



DE GRUYTER
OPEN

Scientific Annals of Economics and Business
64 (1), 2017, 1-18
DOI: 10.1515/saeb-2017-0001



EFFICIENCY OF PAY FOR PERFORMANCE PROGRAMS IN ROMANIAN COMPANIES AND THE MEDIATING ROLE OF ORGANIZATIONAL JUSTICE

Sebastian URIESI*

Abstract

The present research examined the influences of pay for performance programs on employee performance in the Romanian context, by comparing a sample of employees in companies in which such programs are implemented to a sample of employees in organizations in which performance is not used as a criterion in deciding financial rewards. Results show that the work performances of the former, as evaluated by the direct supervisors of each employee, are significantly higher than those of the latter, and that this effect of performance pay is partly mediated by its positive effects on employee perceptions of distributive and procedural justice. Furthermore, results indicate that the individual – level financial incentive systems are more efficient in fostering work performance than the team – level performance pay programs in the Romanian employee sample, and that they also have stronger effects on the two dimensions of organizational justice.

Keywords: performance pay, work performance, organizational justice

JEL classification: M52, L25, D63

1. INTRODUCTION

In the current competitive economy, many companies are looking for management policies and practices that would increase the work performance of their personnel. One of the general approaches that has been developed and tested to this aim is that of using various components of the extrinsic rewards system that the organization can allocate, besides enhancing the qualities of the work tasks in order to increase employers' internal motivation. According to one of the criteria that can be applied in categorizing these components, there are two major types of extrinsic rewards that companies can distribute: financial and non-financial (Chiang and Birtch, 2006). The extrinsic non-financial rewards are organizational benefits that do not offer the employee monetary benefits, such as recognition, status, security, work conditions, etc. The financial performance rewards

* Faculty of Economics and Business Administration, Alexandru Ioan Cuza University of Iași, Romania;
e-mail: sebastur72@gmail.com.

include indirect forms of retribution, such as health or educational benefits, as well as direct financial rewards apart from the employers' base pay or basic salary, that are allocated when they reach a certain level of performance on their job. While base pay is mostly related to the value of one's job, both for the organization and in relationship to the outside job market, the variable financial rewards (both direct and indirect) that one receives are strictly dependent on the performance of the person holding the respective position in the company.

The potential of financial rewards to motivate employees has long been recognized, and companies have developed complex rewards policies and systems of distributing these rewards. The general term that labels the strategic use of money in order to increase the employers' performance or contribution is "pay for performance programs" (Gerhart and Fang, 2014). They have gradually become frequent in the Western companies; for instance, a survey of more than 1600 companies showed that 61% of them had implemented a form of pay for performance plan (Hein, 1996). There are two major categories of such programs (Rynes *et al.*, 2005; Armstrong and Murlis, 2004): individual performance pay systems (such as bonus schemes, sales commissions, piece rates) and collective (group or team-based pay plans, such as gain sharing, profit sharing, employee stock ownership plans). Most are short-term incentive systems, in that they involve periodical performance evaluations (over a period of maximum one year) and subsequent distribution of appropriate rewards. In other cases, such as the stock ownership programs or the profit sharing through contributions to employees' retirement accounts, employees receive their rewards at a later time, for instance at the moment of their retirement in the latter example. The focus of our study is on the first category of pay for performance programs, more specifically on their actual performance effects in a sample of Romanian – based companies, and on the mechanisms on this presumed effect. Generally, the specific design of these plans varies from one company to another and even within the same organization as a function of job level, type of work tasks and the organization of the work flow, as well as of the current strategy of the respective company (Gomez-Mejia *et al.*, 2010; Milkovich *et al.*, 2013). These factors lead to major differences among specific pay for performance plans that have been implemented in what regards several important parameters, such as the criteria employed in order to evaluate employers' performance (behaviors, company profits, production figures, etc.), the organizational level on which the plan is focused (individual, team, department, etc.) and the size of the financial rewards that employees can receive (Gerhart and Rynes, 2003).

2. EFFECTS OF PAY FOR PERFORMANCE PROGRAMS

2.1 Positive effects

The widespread use of pay for performance plans in the last decades has allowed scholars to collect a vast amount of information concerning their presumed effect on employers' performance. As a general conclusion, most of these plans lead to significant increases in productivity. For instance, a meta-analytical review of the studies on this topic revealed that overall two out of three pay for performance programs improve employers' performance (Heneman *et al.*, 2000). Consequently, they seem to have a positive impact on the overall productivity of the company; for example, a study (Locke *et al.*, 1980) reported a 30% increase in productivity after the implementation of such programs. Moreover, they contribute to the profit of the company; in this respect, Gibson (1995) reported a 134%

average return of the investments in pay for performance plans, suggesting that the increases in individual workers' performance is substantial enough to translate into financial benefits for the company as a whole.

The most prevalent effect of these plans is to foster employers' consequent work performance by offering them an incentive for their increased efforts. In terms of the expectancy theory (Vroom, 1964), as the valence of the rewards promised for a higher level of effort increases (as in the case of the financial incentives that companies put at stake in their pay for performance programs), employers' motivation and consequent performance also increases. Thus, they become motivated to perform to the best of their potential, which leads to significant improvements in performance in the case of a substantial percentage of them. This incentive effect has been documented at the individual level by analyzing various types of performance measures (Gerhart and Fang, 2014; Gupta and Shaw, 2014) that indicated a significant increase in most of workers' performance during the implementation of pay for performance programs.

Furthermore, detailed investigations of the effects of pay for performance programs in various companies revealed a second, more general, phenomenon that contributes to their overall benefits, namely a sorting effect at the level of the workforce composition (Gerhart and Milkovich, 1992; Rynes, 1987; Trevor *et al.*, 2012). Specifically, pay for performance plans not only stimulate the productivity of most employees, but they determine a high percentage of less productive workers to quit the company, due to the high pressures of such plans, which involve a more serious and throughout performance evaluations. These employees who prove to be unable to cope with the managerial practices of the pay for performance program implemented in their company are then replaced with more productive workers (Cadsby *et al.*, 2007), thus increasing the overall productivity output of the company workforce. Thus, pay for performance programs help not only in motivating current employees, but also in improving the composition of the workforce in terms of employees' abilities to perform, by keeping the high performers in the company and attracting new employees who would invest a greater amount of work effort than those who they replace.

The two effects of pay for performance plans described above – motivating individual workers and sorting the workforce – seem to lead to a higher efficiency of these managerial interventions in comparison to other types of performance enhancement programs. For instance, a meta-analysis (Locke *et al.*, 1980) of studies that tested the effects of various managerial practices aiming to foster employers' efforts and performance showed that the average positive effect of pay for performance programs reported in these studies was an increase of 30%, much higher than the effect of job enrichment interventions (ranging from 9-17%) and that of programs based on involving employees in managerial decisions (less than 1% on average). Similarly, another systematic review (Guzzo *et al.*, 1985) concludes that the effect of pay for performance plans on productivity is four times larger than that of managerial interventions focused on stimulating employees' intrinsic motivation towards their work tasks.

