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REVIEW

Business excellence practice: efficiency wages versus individual economic incentives

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The objective of this conceptual paper is to analyse why the use of efficiency wages accompanied by informative feedback can be a substitute for the use of individual economic incentives. Efficiency wages lead to the same positive outcomes as these incentives, but without incurring their multiple dysfunctionalities, which are difficult for companies to manage. The research methodology followed is an integrative literature review of different conceptual schools of thought: economics, experimental economics and behavioural economics. The result is the design of a conceptual framework that offers a new perspective on how companies can motivate more effectively employees while achieving organisational objectives. Efficiency wages can attract employees that are more productive and motivate them to be more diligent. When accompanied by informative feedback, they can also orientate employees' behaviours towards the achievement of organisational objectives. Efficiency wages fulfil therefore the objectives of incentives, but they are a fairer and less discriminatory alternative. This paper makes two relevant contributions. First, it offers managers an alternative to the use of individual incentives, and a powerful mechanism in the achievement of business excellence. Second, it promotes the academic analysis of novel hypothesis and research perspectives, constituting thus a relevant step for further theory development.

Keywords: Efficiency wages; individual economic incentives; motivation; business excellence; informative feedback

Introduction

In their famous book entitled *In Search of Excellence*, Peters and Waterman (1982) recognise 'productivity through people' as one of the eight attributes of an excellent business, which requires highly motivated and involved staff. More or less explicitly, any model of business excellence reflects this criterion (see de Waal, 2013; Mohammad et al., 2011; Dahlgaard-Park & Dahlgaard, 2007). To motivate employees, many companies use wages. While some authors do not consider wages to be a motivating factor (Herzberg, 1968), there is sufficient evidence to support that money is a powerful motivator. Money contributes to satisfying the needs of Maslow's hierarchy of needs, while remaining a symbol of one's social status and thus acknowledgment of one's personal accomplishment (Aguinis et al., 2013). People defend the use of economic incentives because they consider that – although they do not feel motivated by vile metal – everyone else does (Jurgensen, 1978).

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Under these premises, it is common practice for companies to opt for wage policies based on the use of economic incentives. In particular, companies use economic incentives linked to individual performance, resulting in individualised payrolls that are adapted to high levels of compensation and related to high levels of demand or results (Gerhart & Fang, 2014; Shaw & Mitra, 2017). In general, it is assumed that the use of this type of incentive induces people to work more diligently, while aligning their personal interests with organisational objectives (Milgrom & Roberts, 1992; Lazear & Gibbs, 2009). This argument would explain the existence of extensive empirical evidence revealing a strong positive relationship between individual economic incentives and organisational productivity (Combs et al., 2006; Shaw & Gupta, 2015).

Today, however, there is also agreement that economic incentives linked to individual performance have an undesirable dark side (Gerhart & Fang, 2014). It is not difficult to observe that the use of such incentives triggers a series of dysfunctional behaviours and negative effects that lead to results contrary to those initially pursued (Kerr, 1975; Gneezy et al., 2011). This reality suggests that, in their search for motivation, performance and involvement, managers must consider alternative wage policies to the use of economic incentives; one of these may be efficiency wages. It is no coincidence that in business reality many excellent companies with high-quality products and services, instead of linking pay to individual performance, choose to give their employees fixed wages that are above those of the wider market.

Efficiency wages have been extensively studied by economists who, in addition to developing several explanatory theories (Akerlof, 1984; Katz, 1986), have analysed their effects on both macroeconomic (Malcomson, 1981; Akerlof & Yellen, 1986) and microeconomic (Cappelli & Chauvin, 1991) indicators. However, there is scant literature investigating efficiency wages from the perspective of managers or employees' behaviour. Therefore, by analysing efficiency wages from the tenets of behavioural economics, this work aims to fill some of this gap. Its main objective is to present efficiency wages as an efficient substitute for the use of individual economic incentives; it conjectures that efficiency wages allow for the same positive results as incentives, but with the advantage of not having to deal with their highly distorting effects. Experimental economics and behavioural economics give support to this claim. The first theory presents efficiency wages acting as an incentive paid in advance (Hossain & List, 2012); the second explains that, in order not to lose that incentive (the endowment effect), the employees will strive to enhance their performance (Kahneman & Tversky, 1979; Kahneman, 2011; Thaler, 2015). However, efficiency wages do not direct behaviours towards the achievement of organisational objectives, so informative feedback should complement them in order to reveal to employees the path to increased efficiency.

