

FINANCIAL INCENTIVES TO PROMOTE OPTIMAL WORK MOTIVATION: MISSION IMPOSSIBLE?



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For decades, compensation management has advocated for the use of financial incentives, such as bonuses, merit increases and stock options. The reason for their use is that employees should be compensated based on, and commensurate with, their contribution to organizational success. Not only is compensation based on individual contributions deemed a good way to align employees' goals with organizational goals (Jensen and Meckling 1976), but it should also create perceptions of equity by paying better performers more than poorer ones (Gerhart 2017). This view relies heavily on expectancy and equity theories (Adams 1965; Vroom 1964). Expectancy theory argues that work motivation is a function of beliefs about one's competence to reach expected performance levels coupled with the expectation of getting a valued reward if one does so; equity theory adds that work motivation is also a function of perceptions that one's performance/rewards ratio is equal to "relevant-other" employees' ratios.

The design of performance management and compensation systems based on these principles demands clear

and achievable performance expectations and sound performance measures clearly linked to valued rewards. If this is achieved, rewards should have the power to signal what the organization values and motivate the right behaviors. It should not, in principle, be so difficult to achieve. If an organization has clear values and objectives to guide the communication of clear individual performance criteria and performance evaluation focuses on measuring these criteria and link valued rewards to them, organizations should get optimal performance (given employees were selected for the right knowledge, skills and abilities) and job satisfaction.

Why, then, do we hear so many stories about problems allegedly created by rewards systems in organizations, including performance anomalies, interpersonal conflict, unethical behavior and mental-health issues? Evidence of these problems can be found in Dahl & Pierce 2020; Gläser et al. 2017; Gläser and Van Quaquebeke 2019; Gubler et al. 2016; Harris and Bromiley 2007; Parker et al. 2019; Shi et al. 2017.

One highly plausible cause is that the principles of expectancy and equity theories are not applied properly when designing incentive systems. Kerr (1995) famously pointed out that the design of incentive systems often, in hindsight, leads to getting what you pay for, and sometimes it is hard to figure out what you are paying for when using an incentive scheme. He cited numerous examples of rewards that lead to the reinforcement of unwanted behaviors and/or the lack of reinforcement of desired behaviors, such as overprescribing medicines, subpar university teaching, hiring a third party to complete university assignments, lack of cooperation in team sports, showing up at work when sick (being especially problematic during a pandemic), and replacing non-defective parts. The problem seems to be that it is difficult to fully anticipate how employees understand what the organization intends to reward (which behavior or outcome), with some understanding all too well how to game the system or cut corners to get the reward without achieving organizational goals.

Rewards are also too frequently linked to results that employees feel they do not control. For example, in a study on the introduction of sales bonuses in an insurance company, people did not perceive a strong contingency between the efforts they exerted to sell insurance products and actually making the sale (Kuvaas et al. 2016). But it was sales that were rewarded, not behavioral efforts. The result of this is that the bonus did not substantially increase work effort, and profits did not increase. But the bonus system carried a considerable cost, which created a negative return on investment. Efforts are, in fact, rarely directly rewarded because they are difficult to measure, and if other factors not under employee control influence results, rewards lose their power to motivate effort.