2.2 Negative effects

Besides the overall increase in productivity documented by many investigations of the consequences of pay for performance plans, several studies have also been highlighted certain negative consequences that, at least in the long run, can also affect the performance of the whole organization. One of the risks of these programs is that they could work too

well, in the sense that employees could become excessively focused on the outputs and behaviors required in order to receive the promised financial rewards, thus ignoring other behaviors and results that are still important for the company (Wright *et al.*, 1993; Beer *et al.*, 2004). For instance, when the financial incentive program rewards the quantity of a specific output, employees could focus on delivering the highest possible quantity irrespective of the quality of the respective products, or they could cut their efforts towards other aspects important for the organization, such as customer satisfaction. This risk is high especially in the jobs that involve complex activities where the performance evaluation system does not cover all the relevant dimensions.

Relatedly, another negative effect that pay for performance programs have been accused of having is that of affecting a specific type of work behaviors, namely cooperation between employees, especially when they are evaluated and rewarded according to individual performance criteria. Consequently, there have been scholars who claimed that such programs have destructive effects on teamwork (Kohn, 1993); of course, when collaboration between employees is essential for the company, collective instead of individual pay for performance plans can be designed, thus offering incentives at the team level and stimulating (instead of affecting) teamwork. Yet, there is another social risk that these programs generate, namely that of affecting the personal relationships between employees, due to the fact that they receive unequal financial rewards. For instance, only 12% of employees who participated in a research (Marsden and Richardson, 1994) declared that the pay for performance program implemented in their company increased their work motivation, and that instead its most significant effect was to generate jealousy among them. Similarly, the participants in the Marsden *et al.* (2001) study evaluated the motivational effect of the current pay for performance plan in their organization as lower than its negative consequences on work place relationships.

Another important risk of these programs that has been suggested both by some empirical studies and by specific theoretical models on motivation is that of diminishing employees' intrinsic motivation towards their work activities (Pfeffer, 1998; Kohn, 1993). The logic of this argument is that extrinsic incentives for specific behaviors undermine one's intrinsic motivation to perform that behavior, especially when it requires creativity. The theoretical background of this criticism is, first, that of Herzberg (1968) influential model of work motivation, according to which money belongs in the "hygiene" motivational category; thus, they cannot stimulate one's motivation to work, irrespective of their amount, but they could only diminish workers' motivation when salaries are below a certain level. Furthermore, Deci and Ryan (1985), in their Cognitive Evaluation Theory, suggested that money affect work motivation, as employees could come to identify the promised financial rewards as the main source of their efforts instead of their genuine interest in performing the respective work behaviors. Yet, several studies contested this position, showing that the detrimental effects of financial rewards on intrinsic motivation are much lower than initially presumed, and that in some cases they can even have positive effects on the interest that workers have in their work tasks (Gagne and Deci, 2005; Gerhart and Fang, 2014).

One of the factors that has been suggested as critical for the success or, alternatively, for the magnitude of the negative consequences of the pay for performance programs is the national culture of the country in which the respective organization operates (Hofstede, 2001). Even on the main dimension of analysis, that of their motivational effects, comparisons between the results of similar such programs implemented in different countries have revealed great variations in the efficiency with which they are able to foster

employees' performances. For instance, studies on the productivity increases brought by such plans indicate that these increases vary from 2% in the French organizations (Cahuc and Dormont, 1997) to 7 – 11% in Italy (Origo, 2009) and over 40% in the United States (Lazear, 2000), although other papers (Fischer and Smith, 2003) suggest that national differences are smaller. Thus, paying for performance might not be a universal solution, and the in-depth analysis of the effects of these programs in each national culture in which they have been adapted appears to be warranted. The goal of the study reported in the present paper was to test the efficiency of the financial incentive systems implemented in a sample of companies located in a specific national space – the Romanian one –, as well as the degree in which their influence is mediated by two subjective dimensions, namely organizational justice and trust in management.

3. ORGANIZATIONAL JUSTICE

Organizational justice is defined as the fairness of the decisions made within an organization, more specifically to the employee perceptions on this topic (Leventhal, 1976). The two most important dimensions of this general concept are distributive and procedural justice (Alexander and Ruderman, 1987; Roth, 2006). Distributive justice refers to the fairness perceptions of the outcomes of the decisions that affect employees in a certain way. With regard to financial decisions, it concerns their evaluation of the fairness of the allocation of financial resources among employees. Procedural justice refers to the fairness perceptions of the procedures that come into play in these decisions, for instance of the evaluation methods and criteria used in deciding financial rewards or pay levels within the organization. The theoretical origin of organizational justice is equity theory (Adams, 1965), according to which the degree in which employees perceive the managerial decisions that personally affect them as equitable is paramount for their subsequent behavior, including their work effort investments. In evaluating equity, they compare themselves to their colleagues, by computing a ratio of inputs (previous experience, qualification, efforts, contributions, etc.) to outputs (the rewards one receives from the organization, in terms of pay, current status, benefits, etc.). The inequity perceptions appear when one's personal ratio is evaluated as inferior to that of other employees, for instance when they perceive their efforts and general inputs as higher than those of their colleagues, even though the outputs received from the company are the same. Consequently, most employees tend redress the balance and reestablish equity by diminishing their inputs, which frequently entails investing lower levels of effort than before.

This general mechanism posited by equity theory has been confirmed by studies that have documented various effects of the two types of organizational justice. They have shown that distributive and procedural injustice negatively affects organizational identification (Kwon *et al.*, 2008), pay satisfaction (DeConinck and Stilwell, 2004), and work motivation (Cropanzano and Rupp, 2003) and performance (Colquitt *et al.*, 2001). On the other hand, such negative perceptions of organizational justice increase employees' turnover intentions (Lum *et al.*, 1998), the frequency of counterproductive behaviors and workplace conflicts (Cohen-Charash and Spector, 2001), as well as that of work withdrawal behaviors (Pinder, 2008).

Previous results also suggest that in what concerns the financial matters, the main criterion that employees use in assessing organizational justice is the factor based on which their company makes decisions regarding the differential allocation of pay among

employees. When the factors of the pay differences among staff are perceived as legitimate, the outputs of these decisions and the procedures in themselves are less likely to be perceived as inequitable (Downes and Choi, 2014). Since work performance is perceived as one of the most legitimate factor for differentiating among financial rewards (Shaw and Gupta, 2007), perceptions of organizational justice in companies that implement pay for performance programs should be higher than in the other organizations, which base their pay policies on other criteria, unrelated to performance and consequently less accepted by the employees as being fair. This idea is further supported by empirical results (Shaw *et al.*, 2002) showing that large differences in pay have a positive effect on work performances in companies using financial incentive systems, while having the opposite, detrimental effect on performance in companies in which financial retributions are not based on performance. In this line of argument, the explanation for these contrasting influences of pay variation might be the opposite perceptions of organizational justice concerning pay allocations in the two types of companies.