The reflection made in this paper allows us to present efficiency wages as an effective tool to achieve one of the most critical aspects of any business model: human resource planning (acquisition, utilisation, improvement and retention) and its total involvement (Mohammad et al., 2011; Dahlggaard et al., 2013).

Methodology

The research methodology followed to reach our objectives has been a literature review of different conceptual schools of thought. The integration of literature is one of the most appropriate methodological tools for conceptual papers like the one we present here, in which the objective sought is to bridge existing theories in novel ways, link works across disciplines, and provide new ways of thinking (Gilsom & Goldberg, 2015).

Using this methodology – review, criticism, and synthesis of representative literature on a topic (Torraco, 2005) – we propose new relationships and links among our paper’s focal constructs (individual economic incentives, efficiency wages, employee motivation and performance), and we also develop logical arguments to support these new associations. The literature review is performed on the tenets of different disciplines (economics, as well as experimental economics and behavioural economics), and focuses on the distorting effects of individual economic incentives, since previous research on these dysfunctions is critically examined and evaluated.

This methodological approach, which integrates and reviews literature from different perspectives and integrates existing ideas with new ones, results in the design of a conceptual framework that offers a new perspective on the economic motivation of employees, provides value added, and highlights directions for future inquiry.

Conceptual background: lights and shadows of individual economic incentives

An incentive is a reward for any effort made. The effort is a broad metaphor that represents whatever is sought because it is valuable to the employer, and that the employees might either dislike performing (find it onerous) or that is not a high priority for them. Incentives aim to induce employees to not only work harder, but also to become involved in the achievement of organisational objectives. The underlying belief is that money motivates people (Jurgensen, 1978) and, since motivation has a singular influence on performance, economic incentives are the most powerful motivating factor.

Effectively designed and implemented incentive systems can increase organisational productivity (Shaw & Mitra, 2017). Schematically, three reasons support such a conclusion. First, incentives have a strong and positive impact on the intensity and persistence of the efforts made by the employees (Prendergast, 1999). This is the ‘effort’ effect. It causes employees to be more diligent in the performance of their activities. Second, the existence of high incentives acts as an attraction and retention mechanism for the best employees, and induces under-performing ones to leave the organisation (Lazear, 1986). This is the ‘sorting’ effect, which strongly determines the effectiveness of incentives (Larkin & Pierce, 2016). Finally, the use of incentives implies that employees direct their efforts towards the achievement of organisational objectives (Gerhart, 2009). This ‘direction’ effect already implies an improvement of performance. Thus, even if the incentives failed to produce a greater individual effort, they would at least promote more qualitative efforts, because they focus on the objectives sought by the organisation (Marsden, 2010). It should be recalled that, despite incentives increase total payroll expenditure, labour unit costs decrease because total productivity increases at a greater proportion.

Each company must measure the success of the three effects indicated in terms of their overall performance. To do so, it is necessary to design KPIs (key performance indicators) that measure the employees’ level of productivity, give visibility to different aspects related to performance, and check whether work dynamics are related to the organisation’s strategic objectives. Despite the existence of multiple KPIs – interested readers can identify the most relevant ones for human resources in Iveta (2012) –, each company must carefully plan their own KPIs.

In spite of all this, ample evidence identifies that incentives might also lead to consequences contrary or different to those expected. Too often, economic incentives can either discourage the desired behaviours or encourage different ones (Kerr, 1975), offsetting the positive outcomes of the three aforementioned effects. This distorting impact of

incentives – which will be dealt later in the paper – cannot be dissociated from their motivating nature (Larkin & Pierce, 2016).

