

Risks and side effects of Pay for Performance - and how to cope with them



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Summary

Experiment based empirical findings give evidence for the negative effect of pay for performance (PfP) on intrinsic motivation. Nevertheless, PfP is widely used in practice, especially in order to motivate salespeople. This article illustrates the mentioned relationship and shows results from an empirical study in an organizational setting with an European based industrial company.

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1. Introduction

Motivation is seen as a key driver of employee productivity and performance. Accordingly, performance-related monetary compensation systems are often perceived as the embodiment of modern management methods and as prominent opportunities to increase employee motivation. Numerous studies in various contexts (countries, industries, company sizes) prove the widespread use of monetary incentive systems based on company and team performance as well as individual performance measured by the extent to which an employee achieves his or her objectives (cf. *Arnold et al.*, 2018, p. 20; *Berger et al.*, 2011, p. 8). The latter is called Pay for Performance (PfP) – the focus of this article. PfP may be applied in all areas of a company, but is in general most pronounced and most widespread in the context of sales remuneration (cf. *Arnold et al.*, 2018, p. 19).

However, a glance at the scientific literature shows that critical voices on the motivational effect of PfP are gaining in importance. Thus the socio-psychological self-determination theory (SDT) contrasts the prevailing paradigm and questions the unrestricted positive effect of PfP on employee motivation (cf. Chapter 3). At the same time, there has also been a change in the way practitioners think. Facing the general increase in environmental volatility and the increasing complexity of the task, it is more and more difficult to set the "right" individual goals. Problems arise, among other things, from the difficulty of quantifying increasingly complex tasks, tactical behaviors in setting goals, necessary goal adjustments in the context of increasing environmental dynamics etc. Well-known companies such as Bosch, Daimler, Infineon, Deutsche Bahn, parts of the Lufthansa Group and the Swiss insurance company Baloise have abolished individual bonus systems and put more and more emphasis on participation in the company's success. Companies do not abolish individual goals, but question the incentive effect of money associated with individual goals; at least for complex and therefore less individually measurable tasks. Money is no longer used as a management instrument in the sense of a carrot, but as a sign of appreciation in the form of participation in the jointly achieved success.

The following article first shows traditional methods of control and motivation in sales (Chapter 2) and then summarizes the behavioral scientific criticism of PfP (Chapter 3). The results of a large empirical study of more than 500 sales employees are then presented in Chapter 4 followed by a discussion of their consequences and recommendations in Chapter 5. The contents of the present article are primarily based on the dissertation of *Cornel Dalla-Rosa* (2018).

2. Traditional methods of control and motivation in sales and distribution

Extroverted employees with personality traits and competencies such as communication skills, enthusiasm, competitive orientation, etc. can frequently be found in sales. The combination of the high importance of the sales function and the widespread belief that sales employees can be motivated particularly well in an extrinsic way leads to many companies dealing with the detailed design of sales compensation systems in partly resource-intensive processes. Approaches with clearly disproportionately rising earning potentials that occur when individual objectives are exceeded - i.e. high extrinsic incentive effect through large "carrots" - are widespread and often promoted by consulting firms as "good practice" (cf. *Kieser*, 2016). The compensation systems are designed and optimized in detail based on various design dimensions such as performance indicators, target values, payout curves and payout dates. In practical application, however, such systems entail numerous challenges: Due to the considerable financial consequences, which depend on the achievement of objectives, the already difficult task of cascading company objectives to individual objectives becomes much more difficult. A participative approach to goal setting, which is particularly important in a dynamic environment and for more complex tasks, often degenerates towards a forced setting of goals according to the subjective assessment of the supervisor. In addition, goals are watered down by tactical behavior to the extent that they are no longer sufficiently demanding and as a result the effect of the goal is softened (*Jensen*, 2003, p. 385). Such incentive systems also systematically promote the questionable behavior of postponing results around the end of a month or the end of a year, something which may also negatively affect customer relations (*Jensen*, 2003, p. 383). If targets are reached at an early stage, a "hammock effect" sometimes occurs, which leads to employees becoming less involved, as additional performance in turn increases the basis for the next target (*Bouwens/Kroos*, 2001, p. 178). Such effects can occur when the achievement of objectives seems very unlikely. In many cases, additional rules are used in an attempt to prevent "gaming", which can frequently lead to even greater complexity of the overall system, even higher maintenance costs and, in the worst case, to a shift in the perception of the entire system as a single "paternalism". Finally, complex (sales) activities are difficult to map with only few goals, which leads to a multi-task problem. The employees then focus on tasks for which they are additionally compensated. As a consequence, areas that are equally important for the long-term success of the company are often neglected.