Studies conducted in companies that do not distribute pay according to performance indicate that base pay is another factor of organizational justice, although its influence is limited in what concerns employee perceptions of distributive justice (Sweeney, 1990; Tekleab *et al.*, 2005). Lower base salaries tend to be associated with more negative perceptions concerning the equity of the distribution of pay in the organization. Consequently, we also included base pay as a potential factor of distributive justice in our research, testing its influence not only in companies implementing pay for performance plans, but also in those in which pay variations are not determined by employee performance.

4. AIMS AND HYPOTHESIS

The objective of our empirical research was to examine the influence of pay for performance programs on employee work performance, by comparing a sample of employees from private companies currently implementing short-term pay for performance programs (with a frequency of reward distribution of at least once a year) to an equivalent sample from private organizations that do not use performance as a criterion in deciding pay. Besides the investigation of the actual performance incentive effect of these programs, which has been documented in previous research, our study has two contributions. First, it examines this effect in a new cultural space, the Romanian one; thus, its results can extend the current knowledge on the inter-cultural variability of the efficiency of these managerial practices. Second, it aims to examine one of the potential mechanisms of the impact of financial incentive systems on performance, by studying two potential mediators of this effect, namely distributive and procedural justice. Our hypothesis in this regard is that employees in companies that implement pay for performance programs have more positive perceptions on these two dimensions regarding the issue of pay allocation in their organizations. Furthermore, we hypothesize that these differences between them and the employees in companies that are not using such programs lead to significant variations in work performance; specifically, we expect employees who are financially rewarded according to their performance to also have higher performances in their jobs, and this difference to be determined, at least in part, by the differences between the two groups in what regards their perceptions of distributive and procedural justice.

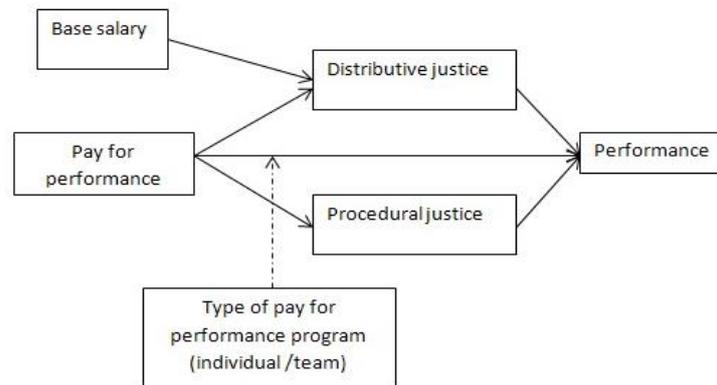


Figure no. 1 – The hypothesized model of relationships between pay dispersion, base salary, distributive and procedural justice, and work motivation

Another objective of our research was to investigate the differences between the two general categories of pay for performance plans – individual and collective – in what concerns their effects on performance and on organizational justice. To this aim, we compared employees in the two types of companies differentiated according to the unit of performance evaluation and reward (individual or team) on these dimensions. In other words, we will examine whether this variable (the level of incentives) moderates the influence of pay for performance programs on organizational justice and on the consecutive employee performances. The model that we tested in our study, displaying the hypothesized relationships between all variables, is presented in [Figure no. 1](#).

5. METHOD

5.1 Participants and procedure

First, we identified 25 companies in the Iasi County, Romania currently implementing short-term pay for performance programs over a time period of more than a year, and 12 companies in the same region in which employees' performances over the previous period are not used as criterion in deciding pay. Then, we contacted the management representatives of these organizations; we explained the aims of our research and its methods, and we requested access to their employees and to salary data. We were granted access to twenty-four of these companies (16 using financial incentive systems and 8 not using such programs). Next, we contacted a sample of potential respondents that next included 462 employees of these organizations, through a human resource representative in their company, who distributed the survey that included the items of our research instruments. In selecting the sample of respondents we used the method of stratified random sampling in each of the companies, by first splitting the population of employees into departments, and then selecting – in collaboration with the human resource representative of that company - a simple random sample within each department that included about half of its employees. The survey also required respondents to insert their names. This was necessary in order to allow us to match respondents' responses to other information, specifically the data concerning the pay for performance program implemented by the company (if any), their performance evaluation and

their current base salary. This method has been used in several studies on the associations between employee-level subjective variables, such as perceptions and attitudes, and objective organizational – level information (e.g. [Tekleab et al., 2005](#)). Participants were assured of the confidentiality of their responses to our research instruments.

There were 51 participants who refused to divulge their identity in the survey (30 in the companies implementing pay for performance pay and 21 in the other category of organizations). The final sample included 411 participants (89 per cent of the initial sample of employees we contacted), out of which 126 (31 per cent) were employed in companies that were not using financial incentive systems and 285 (69 per cent) in companies using such programs; among the latter category, 156 employees (38 per cent of the final sample) were working in companies implementing individual – level pay for performance systems (bonus schemes and sales commissions), while the other 129 (31 per cent) were employed in companies using team – based incentive plans (variations of the gain sharing incentive system). Participants' work sector distribution was: 70 (17%) in the banking sector, 81 (19.7%) in the health sector, 94 (22.9%) in the industrial sector, 26 (6.3%) in the private school sector, 90 (21.9%) in the sales sector, 34 (8.3%) in private consulting, 16 (3.9%) in other types of businesses. We received from each company information concerning the type of pay for performance program (if any) that was currently implemented in the department in which our participants were employed and their current base salary. Base salaries ranged from 900 RON to 3200 RON. Also, we received from the companies an evaluation of the current work performance of each of their employees included in our study. Specifically, each employee was evaluated on the Work Performance Scale ([Welbourne et al., 1998](#)), presented in the following section, by a direct supervisor who has full knowledge on the work behaviors and results of the respective employee.