Incentives may discourage people from undertaking risky activities that embrace new challenges simply because their focus is not to analyse new ideas, but to reach the immediate rewards (Kohn, 1999). When individuals are informed that they will receive an immediate tangible reward (usually money), they tend to focus more heavily on achieving the reward than on performing the task well (Deci et al., 1999). In this sense, incentives will be counterproductive when the results of the task are so broad and open that the necessary steps to reach a solution are not obvious. Incentives also focus employees' attention on short-term gains and narrow numerical objectives, rather than on pursuing the long-term wealth of the firm, and thus they may become dysfunctional (Deming, 1986).

Usually, individual incentives are built on the false perception that the effectiveness of an organisation arises from a simple combinative addition of different individual performances. This is a reductionist perspective that disregards the value, relevance, and nature of collective interactions (Milgrom & Roberts, 1992; Larkin et al., 2012). Furthermore, the use of incentives also overlooks the fact that individual performance can be the result of an exchange of ideas and resources with other colleagues, thus neglecting the existence of indirect contributions within a wider exchange ecosystem. Therefore, another relevant casualty is cooperation. Incentives discourage cooperative behaviours because the time devoted to helping a colleague reduces the helper's absolute performance (Fehr & Gächter, 2002). Moreover, according to Deming (1986), a lack of cooperation results in a lack of product quality; such a negative effect is particularly relevant in the actual labour environments characterised by tasks that frequently require cooperation.

Economic incentives linked to individual results also lead to pay dispersion among employees. The larger the incentive's intensity, the larger the pay dispersion will be. Some firms feel that only a small part of their workforce deserves to receive incentives (Welch & Welch, 2005). As long as it is fair, some scholars are of the opinion that pay dispersion is positive because it avoids any free-riding or social loafing behaviour (Trevor et al., 2012). Some scholars – albeit not all – consider pay dispersion to be a source of frustration in the workforce, which might be perceived to be unfair and thus contributes to low morale, increased job rotation, absenteeism, and lower quality goods and services. Employees might even be predisposed to steal or sabotage (Bartling & von Siemens, 2010).

Likewise, for employees, incentives inherently imply the risk of not achieving them. However, employees might consider that they are entitled to a minimum monetary sum for the efforts made, so any payments below this amount create discomfort and the feeling of abandonment. In practice, not getting the expected reward has a similar effect to a punishment (Kohn, 1999), which can result in negative emotions and antisocial conduits.

The assumption that the performance achieved is under the control of the employees and, therefore, that individual actions drive results substantiates using incentives to motivate employees (Pfeffer & Sutton, 2006). Nevertheless, frequently the results are not always under the full control of the employees. Performance is often dependent on the leadership enforced, on the job design or on other factors that are beyond the employee's full control (Deming, 1986; Kohn, 1999). The consequence is that, through incentives, for the same effort and work conditions, employees might receive different earnings. Habitually, results may depend on factors that are unrelated to the incentive menu. Those factors are not dependent on the employees' efforts, intelligence, honesty, or diligence while performing a task and thus are well beyond their control. As a result, the use of incentives produces an uncontrollable risk for employees that generates dissatisfaction and a feeling of injustice and unfairness.

For those tasks that are simple, independent and easy to measure, incentives linked to results tend to be effective (Gerhart & Fang, 2014). These tasks facilitate the design of incentives that are straightforward and easy for the employees to understand. However, quite often the tasks to perform are complex, interrelated, or diverse, so it is difficult to find objective measures for the result and thus for the effectiveness of the incentive. In these circumstances, the incentive should be set taking into account multiple factors, in a dimension between broad and strict performance measures. Broad incentives take into account several performance measures, thus clarifying the functioning of incentives. However, they accentuate the risks associated with their use because there could be more measurement errors and associated problems. Strict incentives would exclude many facets, thus facilitating the measurement issue and reducing the risks associated with their use (Lazear & Gibbs, 2009). However, this stimulation of a limited number of behaviours distorts their functioning. Those employees assigned various tasks might intentionally or unintentionally over-direct their efforts toward the rewarded tasks at the expense of the others. This is known as the multi-tasking problem (Milgrom & Roberts, 1992). Something similar occurs when a task has several dimensions that might be difficult to cover simultaneously, or might even be conflicting, for example, quality and quantity. Multitasking also arises when employees have two supervisors, as in matrix organisations. In these cases, employees might focus only on the incentivised task or dimension, or follow only the orders given by the supervisor who most influences their final payroll. Accordingly, the informative role of incentives should not be minimised, because incentivising a desirable task might create a negative incentive or send the wrong signal that other relevant tasks should be ignored (Kerr, 1975).