A fundamental problem, however, is the considerable narrowing of the perspective from the motivational point of view that is applied in such systems. Sales employees are often exclusively assigned to the type "extrinsically motivated only", which is no longer appropriate for many of today's

work profiles - especially for increasingly knowledge-intensive activities. The quality of leadership and the fostering of intrinsic motivation are usually insufficiently mentioned or recognized in these approaches. Therefore, there is the danger of optimizing a subsystem (monetary indicators) while at the same time neglecting the effect on the overall system (performance-enhancing management).

3. Pay for Performance and Motivation in the Light of Behavioral Theories

The current widespread use of PfP in business practice is based on standard economic theories with actors operating rationally. The socio-psychological theory of self-determination extends this approach by considering not only the effect of PfP on extrinsic motivation but also the effect of PfP on intrinsic motivation. The SDT has now been "imported" into behavioral economics and is essentially concerned with the question of how it affects (intrinsic and extrinsic) motivation when people are rewarded, regardless of their area of life, for activities that they originally carry out on their own initiative (cf. Deci, 1971, p. 105).

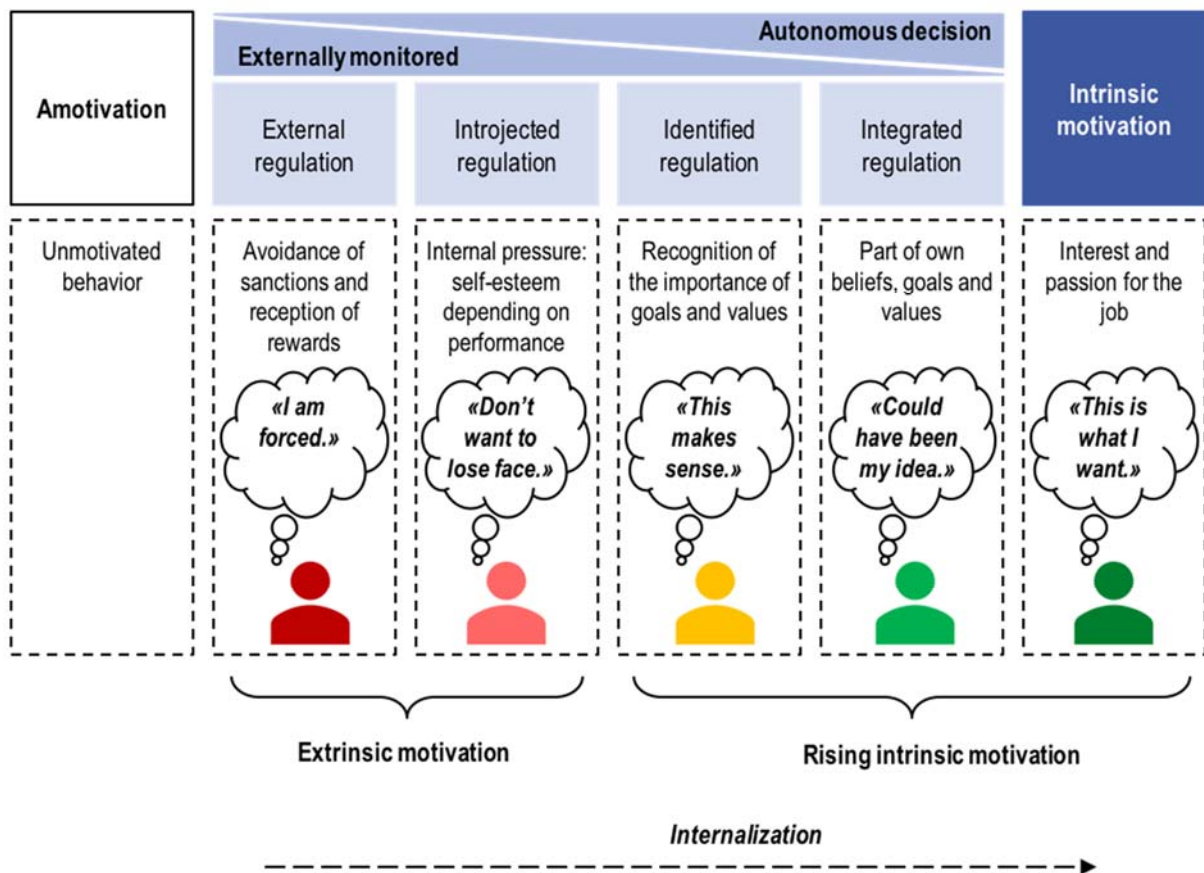


Figure 1 «Self-determination continuum»: The comparison of intrinsic and extrinsic motivation

Fig. 1 illustrates the "self-determination continuum" - a central thesis of the SDT - and describes the difference between extrinsic and intrinsic motivation (cf. *Gagné/Deci*, 2005, p. 336). The categorization of motivation within a continuum implies the understanding that the two motivational backgrounds are interdependent and therefore not additively linked. The categorization is based on the assumption that a person is intrinsically motivated when the three main psychological needs for competence, autonomy and social inclusion are satisfied (cf. *Deci/Ryan*, 2014, p. 16). These fundamental needs are universal and apply to all individuals, regardless of culture, phase of life and socio-economic status (cf. *Moller/Deci*, 2014, p. 191). The need for competence is satisfied when people feel successful by mastering a challenge and thereby expanding and proving their abilities and skills (cf. *Moller/Deci*, 2014, p. 192). Social inclusion is achieved through a sense of belonging or attachment to a group, community or organization. Satisfying one's need promotes the adoption and internalization of rules, values and goals from others (e.g. a company) (cf. *Gagné/Deci*, 2005, p. 334). Intrinsic motivation requires an essential need for autonomy which is satisfied when individuals experience freedom of choice and decide for themselves whether or not to carry out an activity (cf. *Ryan/Deci*, 2002, p. 8). If, for example, employees are motivated extrinsically by PfP, there is a shift in control perception according to SDT. The person is no longer self-determined (autonomous) to the same extent but is "controlled" from outside. Thus there is a shift: the intrinsic motivation gives way to the extrinsic, since the employees lose autonomy due to external incentives. At this point, several authors also argue that PfP leads to a perceived loss of trust and that this also reduces intrinsic motivation.

In general, intrinsic motivation has a positive effect on employee productivity and performance, especially in demanding and complex activities – compared to extrinsic motivation, it is more long-term and stable (cf. *Deci/Ryan*, 2014, p. 13). With simple and repetitive tasks, however, there is no significant difference between extrinsic and intrinsic motivation, or at most a short-term advantage of extrinsic motivation in terms of performance (cf. *Gagné/Deci*, 2005, p. 346). However, fostering intrinsic motivation is usually difficult for employees who perform simple and repetitive tasks. Extrinsic motivation is therefore not necessarily negative. In case of simple and repetitive activities it makes sense, for example, to use external incentives to motivate employees and encourage them to perform better (cf. *Frey/Osterloh*, 2002, p. 22). Regardless of the type of activity, intrinsic motivation leads to better customer relations, higher job satisfaction, reduced employee turnover and improves the well-being of employees (cf. *Fig. 2*).

