesion and cooperation, which could foster the clan culture. However, I could not control for the above possibility, as I lacked access to such data.

In addition, I used the relative amount of average annual individual performance-based pay compared to average annual base pay as the measure for the intensity of individual PFP of the organization. However, if a small number of stars monopolize most individual performance-based bonus, most employees would receive little bonus from individual PFP plan. In this case, even if the average proportion of pay provided to employees by individual PFP plan is large, employees might not perceive individual PFP plan as a salient HR practice and show strong attitudes towards it. Unfortunately, I could not control for this possibility either.

CONCLUSION

This study investigated the relationship between two different PFP plans and collective organizational outcomes and the mediating role of the organizational culture using the sample comprising collectivistic South Korean organizations. Organizational PFP was positively associated with the firm-level clan culture perceptions. Furthermore, the collective perception of the clan culture fully mediated the relationship between organizational PFP and the collective organizational commitment. To clearly understand the effects of implementing individual and organizational PFP plan in individualistic cultures on culture perceptions and/or collective attitudes, replication of the present study in other national contexts is encouraged.

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FIGURE 1
Hypothesized Mediated Moderation Model

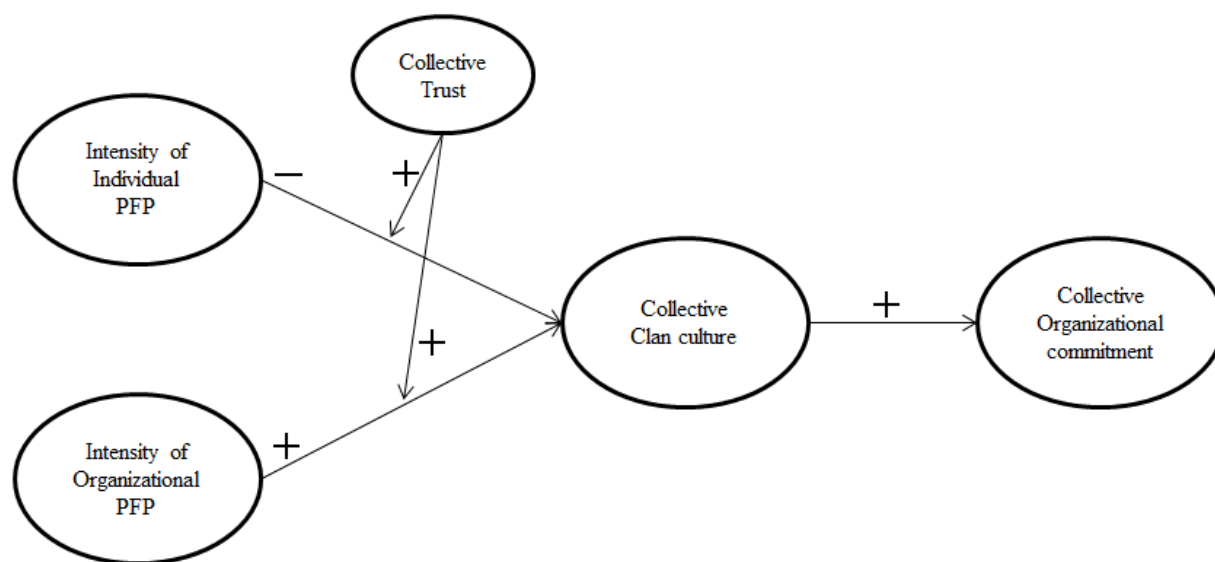


TABLE 1
Descriptive Statistics and Correlations

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. Firm size (log)	2.58	.48										
2. Firm age (log)	1.51	.22	.20**									
3. Labor cost (log)	4.17	.57	.93**	.17**								
4. Team PFP (log)	.16	.51	.18**	.12*	.17**							
5. Business Unit PFP (log)	.14	.51	.037	-.03	.03	.20**						
6. Individual PFP (log)	.47	.84	.24**	-.03	.24**	.26**	.07					
7. Organizational PFP (log)	.91	1.08	.18**	.10	.20**	-.07	-.08	-.08				
8. Trust	7.02	.60	.27**	.03	.31**	.00	-.01	.14*	.17**	(.72)		
9. Clan culture	10.60	.95	.36**	.13*	.38**	.08	.05	.13*	.18**	.86**	(.87)	
10. Commitment	10.16	.88	.51**	.22**	.52**	.06	-.01	.13*	.22**	.74**	.74**	(.75)

Note. N=315-322 organizations, depending on the number of missing values for each correlation.