Distorting effects also occur if incentives are associated with the employees' conduct. On the one hand, it is difficult to evaluate employees' actions and obtain information on how they perform their job. Similarly, measures of conduct also tend to be imprecise. On the other hand, supervisors may reject the assessment of their subordinates when this is going to have a direct effect on their payroll. In other words, if a superior judges employees' conduct, they might not work cooperatively to learn or advance in their professional careers, but instead seek approval for what they do in order to receive their incentive. Employees are thus encouraged to hide problems, to portray themselves as extremely competent individuals and to devote efforts to try to adulate or impress people with power (Kohn, 1999). It is also unlikely that someone would seek advice or help from the person offering both carrots and sticks.

All these limitations and dysfunctionalities of incentives originate from inadequately structured incentives and have become a traditional source of criticism of pay for individual performance incentive systems. However, other limitations and negative consequences of incentives arise from specific employees' reactions to the implementation of incentives.

There is no solid evidence for the theory that paying employees more will motivate them toward a long-lasting greater effort (Kohn, 1999). While it is true that being paid little money can be irritating and can thus become a factor of dissatisfaction (Herzberg, 1968), being paid more money will not necessarily result in greater satisfaction. I.e. NYC taxi-drivers rent cars for a fixed amount per day and keep all payments for them and will want to earn a similar income every day. Consequently, on days when demand is high, they reach their target sooner, so they stop working and work fewer hours despite the opportunity cost of doing so (Camerer et al., 1997). In accordance with the prospect theory (Kahneman & Tversky, 1979), taxi-drivers perceive their failure to achieve the self-set daily income as a loss and thus they are willing to work harder. Meanwhile, when they surpass their self-set daily income, they perceive it as a gain, and thus they are less

willing to continue working. To summarise, once the employees reach a given income, they might not be encouraged to produce greater effort because employees might place greater priority on other values than money (i.e. better working conditions, less stress, or better work-life balance).

Similarly, incentives can lead to opportunistic behaviours because both the employer and the employee can purposely manipulate the incentive system to improve their situation. Such manipulation is possible because once the incentive system has been defined both the employees and the employers can use asymmetric information to derive a benefit. This degrades the effectiveness of the incentive, since it does not correlate with value to the firm and thus becomes useless. A common practice that impairs the functioning of any incentive system is the ratchet effect (Milgrom & Roberts, 1992), which refers to the managerial tendency to raise standards after a period of good performance. In addition to being unfair, this increase may also be unproductive. If employees fear that their current performance will be the benchmark for the future standard, they might not cooperate with their managers to improve organisational productivity, despite losing remuneration. Their purpose is not to reveal how productive they can become individually. For example, for years Hauser Food Products Company observed that their Florida district sellers in the children's food sector showed a sustained outstanding performance, far superior to those attained in other geographical areas. This continued until it was discovered several years later that these products had a high demand in a market segment (the third age) that had been ignored by the company. The employees did not disclose this information, fearing that managers would increase their sales quota the following year (Tushman, 2002). It has also been observed that when results achieved at the year's end are incentivised, employees frequently delay or speed up sales in the last quarter of the year to match the annually set figures or to not 'squander' sales exceeding their annual target. Similarly, the employees might reduce their productivity in the actual period to feel less pressure in the future. The situation described by Lawler (2000) provides a clear example. During a strike, a secretary was asked to work on the factory floor. Despite lacking previous experience, in a few days she was able to beat all production marks by 375%. The worker who occupied the job had more than ten years' experience and had continuously complained that the production standard was too demanding.