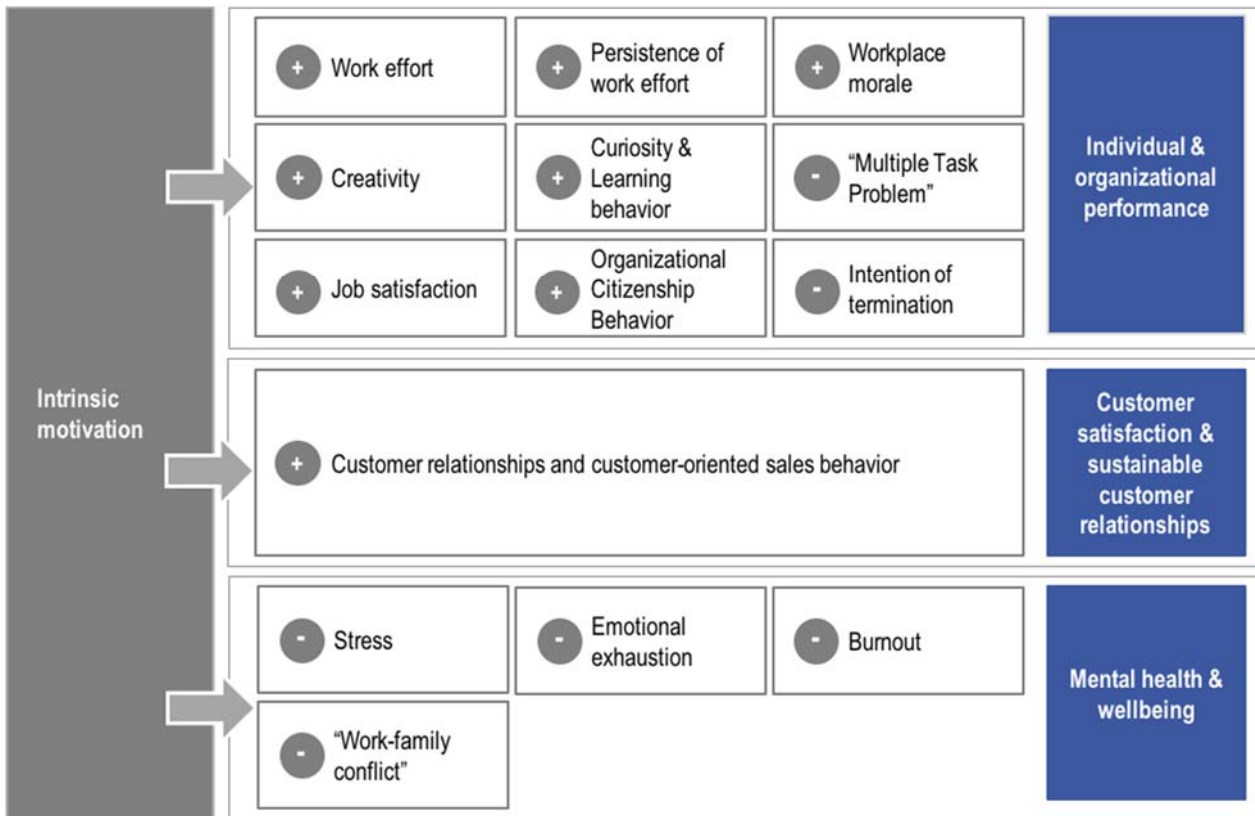


Figure 2: Effects of intrinsic motivation on employees and companies

From a motivational perspective, intrinsic motivation is therefore preferable to "carrots". *Fig. 3* again summarizes the impact of PfP on work effort. PfP has two main effects on employee motivation: On the one hand, a positive effect of PfP on extrinsic motivation is shown. This effect is described as a price effect and illustrated by an increase in labour input from E1 to E2 (*Fig. 3*). Prospective rewards additionally encourage employees to increase their workload. At the same time and under certain conditions, an opposite effect can also be observed according to SDT which is due to the shift in control perception and the associated decrease in intrinsic motivation. This crowding-out effect is highlighted in *Fig. 3* by the reduction of the work effort from E2 to E2' or E2", depending on the strength of the effect. The need for autonomy is thereby restricted, leading to a reduction in intrinsic motivation (cf. *Gagné/Forest, 2008, p. 226*). In this context, it should also be mentioned that intrinsic motivation displaced by external incentives is difficult to rebuild (cf. *Groen et al., 2016, p. 5*).