5.2 Instruments

Work performance was evaluated with an instrument including items adapted from the Role Based Performance Scale developed by [Welbourne et al. \(1998\)](#) across studies on the differences between large and small companies regarding the types of performance they encourage in their employees, respectively on the effect of gain sharing practices. The instrument has also been used in research on the relationships between work – related stress factors and performance ([Wallace et al., 2009](#)), the role of personal traits in the display of positive work behaviors ([Judge and Erez, 2007](#)), etc. The scale is administered to a direct supervisor of the employee who is evaluated. The original instrument included 20 items, distributed in 5 factors (job, career, innovation, team and organization), each addressed by 4 items. Taking into account the relative high numbers of employees that some of the supervisors who contributed to our data collection had to evaluate, we preferred to shorten the instrument by choosing from each four item set corresponding to the five factors only two items. Consequently, the version of the performance scale that we used includes 10 items. A similar adaptation approach of the Role Based Performance Scale was employed in previous studies (e.g. [Zhang and Venkatesh, 2013](#); [Mafini, 2015](#)).

Each of the 10 items represents a specific area of the contributions of the employee to the success of their organization, for instance “the quality of work output”. The evaluator is required to appreciate the current work performance of the respective employee on a response scale that ranges from “1 = Needs much improvement” to “5=Excellent”. Higher overall scores indicate higher work performances.

Distributive justice was measured with the scale developed by [Brashear et al. \(2004\)](#) and used in other research, for instance on the associations between distributive justice and relationships among staff ([Chan and Jepsen, 2011](#)) or job satisfaction ([Ladebo et al., 2005](#)). The 7-item instrument addresses employee perceptions of the distribution of the financial rewards in their company in relationships to their various organizational contributions or inputs (effort, responsibilities, quality of work output, etc.). Higher overall scores indicate perceptions of adequate distributive justice.

Procedural justice was measured with the scale developed by [Tekleab et al. \(2005\)](#), a 2-item instrument that requires respondents to evaluate the correctness of the procedures used by their company in the process of determining financial rewards for its employees. The response scale ranges from 1 – “not all correct” to 6 = “absolutely correct”. Higher overall scores indicate adequate procedural justice.

5.3 Data analysis

First, we computed the mean inter-item correlations of the items in our instruments in order to evaluate their internal consistency of our research instruments, and then we computed the Pearson product moment correlations between variables. The results of these analyses, performed in SPSS 15.0, and the means and standard deviations of all variables are presented in [Table no. 1](#). In the following stage of analysis, we used the structural equation modeling in AMOS 18.0 in order to evaluate the adequacy of the causal model we hypothesized between the use of pay for performance programs, distributive and procedural justice and work performance. This approach was developed for the estimation of the statistical adequacy of a complex model, that includes multiple simultaneous relationships, through specific indexes that offer information concerning the goodness-of-fit of the model to the empirical data ([Byrne, 2001](#)), as well as on the possible ways in which statistical adequacy of the model can be improved. In the final step, we tested the moderating effect of the level of the financial incentive systems implemented in the companies in our sample. To this aim, we compared, through univariate analyses of variance, the two types of employees differentiated by this variable (respectively employees in companies using individual – level programs and those in organizations with team – level incentive schemes) in what regards their performances and their perceptions of distributive and procedural justice.

6. RESULTS

The inter-item correlations in [Table no. 1](#) show that the three research instruments, concerning organizational justice and work performance, instruments have satisfactory internal consistency. The correlations between variables correspond to our assumptions, as all relationships are significant and positive, with work performance significantly and positively related to distributive and procedural justice, and base salary associated to distributive justice.

In order to test the relationship between pay for performance and the other variables of our study, we compared, through a t Student test of mean differences, the employees in companies using such programs and to those in organizations that do not use financial incentive systems on each of the four variables. Results show that employees in the first category ($M = 37.36$) have higher performances ($t(409)=12.34$, $p<.01$) than those in companies in which pay is unrelated to performance ($M = 32.26$). Similar differences were revealed for the two dimensions of organizational justice, with employees in companies using

performance pay ($M = 31.66$ for distributive justice and $M = 7.03$ for procedural justice) scoring higher ($t(409)=16.67$, $p<.01$ for distributive justice, respectively $t(409)=12.94$, $p<.01$ for procedural justice) than those in organizations in which pay is unrelated to performance ($M = 22.66$ for distributive justice, respectively $M = 4.02$ for procedural justice).

Table no. 1 – Means, standard deviations, internal consistency and Pearson correlations between variables

| | Mean | SD | Mean inter-item correlation | 1 | 2 | 3 | 4 |
|-------------------------|-------|------|-----------------------------|------|------|------|------|
| 1. Performance | 36.07 | 4.86 | .38 | 1.00 | .47 | .50 | .21 |
| 2. Distributive justice | 32.4 | 4.23 | .40 | | 1.00 | .44 | .31 |
| 3. Procedural justice | 6.8 | 2.24 | .36 | | | 1.00 | .21 |
| 4. Base salary | 1607 | 240 | - | | | | 1.00 |

All correlations are significant at the .01 level

In the second stage of analysis, we used structural equation modeling in order to examine whether the model that we hypothesized has an adequate fit to the data when considering simultaneously all the relationships that we presumed between the variables investigated. We took into consideration we used the following indexes in order to evaluate the goodness-of-fit of the model: the chi-square statistic, the Goodness of Fit Index (GFI), the Comparative Fit Index (CFI), the adjusted goodness-of-fit statistic (AGFI) and the Root Mean Square Error of Approximation (RMSEA). We also analyzed the Modification Indexes generated in the AMOS 18.0 output, which indicate the possible modifications of the model, in terms of supplementary relationships to be added, that could increase its goodness-of-fit.

Results revealed the following indexes of model fit: $\chi^2_4 = 47.31$, $p < .001$; CFI = .96, AGFI = .84, GFI = .96; RMSEA = .16. Some of these parameters, especially the values of AGFI and RMSEA indexes, indicate a poor fit of the model to the data, when comparing them to the guidelines concerning the accepted values and intervals of these fit indexes (Bagozzi and Yi, 1988; Byrne, 2001). Thus, we analyzed the modification indexes in order to identify the changes in the hypothesized model that could increase its statistical fit. These indexes indicated that one addition that would significantly increase model fit would be a causal relationship from base salary to the variable “use of pay for performance”. We re-specified the model by adding this relationship and re-analyzed its model fit. The indexes resulted in this second phase were: $\chi^2_3 = 10.6$, $p = .014 < .05$; CFI = .99, AGFI = .95, GFI = .99; RMSEA = .078 (with a 90% confidence interval .03 – .132). They indicate an acceptable level of fit of this model to the data, all indexes corresponding to the recommended standards and intervals. Moreover, all estimated parameters (regression weights between variables) were significant at the .05 level, and there were no additional modifications that would increase its fit. The final model with the standardized regression weights that describe the strength of the influences between variables is presented in Figure no. 2.