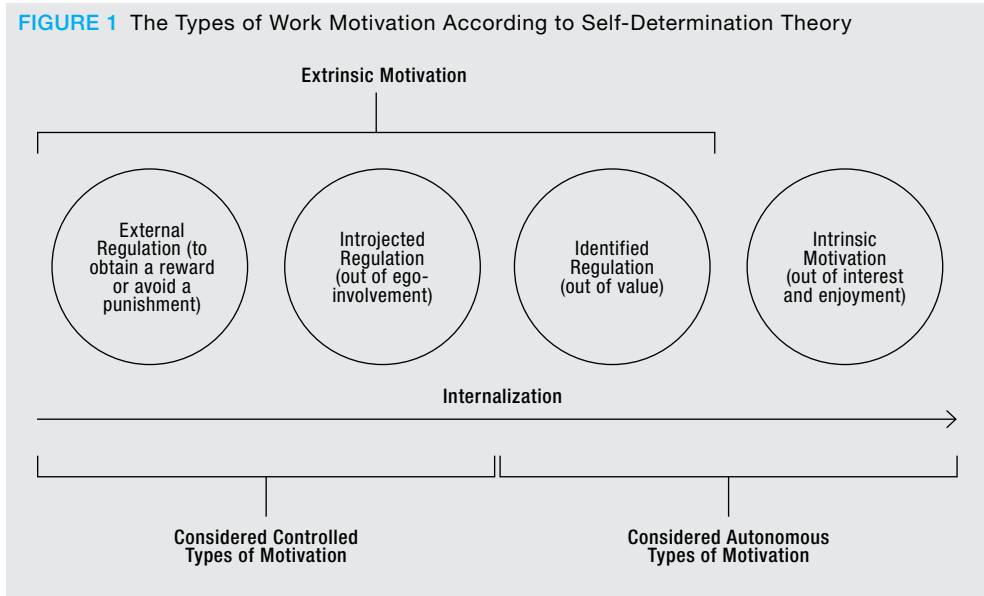
Finally, the advice to make rewards timely, which is important to make them powerful motivators according to behavioristic principles, pushes for the use of performance measures linked to short-term goals (Kerr 1995). It makes it difficult to link timely rewards to higher-order organizational goals (e.g., its mission), which

often have a longer-term focus with vague links to specific behaviors. Thus, a disconnect between individual and organizational goals is often created by the rewards system. In short, organizational financial incentive systems are rarely, if ever, designed completely in alignment with the principles of expectancy and equity theories, and it could be impossible to do so.

Another reason for problems related to incentive systems might be that incentives promote the wrong type of motivation.

OPTIMAL WORK MOTIVATION

To dig deeper into how incentive systems influence work motivation, we use the self-determination theory (Ryan and Deci 2017), which argues that the way rewards systems are often designed might be promoting the wrong type of motivation. This theory distinguishes between intrinsic and extrinsic motivation, respectively defined as doing something out of enjoyment or for an instrumental reason (e.g., a reward). Research in early years of the theory has shown that when rewards are experienced as pressuring or controlling, and when they are not linked to clear feedback on performance to increase people’s sense of competence, they can decrease a person’s intrinsic motivation. Laboratory studies and small-scale field studies demonstrated that the introduction of performance-contingent rewards decreased people’s subsequent interest in engaging in a task they were enjoying before the reward’s introduction (Deci 1971, 1972). These early studies drew a lot of attention, leading to a burst of research in this area, and though this research has remained largely confined to the lab, more recent work has extended results to real-world settings (e.g., White and Sheldon 2014). The conclusions from this body of research indicate that financial rewards can have detrimental effects on intrinsic motivation when they decrease feelings of autonomy (i.e., “I do it because I want to” vs. “I do it because I have to in order to get the reward”) and when



they do not increase feelings of competence (i.e., do not provide information about one's mastery or proficiency; Deci et al. 1999; Thibault Landry et al. 2017, 2019).

Self-determination theory subsequently refined its definition of extrinsic motivation to consider the fact that people can internalize reasons to engage in a behavior they do not enjoy (i.e., for which they are not intrinsically motivated). Figure 1 shows how extrinsic motivation is now split into three distinct forms reflecting increasing levels of internalization:

- 1 | External reasons that have to do with rewards and punishments (e.g., I do it to get a bonus);
- 2 | Introjected reasons that have to do with self-esteem and reputation (e.g., I do it so I don't get a bad reputation); and
- 3 | Identified reasons that have to do with the perceived importance of a task (e.g., I do it because it helps others in important ways).

These different motivations are often split into autonomous reasons (i.e., intrinsic and identified reasons) and controlled reasons (introjected and external reasons). More than 40 years of research has now shown quite clearly that autonomous motivation is more strongly related to performance and well-being than controlled motivation (Gagné et al. 2015; Ryan and Deci 2017).

The theory has additionally focused on examining what would lead to the development of autonomous motivation, and found that three innate and universal (at least in 132 countries) psychological needs are important in this regard (Diener et al. 2010). First, people need to feel competent when they engage in an activity. Second, they need to feel volitional — free to choose or be involved in decisions. Third, they need to feel related to others in the context of the activity (e.g., work colleagues). A large body of research has shown that autonomous work motivation is promoted when these three needs are satisfied (Van den Broeck et al. 2016), and that they contribute to general well-being beyond material prosperity (Diener et al. 2010).