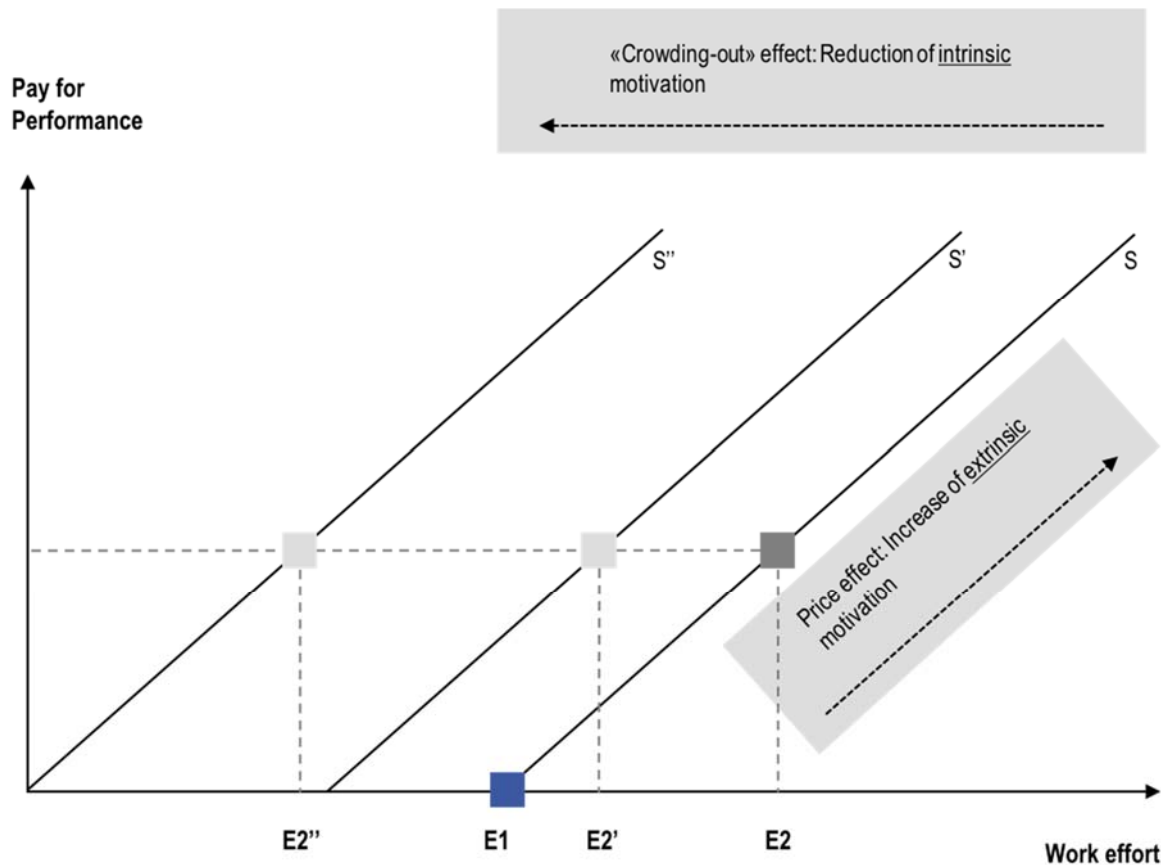


Figure 3: Effect of PfP on work effort (based on *Frey/Osterloh*, 2002, p. 17)

The crowding-out effect is usually stronger for interesting, demanding, knowledge-intensive and complex activities, as these are intrinsically motivating in contrast to simple and monotonous work. A further complicating factor in these activities is the difficulty of deriving goals from these tasks and the fact that they can hardly be represented by key figures in PfP systems. Insofar, situations in which the crowding-out effect prevails and the work effort of the employees is even reduced through the use of PfP are conceivable. Simple and monotonous activities are, as mentioned, often hardly intrinsically stimulating, so the crowding-out effect is negligible. With these activities, the price effect seems to dominate and PfP is likely to fulfil its purpose. In summary, both the presence and the intensity of the crowding-out effect depend significantly on the following two factors (cf. *Weibel et al.*, 2014, p. 77 ff.): (i) On the one hand, the work activity itself must be intrinsically motivating, so that the employees are intrinsically motivated before the introduction of PfP in order to ensure that crowding-out can take place at all. (ii) On the other hand, the variable compensation should be material, performance-related and consciously pursued by the employee.