Most of the values of the standardized regression weights between the variables in the model confirm our hypotheses. The sign of the relationships between the variable “pay for performance” and the others should be interpreted by taking into account the coding of the two groups of this variable in the data base, where employees in companies using pay for performance programs were coded “1”, while the others were coded “2”. Consequently, the value of the standardized regression weight of the influence of performance pay on performance (-.25) indicates that employees in companies that use financial incentive systems have significantly higher work performances than those in organizations in which pay is

unrelated to performance. Similarly, employees in the former category perceive significantly higher levels of distributive and procedural justice in their organizations. Moreover, the main contribution of this set of results is to attest the fact that both dimensions of organizational justice are mediators of the effect of performance pay on employee performance. Thus, performance pay influences performance through two types of effects: a direct effect and an indirect effect, mediated by distributive and procedural justice.

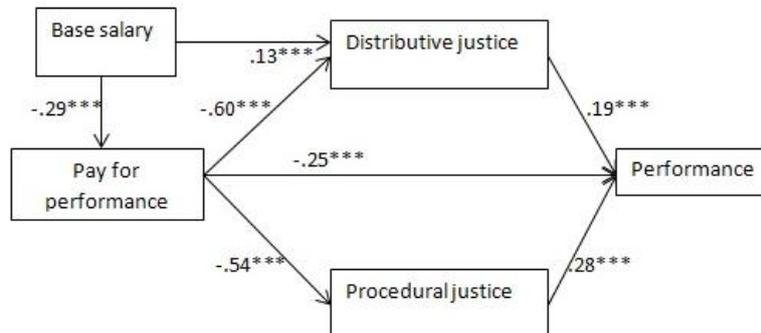


Figure no. 2 – The standardized regression weights of the effects in the final model
 *** $p < 0.001$

Another result in line with our hypotheses is the influence of base salary on distributive justice, confirmed also by this data analysis approach that takes into account all the variables and relationships at once. There is also a relationship that we did not expect, but which emerged as significant, specifically the effect of base salary on performance pay. The negative value of the standardized regression weight between the two variables (-.29) indicate that performance pay is more frequent in companies in which employees have higher base salaries. On the other hand, the strength of this effect is quite low, since the percentage of variance in using performance pay that is explained by base salary is only 8.6%. Comparatively, the other variables in the model have much higher percentages of variance that are explained by their predictors: .36 for work performance, .42 for distributive justice, respectively .29 for procedural justice.

The final stage of analysis was focused on the differences between employees in companies using individual – level programs and those in organizations with team – level incentive schemes on work performance, respectively on distributive and procedural justice. We used One-Way ANOVA tests to compare these two groups, as well as each of them to the group of employees in companies that do not use financial incentive systems. Significant differences emerged on all three variables: $F(2, 408) = 106.77$ for work performance, $F(2, 408) = 149.17$ for distributive justice, and $F(2, 408) = 169.83$ for procedural justice. Next, we used post-hoc Tukey's pairwise comparisons between the three groups. The pattern of differences was the same on all the three dimensions, with employees in companies using individual – level pay for performance programs ($M = 39.17$ for work performance, $M = 32.56$ for distributive justice and $M = 8.17$ for procedural justice) scoring significantly higher ($p < .01$ in all cases) than those in companies using team – level pay for performance programs ($M = 36.06$ for work performance, $M = 30.53$ for distributive justice and $M = 5.65$ for procedural justice). Both groups scored significantly higher than employees in organizations that do not use financial incentive systems (whose means are reported above) on all three variables.

7. DISCUSSION AND CONCLUSIONS

Performance pay has become more and more frequent among the managerial practices used by companies, especially among those located in the U.S. and Western European countries, in order to foster employee motivation and productivity. Nevertheless, the universal efficiency of this approach is still a debatable issue, as there are scholars and studies that highlight the cultural variability of its influence. Our research focused on the Romanian context, and its results show that performance pay has a significant positive effect on employee performance, as evaluated by direct supervisors. Thus, as revealed by other studies on the same topic (e.g. Gerhart and Fang, 2014; Engelland and Riphahn, 2011; Della Torre *et al.*, 2014) conducted in different cultures, allocating supplementary financial rewards for certain levels of performance on the job has a substantial incentive effect on employees, who intensify their efforts in order to maximize their pay. Consequently, they reach significantly higher levels of performance in comparison to those of the employees in companies in which pay is not decided upon performance – related criteria.

Nevertheless, performance pay might have, even in the Romanian companies, some of the negative effects that have been highlighted in previous studies. For instance, they could excessively focus employees on the results that would help them reach their performance targets (Wright *et al.*, 1993), they could affect relationships among staff (Marsden and Richardson, 1994), or they undermine employees' intrinsic motivation towards the tasks that they are externally motivated to perform under the pay for performance program (Pfeffer, 1998). Yet, our study did not use the necessary methods in order to detect such effects. Further studies should take into consideration these potential negative influences of financial incentive systems used by Romanian companies on their employees, either by comparing them with samples of employees in organizations that are not implementing performance pay or by evaluating the changes in work behaviors, team relationships and intrinsic motivation that are generated by the introduction of such programs.

Our results also show that the effect of performance pay on actual employee performance is mediated, in part, by the two dimensions of organizational justice that we included in our study: distributive and procedural justice. The role of organizational justice in mediating the aforementioned effect is in line with previous studies that highlight the importance of the perceived legitimacy of the factors that determine pay (Downes and Choi, 2014). When employees perceive them as legitimate, both procedural justice (focused on the criteria and procedures used by the company in its compensation – related decisions) and distributive justice (concerning the output of these decisions and the differences among employees in what regards their financial rewards) are high. The pattern of results of our research suggest that Romanian employees perceive work performance as a legitimate criterion for generating pay differences among staff, similarly to their counterparts in other countries in which studies on this topic have been conducted. Consequently, those working in companies that implement pay for performance programs have more positive evaluations of their company in what regards organizational justice, compared to those employed in companies in which pay differences are not related to performance, a result paralleling that of previous studies (Shaw *et al.*, 2002).

The mediational role of organizational justice is further played by its significant effect on work performance, in line with previous results on the relationships between the two (Colquitt *et al.*, 2001) that show the employee perceptions of the pay distribution and of the decisions behind pay differences among staff as inequitable lead to detrimental effects on work

motivation. Moreover, studies show that this negative influence of low organizational justice on performance, revealed also by our results in companies that do not use performance as a criterion in deciding pay, also extends on other important organizational variables, such as turnover intentions (Lum *et al.*, 1998), organizational identification (Kwon *et al.*, 2008), counterproductive behaviors and workplace conflicts (Cohen-Charash and Spector, 2001), etc. Thus, negative perceptions of distributive and procedural justice can become a major problem for a company. In the case of the organizations in which they are related to the compensation system, such as those in which pay is decided upon other factors than performance, one way in which management could address this issue is through clear and open communication with employees about these factors (Shaw and Gupta, 2007), in which the latter should be explained the legitimacy of the criteria that create pay differences among staff.