Alpha coefficients are reported in the diagonals.

** p<0.01, * p<0.05.

TABLE 2
Regression Results for Collective Perceptions of Clan Culture

Variables	Step 1	Step 2	Step 3	Step 4
Constant	9.28**	9.36**	.79	.79
Firm size (log)	.57**	.51**	.24**	.24**
Firm age (log)	.22	.19	.30*	.30*
ESOP	.27*	.26*	.07	.08
Internal Training	-.50**	-.50**	-.20**	-.19**
Individual PFP (log)		.04	-.04	.23
Organizational PFP (log)		.10*	.01	-.15
Trust			1.27**	1.27**
Trust*Ind PFP				-.04
Trust*Org PFP				.02
R-squared	.18**	.20**	.76**	.76**
R-squared change	-	.01	.57**	.00
N	312	312	312	312

** p<0.01, * p<0.05

TABLE 3
Regression Results for Collective Organizational Commitment

Variables	Step 1	Step 2	Step 3	Step 4	Step 5
Constant	7.64**	7.71**	2.27**	1.17**	1.24*
Firm size (log)	.82**	.77**	.47**	.52**	.52**
Firm age (log)	.46*	.43*	.32*	.45**	.45**
ESOP	.07	.06	-.09	-.09	-.10
Internal Training	-.29**	-.30**	.00	-.03	-.04
Individual PFP (log)		.02	-.01	-.03	-.49
Organizational PFP (log)		.10*	.04	.03	.23
Clan culture			.58**	.19**	.19**
Trust				.71**	.69**
Trust*Ind PFP					.06
Trust*Org PFP					-.03
R-squared	.27**	.29**	.61**	.67**	.67**
R-squared change	-	.02*	.32**	.06**	.00
N	312	312	312	312	312

** p<0.01, * p<0.05

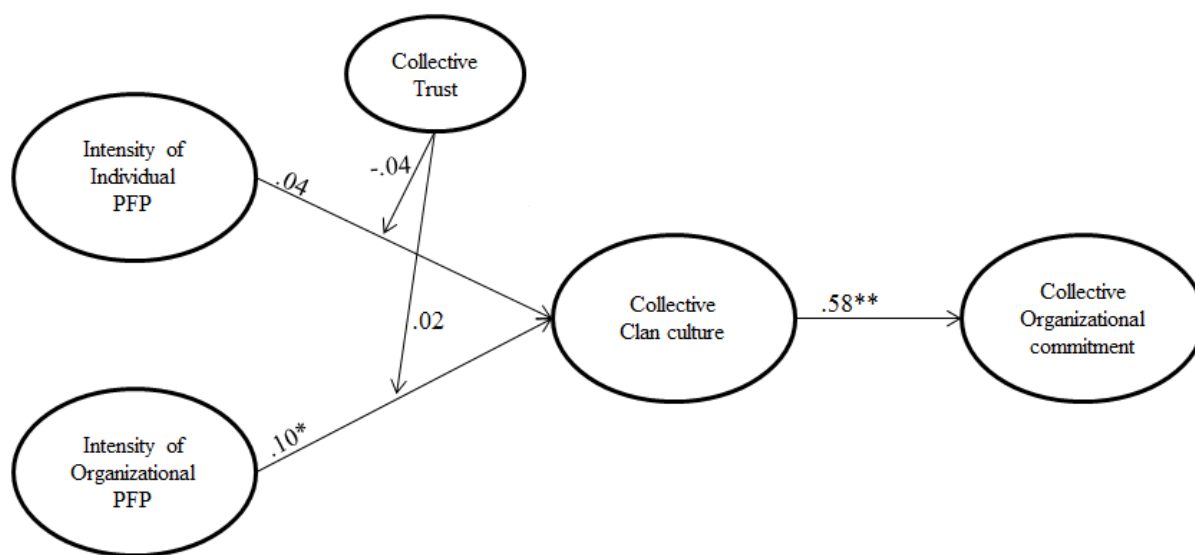
TABLE 4
Direct, Indirect and Total Effects of
Organizational PFP on Organizational Commitment

	Effect	<i>SE</i>	<i>p</i>	LLCI	ULCI
Direct	.04	.03	.18	-.02	.10
Indirect	.06	.03	.03	.01	.11
Total	.10	.04	.01	.02	.18

Note. N=316.

LLCI=lower limit confidence interval;

ULCI=upper limit confidence interval.

FIGURE 2**Final Model with Coefficients from Regression**

** $p < 0.01$, * $p < 0.05$