4. Findings

So far, the dependence on intrinsic and extrinsic motivation and in particular the crowding-out effect have been empirically investigated and proven in numerous laboratory and field experiments as well as field studies and meta-analyses of the experiments within an educational environment. (cf. *Groen et al.*, 2016, p. 6; *Weibel et al.*, 2014, p. 73 ff.). Scientific studies regarding the effect of PfP on intrinsic motivation in a business context are rare, however, and the transferability of research results to business practice is questioned by critics (cf. *Groen et al.*, 2016, p. 6; *Weibel et al.*, 2014, p. 73 ff.). Accordingly, research in a real business context is of central importance, especially for practice. With their own study at an industrial enterprise located in Central Europe, the authors have tried to close this research gap and to examine the effect of PfP on intrinsic and extrinsic motivation as well as on work effort in an organizational context. More than 500 sales employees from seven sales organizations in different countries were surveyed. These sales organizations are given extensive freedom in designing their sales compensation systems. Over time, the compensation designs of the individual countries and sales organizations differed significantly in aggressiveness as measured by the proportion of variable individual target compensation compared to total compensation (PfP ratio). The PfP ratio ranged from above 40% to below 5%. On the other hand, the job profile of the surveyed employees is identical and independent from the sales organization, thus forming the basis of the survey. In line with current developments, the complexity of the sales tasks performed by the surveyed industrial company has increased noticeably in recent years. Sales staff is no longer "merely" engaged in "simple" product sales, but, with the increasing support of experts, also in selling systems and concepts with a significantly higher focus on the development of long-term customer relationships. The study mainly focused on the question of whether a higher level of variable remuneration (PfP ratio) leads to a higher work effort.

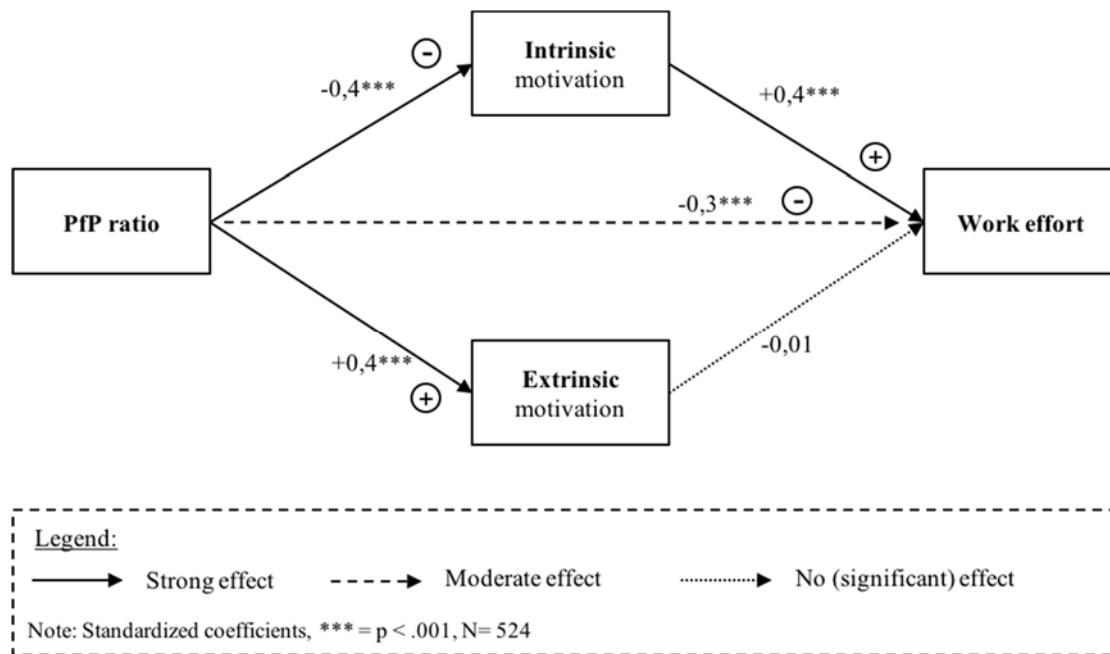


Figure 4: Study results on the impact of PFP on motivation and work effort (based on *Dalla-Rosa*, 2018, p. 133)