The main contribution of our empirical results to the existing literature in the field consists in revealing the connections between all these three layers of analysis, specifically pay for performance programs, organizational justice and actual employee performance. While each of the previously mentioned research programs (Shaw *et al.*, 2002; Colquitt *et al.*, 2001) focus on one of the relationships between these variables, our study shows that the influences of the organizational decisions concerning pay extend through multiple layers, affecting work performance through their effect on organizational justice.

In our Romanian sample, the use of pay for performance programs emerged as dependent, in a certain degree, on the employees' base salaries. We can interpret this result as indicating a tendency among Romanian companies – at least among those located in the Iasi county – to use financial incentive systems mostly for jobs with higher salaries, in other words for higher level jobs, while jobs at the lower – end of the organizational hierarchy tend to be left out of these systems. On the other hand, the difference might also be determined by differences in what regards the type and the content of the jobs in the two categories, which might be related, in turn, to differences in base pay. In other words, employees in certain work sectors in which base pay is higher might also have job tasks for which pay for performance programs are easier to implement. One of the limits of our study, due to sample size limitations, is that we did not include enough representatives of all the work sectors analyzed in order to be able to perform the necessary analyses that would test this possibility. Finally, another potential explanation of this effect of base salary on the use of performance pay concerns the company in itself and not the actual job: it is possible that low base salaries to be paid in companies with low compensation budgets, which, subsequently, do not afford to invest in financial incentive systems. The dependency of performance pay on the budgets that companies are willing or able to invest for motivating their employees has been previously highlighted (Armstrong and Murlis, 2004). Future studies could examine the source of this relationship and reveal the factors that differentiate both between the Romanian companies that implement performance pay programs and those that do not, as well as between the type, the content and the hierarchical position of the jobs included in such programs and those that are not.

Another type of effect of performance pay on performance revealed by our results was the direct relationship between the two. Thus, besides the influence of the former that is mediated by the two dimensions of organizational justice, performance appears to be also directly impacted by the use of performance pay. This result can be explained in the framework of the expectancy theory (Vroom, 1964): the supplementary rewards allocated in these programs for high performers increase the valence of the rewards that the employee has the opportunity to gain from his/her company, which, in turn, significantly fosters the

motivation to perform the necessary behaviors required in order to obtain them. Moreover, the relationship that our results revealed could also include certain mediators that were not taken into consideration in our study, due to our specific focus on organizational justice. Further studies should extend this analysis by addressing other variables that might play a significant part in this relationship, since the identification of such mediators could enrich the theoretical modeling on the effects of performance pay on work motivation and performance.

Because of the transversal design of our study, our results could examine only one of the effects through which performance pay has been shown to increase the general productivity of the companies, namely the incentive effect, localized at the individual level of the employees in our sample. Future studies could test whether performance pay also has the second, more general effect, of “sorting” employees (Gerhart and Milkovich, 1992) and improving the composition of the workforce due to the implementation of financial incentive systems. This research aim would require a longitudinal investigation of the long-term effects of these systems both in terms of individual performance and of the productivity of the employees hired after their implementation in comparison to that of those who quit. Such a design was used, for instance, by Lazear (2000) in an automobile glass installation company; this study revealed both types of effects: on the one hand, a substantial proportion of the workers increased their productivity (the incentive effect), while on the other the general productivity of the company was also increased due to the replacement of less productive workers with employees who delivered higher work performances for the company (the sorting effect).

Moreover, our results also contribute to the literature by pinpointing another factor of the efficiency of pay for performance programs, namely the unit of performance evaluation and reward. In this regard, our comparisons between the two types of performance pay programs – individual and collective – revealed significant differences between the two corresponding groups of employees on all the three variables under scrutiny. Those in companies using individual – level financial incentive systems perceive higher levels of organizational justice in their workplaces and, partly as a consequence, have higher performances. Thus, the type of performance pay program moderates the strength of the influence of performance pay: the positive effects of this managerial practice appears to be stronger when the unit of performance evaluation and rewarding is the individual employee, compared to the team – level incentive systems. Previous studies noted several deficits of the collective performance pay approach, especially the “free – rider problem” (Kidwell and Bennett, 1993; Rynes *et al.*, 2005), which is generated by the fact that in this approach employees have to equally share the payouts of their efforts; consequently, many individuals frequently cut back on their own effort, in order to maximize their ratio of rewards to inputs or, in other words, to obtain their share of payouts with a minimal investment of personal effort. This phenomenon would explain the lower individual performances of the employees in collective financial incentive systems compared to that of the employees who are evaluated and rewarded individually, and it might explain to a certain degree the lack of efficiency of pay for performance programs that have been reported in certain studies (e.g. Mattson *et al.*, 2014). It would also explain the differences between them in what regards distributive and procedural justice, since the pay allocated to each individual is more dependent on his/her individual performance in the latter case than in the programs in which the main factor is the performance of the whole team. Further studies could extend the investigation of the differences between the two types of performance pay programs in the Romanian companies by analyzing each of the major work sectors. This could possibly lead

to the identification of certain sectors in which team – based financial incentive systems are more recommendable than the individual ones.

There are several limitations to this study. First, its transversal and correlational design does not fully support the formulation of causal relationships between performance pay, organizational justice and work performance, a drawback common to most investigations in this area. Supplementary studies, designed in an experimental fashion, are needed in order to fully attest the causal role of performance pay in these respects. Second, sample size limitations did not allow us to examine the effect of certain important variables, such as work sector, or to statistically control their influence on our variables of interest. Thirdly, not all the employees we contacted at the first moment of our study accepted to divulge their identity and they were not included in our final sample, raising the possibility that the aggregate scores on our variables would had been different if their answers were taken into account.

In conclusion, our results suggest that pay for performance programs, especially those who focus on the individual employee, have a beneficial effect on work performances in the Romanian companies. Moreover, they show that this effect is in part mediated by the positive influences in what regards distributive and procedural justice that these programs generate in the companies in which they are implemented. Further studies should examine additional effects of financial incentive systems in the Romanian organizations, as well as the differences between various types of the performance pay approach in these respects.