In the workplace, the provision of feedback (for competence), discretion and participation (for autonomy) and good work relationships (for relatedness) have important consequences for motivation, and can be covered in significant part through appropriate work design and managerial leadership styles (e.g., Gagné et al. 1997, 2019; Kovajnic et al. 2012; Slemp et al. 2018; Van den Broeck et al. 2008, 2016). But when thinking of the role of compensation and incentives in promoting (or not) the satisfaction of these three needs, the matter is quite complex. Nonetheless, if we do not consider the matter of promoting these three psychological needs, we are very likely to miss the mark when we design incentive systems.

ASSESSING THE EFFECT OF COMPENSATION ON NEEDS AND MOTIVATION

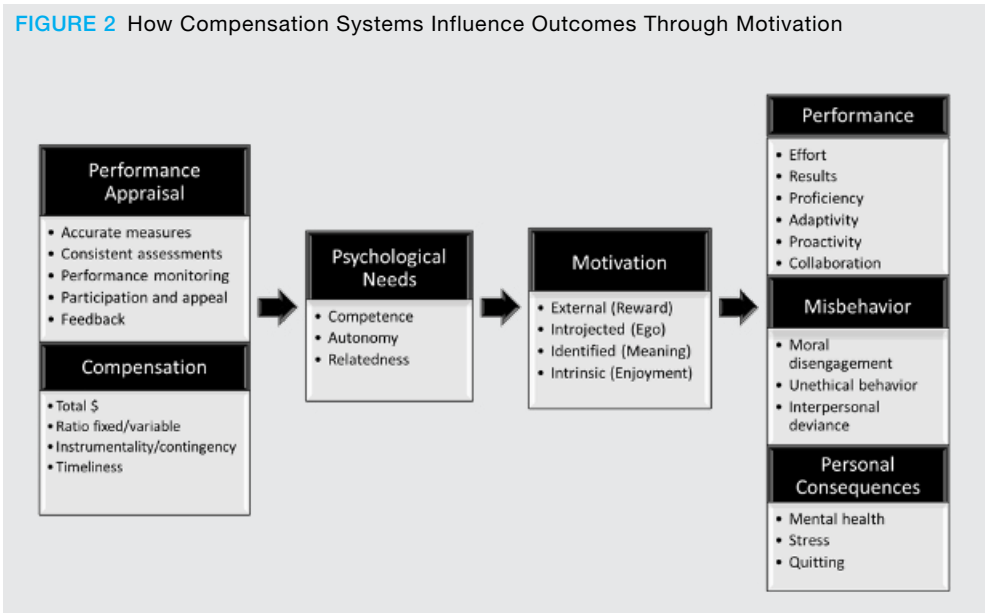
When it comes to compensation, we have proposed a model that breaks down monetary compensation into psychologically meaningful characteristics based on both the traditional expectancy/equity factors and self-determination theory (Gagné and Forest 2008). Each of these characteristics of compensation are proposed to influence the needs for competence, autonomy and relatedness, which in turn influence a person's quality of work motivation, performance, work behavior and mental health (see Figure 2).

The first characteristic of compensation is the total amount of money a person receives. We are talking here about the sum of all components of financial compensation, including base pay or annual salary or the sum of hourly wages, as well as bonuses, commissions, stock options, etc. We see three potential psychological functions emerging from total amount of compensation. First, does this amount meet a person's basic survival needs? In a study including representative samples from 164 countries, Jebb and colleagues (2018) showed that income has an optimal or satiation effect on well-being in the range of \$60,000 to \$75,000 for emotional well-being to \$95,000 for life satisfaction (these values represent yearly household-equivalent income in U.S. dollars). Beyond that, income showed a declining effect on these outcomes. This aspect of income does not address the three psychological needs but more basic physiological and security needs.