Other times, the group will put pressure to set the same results for all the units of the system, even forcing the most productive ones to reduce their output. The social pressures of the group can also push the most efficient employees to reduce their performance or to quit the organisation. Incentives can also lead employees to engage in all sorts of illicit behaviours. One major problem with incentives is that people will choose the fastest way to achieve a goal, even if that means cheating or avoiding laws and norms. One example of such practices occurred in New Orleans when the police were encouraged to make the city a safer place. The local city government team established a programme whereby those districts that improved their crime statistics would receive bonuses and promotions. In some districts, the police cut corners to improve their crime statistics; they did not reduce criminal offenses but reclassified them as less serious. Five prominent officers were dismissed when this cheating was discovered (Pfeffer & Sutton, 2006). Some athletes also cut corners by doping themselves to get better rankings and thus be able to sign lucrative advertising contracts. In fact, the majority of scandals and reprehensible behaviour in today's society are linked to cutting corners due to a lack of ethics and moral standards.

Some scholars consider the use of incentives to undermine intrinsic motivation (Deci et al., 1999), and even advances related to performance can be an unsurmountable burden. Counterintuitively, incentives may produce a crowding-out effect, because

people's willingness to execute an activity governed by intrinsic motivation might decrease when its performance is associated with attaining a monetary or material reward. However, the evidence of this crowding-out effect is strange because it would imply that if the incentivised increase in extrinsic motivation is smaller than the decrease in intrinsic motivation, employees would work less hard regardless of receiving higher pay (Larkin & Pierce, 2016). Other scholars consider this crowding-out effect to be a myth (Cerasoli et al., 2014) and counter-intuitive.

Economic incentives can also alter the social or moral behaviours of employees. Some people perform their activities at maximum effort simply because they feel that it is their moral or social obligation. However, when an incentive is set to perform a task, the transaction stops being 'social' or 'moral' and becomes 'economic'. As a result, individuals might reduce and relax their moral or social responsibility, leading to results contrary to those targeted by the incentive.

In the social behaviour displacement, the distortion in the behaviour is due to the perception that paying the agreed price is, on its own, a responsible act. Gneezy and Rustichini (2000) evidenced such an effect in their study of 10 private day-care centres for children located in Haifa, Israel. Imposing a fine to those parents arriving late to collect their children transformed the social obligation of being punctual into an economic transaction for which parents were inclined to buy time to arrive late. The number of delays increased steadily after the introduction of the fine. The rate eventually settled at a level that was almost twice as large as the initial one. The penalty gave parents the freedom to decide whether they were late. This implies that incentives can make people change the questions they ask themselves from 'are you good or evil?' to 'would you pay the price?' In Haifa, when the fine was removed the rate of late arrivals did not change. Eliminating the fine did not make parents consider it their social duty to follow the social norm of being punctual; it just set a fair price to pay (equal to zero) to eliminate the delay. As a result, once economic norms displace social ones, they are more difficult to re-establish.

The risk associated with transforming moral behaviours into economic transactions is the adverse selection of those individuals exclusively motivated by money. Titmuss (1970) observed that the majority of U.S. blood donors received a monetary compensation, while in Britain the donations were voluntary. However, relative to the American system, the British blood donation system had higher quality blood (with less Hepatitis B) and there were fewer shortages. When in the 1970s the U.S. adopted the system of voluntary donations, altruistic donors more than offset the decrease in paid donations. This occurred exactly as Titmuss had predicted, and contrary to other scholars, among which was the Nobel Laureate Economist Kenneth Arrow, who considered that payment (economic rewards) should not deter altruist donors, whereas if the payment was eliminated it could deter paid donors, thus reducing the total number of donations. Once the economic incentives were removed, blood donations increased both in quality and in quantity, and the system as a whole was more effective and steady than before (Benkler, 2011).

Finally, it should be borne in mind that incentives find support in their fairness (or merit). Fairness is just one mechanism to distribute resources. Another standard is equality. Since they rely on beliefs, there is not such a thing as a true or false rule. Individualist cultures promote equality (Leung, 1997). In those cultures in which people possess communal rather than individual thinking schemes, the rewards will likely be equally distributed rather than given to those individuals who obtain the best results. Relative to men, women are more likely to prefer equality as distributive criteria (Sampson, 1975). This leads women to reject incentives (Niederle & Vesterlund, 2007). Hence, it could be possible that,

unintentionally, an incentive system could lead to discrimination against women in the labour market.