References

- Adams, J. S., 1965. Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267-299). New York: Academic Press.
- Alexander, S., and Ruderman, M., 1987. The role of procedural and distributive justice in organization behavior. *Social Justice Research*, 1(2), 177-198. doi: <http://dx.doi.org/10.1007/BF01048015>
- Armstrong, M., and Murlis, H., 2004. *Reward Management: A Handbook of Remuneration Strategy and Practice*. London: Kogan Page.
- Bagozzi, R. P., and Yi, Y., 1988. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. doi: <http://dx.doi.org/10.1007/BF02723327>
- Beer, M., Cannon, M. D., Baron, J. N., Dailey, P. R., Gerhart, B., Heneman, H. G., . . . Locke, E. A., 2004. Promise and peril in implementing pay-for-performance. *Human Resource Management*, 43(1), 3-48. doi: <http://dx.doi.org/10.1002/hrm.20001>
- Brashear, T., Brooks, C., and Boles, J., 2004. Distributive and procedural justice in a sales force context: Scale development and validation. *Journal of Business Research*, 57(1), 86-93. doi: [http://dx.doi.org/10.1016/S0148-2963\(02\)00288-6](http://dx.doi.org/10.1016/S0148-2963(02)00288-6)
- Byrne, B. M., 2001. *Structural Equation Modeling with AMOS - Basic Concepts, Applications, and Programming*. Mahwah: Lawrence Erlbaum Associates.
- Cadsby, C. B., Song, F., and Tapon, F., 2007. Sorting and incentive effects of pay-for performance: An experimental investigation. *Academy of Management Journal*, 50(2), 387-405. doi: <http://dx.doi.org/10.5465/AMJ.2007.24634448>
- Cahuc, P., and Dormont, B., 1997. Profit sharing: Does it increase productivity and employment? A theoretical model and empirical evidence on French micro data. *Labour Economics*, 4(3), 293-319. doi: [http://dx.doi.org/10.1016/S0927-5371\(97\)00008-0](http://dx.doi.org/10.1016/S0927-5371(97)00008-0)
- Chan, S., and Jepsen, D., 2011. Workplace Relationships, Attitudes, and Organizational Justice: A Hospitality Shift Worker Contextual Perspective. *Journal of Human Resources in Hospitality & Tourism*, 10(2), 150-168. doi: <http://dx.doi.org/10.1080/15332845.2011.536939>
- Chiang, F. F. T., and Birch, T. A., 2006. An empirical examination of reward preferences within and across national settings. *Management International Review*, 46(5), 573-596. doi: <http://dx.doi.org/10.1007/s11575-006-0116-4>

- Cohen-Charash, Y., and Spector, P. E., 2001. The role of justice in organizations: A metaanalysis. *Organizational Behavior and Human Decision Processes*, 86(2), 278-321. doi: <http://dx.doi.org/10.1006/obhd.2001.2958>
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., and Ng, K. Y., 2001. Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *The Journal of Applied Psychology*, 86(3), 425-445. doi: <http://dx.doi.org/10.1037/0021-9010.86.3.425>
- Cropanzano, R., and Rupp, D. E., 2003. An overview of organizational justice: Implications for work motivation. In L. W. Porter, G. Bigley and R. M. Steers (Eds.), *Motivation and work behavior* (7 ed.). New York: McGraw-Hill Irwin.
- Deci, E. L., and Ryan, R. M., 1985. *Intrinsic motivation and self-determination in human behavior*. New York: Premium. doi:<http://dx.doi.org/10.1007/978-1-4899-2271-7>
- DeConinck, J. B., and Stilwell, C. D., 2004. Incorporating organizational justice, role states, pay satisfaction and supervisor satisfaction in a model of turnover intentions. *Journal of Business Research*, 57(3), 225-231. doi: [http://dx.doi.org/10.1016/S0148-2963\(02\)00289-8](http://dx.doi.org/10.1016/S0148-2963(02)00289-8)
- Della Torre, E., Giangreco, A., and Maes, J., 2014. Show Me the Money! Pay Structure and Individual Performance in Golden Teams. *European Management Review*, 11(1), 85-100. doi: <http://dx.doi.org/10.1111/emre.12025>
- Downes, P. E., and Choi, D., 2014. Employee reactions to pay dispersion: A typology of existing research. *Human Resource Management Review*, 24(1), 53-66. doi: <http://dx.doi.org/10.1016/j.hrmr.2013.08.009>
- Engellandt, A., and Riphahn, R. T., 2011. Evidence on incentive effects of subjective performance evaluations. *Industrial & Labor Relations Review*, 64(2), 241-257. doi: <http://dx.doi.org/10.1177/001979391106400202>
- Fischer, R., and Smith, P., 2003. Reward allocation and culture: A meta-analysis. *Journal of Cross-Cultural Psychology*, 34(3), 251-268. doi: <http://dx.doi.org/10.1177/0022022103034003001>
- Gagne, M., and Deci, E. L., 2005. Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331-362. doi: <http://dx.doi.org/10.1002/job.322>
- Gerhart, B., and Fang, M., 2014. Pay for (individual) performance: Issues, claims, evidence and the role of sorting effects. *Human Resource Management Review*, 24(1), 41-52. doi: <http://dx.doi.org/10.1016/j.hrmr.2013.08.010>
- Gerhart, B., and Milkovich, G. T., 1992. Employee compensation: Research and practice. In M. D. Dunnette and L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2 ed., pp. 481-569). Palo Alto, CA: Consulting Psychologists Press, Inc.
- Gerhart, B., and Rynes, S. L., 2003. *Compensation: Theory, evidence, and strategic implications*. Thousand Oaks, CA: Sage.
- Gibson, V. M., 1995. The new employee reward system. *Management Review*, 84(2), 13-18.
- Gomez-Mejia, L. R., Berrone, P., and Franco-Santos, M., 2010. *Compensation and organizational performance*. Armonk, N.Y.: M.E. Sharpe.
- Gupta, N., and Shaw, J. D., 2014. Employee compensation: The neglected area of HRM research. *Human Resource Management Review*, 24(1), 1-4. doi: <http://dx.doi.org/10.1016/j.hrmr.2013.08.007>
- Guzzo, R. A., Jette, R. D., and Katzell, R. A., 1985. The effects of psychologically based intervention programs on worker productivity: A metaanalysis. *Personnel Psychology*, 38(2), 275-291. doi: <http://dx.doi.org/10.1111/j.1744-6570.1985.tb00547.x>
- Hein, K., 1996. Raises fail, but incentives save the day. *170*, 11.
- Heneman, R. L., Ledford, G. E. J., and Gresham, M. T., 2000. The changing nature of work and its effect on compensation design and delivery. In S. L. Rynes and B. Gerhart (Eds.), *Compensations in organizations* (pp. 195-240). San Francisco: Jossey-Bass.
- Herzberg, F., 1968. One more time: How do you motivate employees? *Harvard Business Review*, 46(1), 53-62.
- Hofstede, G., 2001. *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed. ed.). Thousand Oaks, CA: Sage Publications.