Second, what does the money an organization pays an employee signal to the employee? Research indicates that the provision of compensation that is at or above market value should signal that employees are a valued asset worth investing in (Thibault Landry, Schweyer, et al. 2017). This can help improve intrinsic motivation (Kuvaas 2006) because the value signal can enhance their feelings of competence and relatedness (i.e., "they pay me this much because I bring something valuable to the organization and they want me here"). Third, how employees plan to use, and actually use, the money they earned has implications for their well-being. Money can serve many purposes, including giving us more free time and resources to engage in leisure activities (e.g., a trip overseas), allowing us to buy items that signal our status in society (e.g., a luxury car), and supporting a cause we care about. Research shows how different motives for making money (e.g., helping a charity vs. buying a luxury car) have differential effects on feelings of competence, autonomy and relatedness, which affect our well-being (Thibault Landry et al. 2016). Money motives also influence how people actually spend their money (Zhang et al. 2013), which is also related to higher well-being (Manganelli and Forest 2020) and their propensity to engage in fraudulent work activities (Gottschalk 2020).

The second characteristic of compensation is the ratio of fixed to variable compensation components. As total compensation can be made up of base pay and pay-for-performance components, we need to separate the effects of each on

FIGURE 2 How Compensation Systems Influence Outcomes Through Motivation



the psychological needs and motivation to fully understand the effects of incentives on performance and other outcomes. For example, in the study of insurance salespeople mentioned earlier, base pay was more highly related to autonomous motivation while bonuses were more related to controlled motivation (Kuvaas et al. 2016). Though both forms of motivation were related to increases in effort, the effect of autonomous motivation was five times stronger than the effect of controlled motivation. And while people with high autonomous motivation wanted to stay in their job, those with high controlled motivation (which was promoted through the new bonus system) expressed an increased desire to leave this organization. In effect, the introduction of a bonus system in this organization did not significantly improve work efforts while it increased turnover intentions. In a study of Swedish white-collar employees, merit-pay increases did not significantly influence subsequent performance relative to having psychological needs supported through job autonomy, feedback and social support, raising the question of whether administering complex incentive systems is worthwhile (Nordgren-Selar et al. forthcoming).

In other studies, incentives increased interpersonal deviance and unethical behavior because they can lead to moral disengagement (Beaudoin et al. 2015; Gläser et al. 2017; Gläser and Van Quaquebeke 2019; Kouchaki et al. 2013). Variable pay that is based on performance or even on time spent working can promote money motives that are less need satisfying by signaling that making more money is what matters most (DeVoe 2019; DeVoe and Pfeffer 2007, 2010; Pfeffer and DeVoe 2012). Bonus systems have also been shown to increase stress and the number of prescriptions for depression and anxiety (Dahl and Pierce 2020; Parker et al. 2019). These results have been attributed to perceptions of being controlled by the reward (Kuvaas et al. 2020), but also to the fact that a high proportion of

variable pay makes one's income less certain, creating financial insecurity that affects psychological need satisfaction (Harrison et al. 1996; Howell et al. 2013). Moreover, the more directly contingent on performance the reward is, the more negative its effects are on feelings of competence, autonomy and relatedness as well as on intrinsic motivation and performance (Cerasoli et al. 2014, 2016). The more attractive and complex the task, the more negative the effect; and the effects are also more negative on performance quality compared to performance quantity (Bailey and Fessler 2011; Weibel et al. 2010). Thus, when looking at the empirical literature, incentive rewards appear to be effective only for tasks that will soon be automated. Future work is going to require more adaptive and proactive types of behavior to adjust to increasing uncertainty and more collaboration (Griffin et al. 2007). Because all of those behaviors have been shown to be highly reliant on autonomous motivation (Gagné 2003; Strauss and Parker 2014), incentives contingent on performance might not be the best strategy to motivate such behaviors.

The third aspect of compensation is the perceived equity of pay (distributive justice), while the fourth characteristic is the subjectivity of the performance appraisal used to determine a reward (procedural justice). Data from more than 50,000 people in 40 countries indicate a universal desire for equitable pay (Kiatpongsan and Norton 2014). Does this mean that perceptions of equity influence the psychological needs and autonomous work motivation? Contrary to the predictions of equity theory, the mere distribution of rewards based on relative contributions has not been found to be related to need satisfaction or intrinsic motivation. However, perceptions of the methods used to assess performance and make decisions about rewards have been deemed to be quite important (Olafsen et al. 2015). To be considered fair, rewards need to be determined on the basis of accurate information that is free of bias, through consistently applied rules, and with the opportunity to express views and appeal if necessary (Colquitt 2001).