Discussion: efficiency wages as an alternative to individual economic incentives

Some organisations offer wages that are higher than the market-average as a compensation mechanism. Any firm can replicate this practice for any task. Counterintuitively, paying higher wages can make firms more productive. The reason is that these wages do not encourage employees to engage in free rider or social loafing behaviours, but they instead help to hire and retain the best talent. Ford's minimum wage increase provides a good example of efficiency wages. On January 5th 1944, Henry Ford announced a new minimum wage that doubled the average wage in the industry, which was set at US \$2.38 for nine working hours a day. Absenteeism and workers' monthly turnover were sharply reduced. Henry Ford claimed that 'paying 5 US\$ for eight working hours per day was one of the best cost reduction tactics that could have ever been implemented' (Ford, 1922). Henry Ford had rediscovered an ancient truth: paying employees more than what they can earn in other firms allows for a more enthusiastic and loyal workforce and lower rates of absenteeism (Raff & Summers, 1987). For firms, labour turnover is costly; the higher the wages, the lower the rate of turnover is because the wage exceeds the employee's opportunity cost. In addition, the adverse selection effect predicts that employees with greater skills will reject those firms offering lower wage levels (Eisenhardt, 1988). Consequently, high wages will attract the most productive employees.

From the perspective of behavioural economics, two arguments support the use of efficiency wages. The first argument is related to the endowment effect (Kahneman et al., 1990), which refers to the greater suffering experienced by people when they lose something they already possess, as opposed to the pleasure felt when they receive or win that thing; in absolute terms, this difference might amount to twice the value (Novemsky & Kahneman, 2005). That is to say, people value more what they already possess than what they do not yet possess, even in the case of it being an incentive paid beforehand, which should be paid back if the desired result is not achieved or that will be kept if the result is achieved. Scholars from the behavioural economics field have made an interesting finding: it seems that giving the employees the incentive before completion of the work – and threatening to reclaim it if they do not meet the results – increases their performance more than the promise of giving them the incentives afterwards (Hossain & List, 2012). Gneezy and List (2013) confirmed this finding in a manufacturing setting evidencing greater productivity amongst those teams that were given the incentive in advance as compared to those teams that were given the incentive afterwards.

The second argument considers incentives that are paid beforehand to be leveraged by the rule of reciprocity (Fehr et al., 1997), which claims that individuals act according to how they have been treated previously. This rule supports the managerial practices that give employees a gift in the form of an additional reward, expecting more effort than the required minimum (Akerlof, 1984). If it were not for the feeling of self-imposed individual obligation, this demand for increased effort would surely be rejected. Among physicians, Berry and Kanouse (1987) verified that their response rates to a questionnaire increased from 66% to 78% if the questionnaires came together with an incentive in the form of a US \$20 check, instead of just promising the participants that they would give them a check afterwards.

It is thus possible to build a conjecture that the difference between efficiency and market wages could be considered as an incentive paid in advance. This 'incentive' would be lost

should the employee be fired and work elsewhere for market wages. Despite efficiency wages being considered fixed pay, they implicitly act as an incentive that fulfils the first of its two objectives: to motivate employees to increase their diligence. A firm paying efficiency wages will attract the best candidates and those who are hired will be less encouraged to shirk or to be lazy for fear of losing their additional economic reward. Idle employees can be easily noticed and their sanction will be their dismissal, being thus paid market wages by their new employers. Hence, efficiency wages contribute to promoting the effort and the sorting effects, exactly as economic incentives do. Efficiency wages help retain employees, who also seek to keep their high wages, thus efficiency wages also promote long-term employment relations, helping to eliminate the short-term orientation problem. This allows employees to accumulate experience and become familiar with strong reciprocity norms. Confidence facilitates communication processes and improves the flux of information, contributing to the construction of social capital and reduction of the problem of individualistic competitiveness that creates incentives. In sum, efficiency wages help to attract the most productive employees; they increase employees' morale and loyalty – because they perceive them as a fairer and less discriminatory compensation mechanism –; they favour cooperative behaviours, they contribute to maintaining the organisational social peace, and they prevent employees' unionisation (Katz, 1986). Therefore, firms can invest in training and personnel development without the fear that their employees will abandon the firm once they finish their training. This should also be measured in terms of its impact on overall performance through adequate KPIs.