- Judge, T., and Erez, A., 2007. Interaction and intersection: The constellation of emotional stability and extraversion in predicting performance. *Personnel Psychology*, 60(3), 573-596. doi: <http://dx.doi.org/10.1111/j.1744-6570.2007.00084.x>
- Kidwell, R. E., and Bennett, N., 1993. Employee propensity to withhold effort: A conceptual model to intersect three avenues of research. *Academy of Management Review*, 18, 429-456.
- Kohn, A., 1993. Why incentive plans cannot work. *Harvard Business Review*, 71(5), 54.
- Kwon, S., Kim, M., Kang, S., and Kim, M., 2008. Employee Reactions to Gainsharing under Seniority Pay Systems: The Mediating Effect of Distributive, Procedural, and Interactional Justice. *Human Resource Management*, 47(4), 757-775. doi: <http://dx.doi.org/10.1002/hrm.20243>
- Ladebo, O., Oyekale, C., and Olaoye, O., 2005. Relative Contributions of Perceived Organizational Support and Organizational Justice to Extension Personnel's Job Satisfaction. 12(1), 65-75. doi: <http://dx.doi.org/10.5191/jiaee.2005.12107>
- Lazear, E., 2000. Performance pay and productivity. *The American Economic Review*, 90(5), 1346-1361. doi: <http://dx.doi.org/10.1257/aer.90.5.1346>
- Leventhal, G. S., 1976. Fairness in social relationship. In Thibaut J.W., J. T. Spence and R. C. Carson (Eds.), *Contemporary topics in social psychology* (pp. 211-239). Morristown, NJ: General Learning Press.
- Locke, E. A., Feren, D. B., McCaleb, V. M., Shaw, K. N., and Denny, A. T., 1980. The relative effectiveness of four methods of motivating employee performance. In K. D. Duncan, M. M. Gruenberg and D. Wallis (Eds.), *Changes in working life* (pp. 363-388). New York: Wiley.
- Lum, L., Kervin, J., Clark, K., Reid, F., and Sirola, W., 1998. Explaining nursing turnover intent: Job satisfaction, pay satisfaction, or organizational commitment. *Journal of Organizational Behavior*, 19(3), 305-320. doi: [http://dx.doi.org/10.1002/\(SICI\)1099-1379\(199805\)19:3<305::AID-JOB843>3.0.CO;2-N](http://dx.doi.org/10.1002/(SICI)1099-1379(199805)19:3<305::AID-JOB843>3.0.CO;2-N)
- Mafini, C., 2015. Investigating antecedent factors to job performance: Contemporary evidence from government supply management professionals. 15(1), 1-11. doi: <http://dx.doi.org/10.4102/ac.v15i1.287>
- Marsden, D., French, S., and Kubo, K., 2001. Does performance pay de-motivate, and does it matter? *Centre for Economic Performance Discussion Paper*, 660. <http://eprints.lse.ac.uk/3637/>.
- Marsden, D., and Richardson, R., 1994. Performing for Pay? The Effects of 'Merit Pay' on Motivation in a Public Service. *British Journal of Industrial Relations*, 32(2), 243-261. doi: <http://dx.doi.org/10.1111/j.1467-8543.1994.tb01043.x>
- Mattson, M., Torbiorn, I., and Hellgren, J., 2014. Effects of staff bonus systems on safety behaviors. *Human Resource Management Review*, 24(1), 17-30. doi: <http://dx.doi.org/10.1016/j.hrmr.2013.08.012>
- Milkovich, G. T., Newman, J. M., and Gerhart, B., 2013. *Compensation* (11th ed. ed.). New York: McGraw-Hill/Irwin.
- Origo, F., 2009. Flexible pay, firm performance and the role of unions. New evidence from Italy. *Labour Economics*, 16(1), 64-78. doi: <http://dx.doi.org/10.1016/j.labeco.2008.05.001>
- Pfeffer, J., 1998. *The human equation: Building profits by putting people first*. Boston, MA: Harvard Business School Press.
- Pinder, C. C., 2008. *Work motivation in organizational behaviour* (2nd ed. ed.). New York, NY: Psychology Press.
- Roth, L., 2006. Because I'm worth it? Understanding Inequality in a Performance-Based Pay System. *Sociological Inquiry*, 76(1), 116-139. doi: <http://dx.doi.org/10.1111/j.1475-682X.2006.00146.x>
- Rynes, S. L., 1987. Compensation strategies for recruiting. *Topics in Total Compensation*, 2, 185-196.
- Rynes, S. L., Gerhart, B., and Parks, L., 2005. Personnel psychology: Performance evaluation and pay for performance. *Annual Review of Psychology*, 56(1), 571-600. doi: <http://dx.doi.org/10.1146/annurev.psych.56.091103.070254>
- Shaw, J. D., and Gupta, N., 2007. Pay system characteristics and quit patterns of good, average, and poor performers. *Personnel Psychology*, 60(4), 903-928. doi: <http://dx.doi.org/10.1111/j.1744-6570.2007.00095.x>

- Shaw, J. D., Gupta, N., and Delery, J., 2002. Pay dispersion and workforce performance: Moderating effects of incentives and interdependence. *Strategic Management Journal*, 23(6), 491-512. doi: <http://dx.doi.org/10.1002/smj.235>
- Sweeney, P. D., 1990. Distributive justice and pay satisfaction: Field test of an equity theory prediction. *Journal of Business and Psychology*, 4(3), 329-341. doi: <http://dx.doi.org/10.1007/BF01125243>
- Tekleab, A., Bartol, K., and Liu, W., 2005. Is it pay levels or pay raises that matter to fairness and turnover? *Journal of Organizational Behavior*, 26(8), 899-921. doi: <http://dx.doi.org/10.1002/job.352>
- Trevor, C. O., Reilly, G., and Gerhart, B., 2012. Reconsidering pay dispersion's effect on the performance of interdependent work: Reconciling sorting and pay inequality. *Academy of Management Journal*, 55(3), 585-610. doi: <http://dx.doi.org/10.5465/amj.2006.0127>
- Vroom, V. H., 1964. *Work and motivation*. New York: Wiley.
- Wallace, C., Edwards, B., Arnold, T., Frazier, L., and Finch, D., 2009. Work stressors, role-based performance, and the moderating influence of organizational support. *The Journal of Applied Psychology*, 94(1), 254-262. doi: <http://dx.doi.org/10.1037/a0013090>
- Welbourne, T. M., Johnson, D. E., and Erez, A., 1998. The role-based performance scale: Validity analysis of a theory-based measure. *Academy of Management Journal*, 41(5), 540-555. doi: <http://dx.doi.org/10.2307/256941>
- Wright, P. M., George, J. M., Farnsworth, R., and McMahan, G. C., 1993. Productivity and extra-role behavior: The effects of goals and incentives on spontaneous helping. *The Journal of Applied Psychology*, 78(3), 374-381. doi: <http://dx.doi.org/10.1037/0021-9010.78.3.374>
- Zhang, X., and Venkatesh, V., 2013. Explaining employee job performance: The role of online and offline workplace communication networks. *Management Information Systems Quarterly*, 37(3), 695-722.

Copyright



This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).