Fig. 4 visualizes the research results. The findings show a negative relationship between PFP and the intrinsic motivation of the sales staff, indicating the existence of the crowding-out effect described above. At the same time, as expected, more PFP leads to higher extrinsic motivation. Furthermore, the results indicate that intrinsic motivation is an important factor influencing the work effort. Simultaneously, the positive effect of PFP on extrinsic motivation in terms of productivity seems to fizzle out, since no correlation between the level of extrinsic motivation and the level of work effort could be found in this context. A higher PFP ratio even leads to a lower workload of the sales staff. In other words: The more employees are incentivized through individual, target-based compensation systems, the less they are willing to do additional work. Consequently, the performance-related external incentives tend to fail in having an effect within the observed context. A side-evaluation of the conducted study revealed that the crowding-out effect increases with increasing work experience of the employees. This is important because the experienced employees are often a company's key performers. In particular, this applies to complex sales activities within the framework of long-term B2B customer relationships. Another side-evaluation examined the direct interaction with the supervisor as well as his leadership style. It showed that a leadership style that aims at both coaching and developing the employee's skills has a more positive effect on intrinsic motivation than an activity-oriented (transactional) leadership style.

5. Motivation without PfP

An in-depth look at (extrinsic and intrinsic) motivation reveals that the use of PfP is associated with some risks and side effects due to its crowding-out effect on intrinsic motivation. For this reason, the effect of compensation systems based on individual goals must be critically questioned, particularly in the case of increasingly knowledge-based and team-oriented activities. This rethinking can be seen in business practice by looking at previously described companies which have already abolished individual bonuses. Consequently, the question of how to motivate sales staff without PfP and align them to strategic initiatives arises. One possibility is a fixed base salary that is in line with market conditions. High fixed salaries can be interpreted as recognition of competence, especially if they are differentiated in a fair way. Moreover, they have a proven positive effect on intrinsic motivation (cf. *Kuvaas et al., 2016, p. 8*). In order to ensure a respective differentiation of employees, wage bands that allow good performance to be valued on a sustainable basis can be introduced for the base salary. In addition, differentiated fixed salaries may be combined with bonus systems based on team or company performance, which allow employees to participate in the corresponding success. Such systems do not restrict autonomy, but rather inform and strengthen the sense of belonging and identification with the company, leading to a positive effect on intrinsic motivation (cf. *Landry et al., 2017, p. 25*). Considering the effect on intrinsic motivation, a clear distinction between PfP and profit-sharing systems has to be made. If profit sharing depends on the degree to which strategic goals have been achieved, such systems can also help to channel employees' efforts and align them to strategic objectives. Another means of expressing recognition and appreciation for a person or his/her performance and competence is «ex-post recognition». In this case, it can be either a monetary or a non-monetary reward which is independent from the achievement of objectives and which can be assigned to specific employees for above-average performance. As this reward does not depend on the achievement of pre-defined (ex-ante) objectives, it is not expected to have a controlling effect. Similarly, there should be no control effect if the criteria or rules to be applied for a relative comparison are set ex-ante, whereas the measurement by the relative comparison can only be carried out ex-post. The design, however, requires caution. The relative comparison should be perceived as inspiring an as a constructive competition instead of leading to harmful competitive behavior.

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Keywords

#Crowding-Out Effect # Intrinsic Motivation # Pay for Performance # Sales Compensation # Self Determination Theory

Summary

Experiment based empirical findings give evidence for the negative effect of pay for performance on intrinsic motivation. Nevertheless, Pfp is widely used in practice, especially in order to motivate salespeople. This article illustrates the mentioned relationship and shows results from an empirical study in an organizational setting with an European based industrial company.

Implications for practice

- The use of Pfp systems is not recommended for complex activities. On the other hand, Pfp can be used as a tool to improve the performance of simple and repetitive tasks.
- For simple activities, however, Pfp is an adequate instrument in order to motivate (sales) employees.
- Profit sharing, ex-post rewards for exceptional performance and wage bands make a valuable contribution to the promotion of intrinsic employee motivation.
- Money is considered as a hygiene factor as long as it is not used in an appreciative way.

Major statements

- It is necessary to question the unqualified positive impact of Pfp. While Pfp promotes extrinsic motivation, negative effects on intrinsic motivation can be observed in complex activities.
- Numerous studies show the importance of intrinsic motivation for both employee and company performance as well as employee health.
- Hence, companies should critically question the use of Pfp.