Regardless, if efficiency wages are a potential substitute for incentives, they should also address their second objective: to align organisational objectives and employees' personal interests, thus supporting the direction effect. For this purpose, employees need feedback about their level of performance and the results of their actions (Smilko & Van Neck, 2004; Stone & Heen, 2014). Without specific feedback, employees do not know how (right or wrong) their effort leads to the achievement of organisational objectives (Kluger & DeNisi, 1996; London, 2003). Therefore, efficiency wages should always be awarded alongside an effective informative feedback system.

Feedback performs an instructional role. Objective information about the employees' level of achievement, their behaviour, or the attainment of organisational objectives, clarifies roles, shows new behaviours, or communicates relevant facts about the use of resources or the achievement of organisational objectives. Thus, feedback is an opportunity to work with the employees and to help them in their development and involvement.

To achieve a positive effect, feedback has to be planned and programmed as a continual activity and not as a unique annual or term appraisal event. It is a double communication process free of performance appraisals or compensation activities (Kohn, 1999; Doerr, 2018). In addition, the instructional function of feedback can be significantly enhanced if the specific feedback on the results is linked to challenging and quantifiable objectives (Earley et al., 1990).

The need for - and relevance of - feedback varies among individuals and contexts, though it always remains necessary and has to be both fast and truthful. Usually, an employee's performance improves according to the quality of the feedback provided (Jackman & Strober, 2003). Additionally, evidence shows that, if feedback is informative and positive rather than negative and control oriented, it leads to better performance improvement. It also shows that a positive feedback is remembered more exactly than a negative one (Bannister, 1986). Praises develop a positive concept in individuals and lead to greater performance (Luthans, 2008). Likewise, self-generated feedback (which allows employees to follow up on their own progression) is more effective and provides higher performance

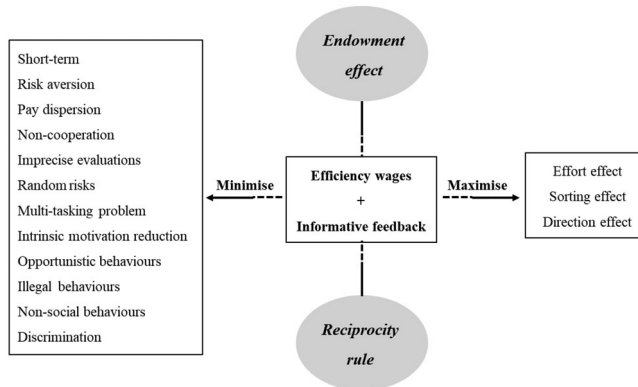


Figure 1. Conceptual framework.

than feedback provided by third parties (Ivancevich & McMahon, 1982). There is also evidence that individual feedback produces better results than collective feedback. Similarly, it seems that public feedback is more effective than if done privately (Kopelman, 1986).

Therefore, feedback becomes an essential element of any excellence model, for which people development and involvement that this feedback encourages are a fundamental concept (see Dahlgaard-Park, 2008). Despite it is not a complement of efficiency wages, providing information about the level of achievement, or whatever is important for the employer, has a significant effect on behaviour (Kluger & DeNisi, 1996).

Conceptual framework

Figure 1 synthesises the conceptual framework built under the behavioural economics tenets that gives support to the conjecture presented in this paper.

According to extensive empirical evidence on wage policies, most excellent companies, on the grounds of classical economics, conceive and give support to the use of incentives as a motivational factor. In this work, on the grounds of the conceptual framework of Figure 1, we propose the use of efficiency wages accompanied of informative feedback as an effective alternative to incentives. In addition to achieving the same motivational and aligning roles as incentives do, they reduce many of their recognised and dangerous dysfunctions, thus becoming a less discriminatory motivational tool that also enhance more cooperation amongst employees. A basic criterion of any excellence model is the human resource management, with reward and recognition being one of its essential sub criteria (see Dahlgaard-Park & Dahlgaard, 2007). Additionally, cooperation is a necessary ingredient for successful business excellent model initiatives (Dahlgaard-Park, 2012). Thus, efficiency wages accompanied of informative feedback would be a very useful tool to fulfil effectively these sub criteria and to achieve one of the most sought results of these models: employee motivation and satisfaction. In fact, lack of staff involvement is one of the main barriers for excellent models to succeed (Corbett & Angell, 2011).