COMPENSATION SYSTEMS THAT SATISFY PSYCHOLOGICAL NEEDS

Combining what we have learned so far about problems in the design of incentive systems, coupled with new insights from self-determination theory, we might be able to draw a few principles that could be used to design compensation systems that will satisfy the psychological needs and promote autonomous motivation. Behind these principles is the realization, from the review above, that the two extreme cases of making compensation completely contingent on measurable outcomes vs. making compensation completely noncontingent on measurable outcomes, are both unlikely to be optimal. In the former case, it is likely to promote externally oriented motivation that has been shown to lead to problems with certain aspects of performance, misbehavior and mental health. In the latter case, it is likely to lead to perceptions of inequity.

The first principle to guide the design of incentive systems is that people want some income security and employers want to attract and retain good employees.

A solid market-competitive base salary that meets a minimum satiation point, not contingent on performance once hired, seems to be quite important (Jeff et al. 2018). Not only does it signal to the potential candidate and future employee that they are trusted for skills and efforts valued by the company, but it can go a long way to promoting well-being by giving people head space to focus on the work itself rather than having to focus on meeting their (and their dependents') basic physiological and security needs. A trial of a "universal basic income" in Canada has shown that when people received a noncontingent and minimally decent source of revenue, they worked more, educated themselves longer and health costs decreased (Forget 2011).

The second principle is that people want their employer to perceive and evaluate their contributions to organizational success accurately and make decisions based on that. Decisions made according to performance evaluations could include salary increases, pay-for-performance compensation components, promotions, training and development opportunities, etc. Though we do advocate for procedurally fair performance appraisals to make some decisions, we find it hard to justify, based on the review above, recommending the use of pay-for-performance. We think there may be other means to motivate workers that might not require it. We see two major challenges that have yet to be resolved with pay-for-performance systems:

1 | Developing accurate measures of observable behavior or output that are linked to organizational goals and that employees have control over. As mentioned earlier, accuracy seems to be difficult to reconcile with relevance. Moreover, we have not yet found a solution to gaming problems, which have been argued to stem from the inability of incentives to encourage the internalization of the value of the behavior they are meant to encourage. However, this does not mean that we have no means to get employees to internalize organizational goals. Within the literatures on organizational socialization, leadership and work design, researchers have provided evidence-based means to encourage personal ownership and engagement by considering the satisfaction of the three psychological needs (Chong et al. 2020; Kovajnic et al. 2012; Van den Broeck et al. 2008). Therefore, not using financial incentives does not mean we cannot motivate employees to internalize and pursue organizational goals. In fact, as explained earlier, financial incentives may not achieve this purpose very well (Nordgren-Selar et al., forthcoming).

2 | Developing means to capture data on performance measures that will not take up all of managers' time to the detriment of building trustful and supportive relationships that promote employee need satisfaction. Even if monitoring could be done through technology, the simple act of being and feeling monitored can squash feelings of autonomy (Carayon 1994;

Lepper and Greene 1975). However, good performance measures are useful to provide feedback on performance, which can help with development (and influence feelings of competence). Giving feedback is also a good way to build relationships (and influence feelings of relatedness). So the reasons for monitoring (development vs. surveillance) matter (McNall and Roch 2009; Wells et al. 2007) because they signal not only how much the organization values employees but also how much it trusts them. Therefore, developing economical means to gather performance data and use them to develop rather than reward might be the best way to ensure autonomous motivation is fostered.

CONCLUSION

Though people should be getting an income that meets a satiation point to ensure well-being, it does not mean that everyone shall be paid the same. However, we need to continue working on how best to design compensation systems that avoid measurement and monitoring issues, and that fulfill the psychological needs for competence, autonomy and relatedness necessary to sustainable work performance — not just proficient performance, but also adaptive and proactive performance and well-being (Griffin et al. 2007). Whether it is possible to do so with financial incentives such as pay-for-performance schemes remains to be explored. ■

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