Conclusion and discussion

One of the most difficult tasks for any firm is to match the employees' effort to an adequate and fair remuneration. Perhaps this explains the use of variable pay and individualised pay-rolls, which take into account the professional category of each employee alongside their

personal performance. Despite this, it is not always easy to implement variable pay policies associated with the achievement of specific objectives. In fact, all too often, after having incurred relevant costs to implement a compensation policy based on incentives, many firms fail to achieve their two main objectives: greater staff motivation and alignment of their interests with organisational objectives. In practice, firms have to manage multiple challenges in order to reduce the risks of incentives producing effects contrary to those sought after.

This paper addresses these challenges and proposes that efficiency wages are an effective substitute for incentives. On the grounds of behavioural economics, we argue that, although efficiency wages are a fixed pay, in practice they act as an incentive paid in advance. Since efficiency wages are paid in advance, due to the endowment effect they motivate employees more than what individual economic incentives do once their objective is achieved. Additionally, the reciprocity rule – which increases employees' motivation to make voluntary additional efforts when they are paid higher than average market wages – also reinforces the motivating effect of efficiency wages. Higher wages also help to attract the most productive employees, increase employee morale and loyalty, favour cooperative behaviours, and contribute to maintaining the organisation's social peace. Overall, this means efficiency wages possess the same positive 'effort' and 'sorting' effects as individual economic incentives do, but they also, as is particularly relevant, minimise most of the risks associated with their distorting effects. Efficiency wages discourage employees' non cooperative behaviours, short-term orientation, and risk aversion; discourage the advent of opportunistic, illegal, and non-social behaviours; minimise the risk of a reduction in the employees' intrinsic motivation, morale, and loyalty due to their perception of unfairness and discrimination; reduce pay dispersion, multitasking problems, and the need for precise multidimensional evaluation procedures.

However, managers should be well aware that paying efficiency wages does not necessarily imply employees are aware of the objectives to meet and thus their expected behaviour. Consequently, in order to achieve the third effect of incentives, the alignment of the employees' efforts and the firm's objectives, the employees should receive informative feedback on their behaviour. This implies that, in order for efficiency wages to become effective substitutes of individual economic incentives, their use has to be accompanied by informative feedback and recognition.

Managerial implications and future research

With these thoughts in mind, this paper aims to contribute to business practices and to communicate the following messages to managers. First, the relationship between the use of incentives and motivation is not always positive. Second, other alternatives to variable pay can optimise their employees' compensation, while increasing their motivation. Relative to pay for objectives, which are currently more pervasive for firms despite their undesirable dysfunctional consequences – and hence increasing detractors –, it is proposed that efficiency wages are an effective form of compensation for any environment. Managers should perceive efficiency wages – if accompanied by information feedback – as a powerful tool to direct employees' efforts towards achieving their business objectives. Overall, managers should therefore consider the joint use of efficiency wages and information feedback as another organisational practice that has to be included in any model of business excellence.

Clearly, to be considered as a valid tool to achieve business excellence (see Asif et al., 2011; Mohammad et al., 2011; Abdullah et al., 2012; Thürier et al., 2018), efficiency wages

should not be considered in isolation. Efficiency wages are a necessary condition for good organisational performance (low wages demotivate employees causing shirks and abandonments), but they are not a sufficient condition. Business excellence requires a plurality of values that must be achieved and maintained in the long-term; it is a complex path both economically, technically, and socially (Ghicajanu et al., 2015). To achieve business excellence, the use of efficiency wages must be complemented with many other measures, for example, the development of effective leadership (Aladwan & Forrester, 2016; Raharjo & Eriksson, 2017). Huges and Halsall (2002), Ringrose (2013) or Ghicajanu et al. (2015) exhaustively put forward in their works all the criteria, measures, and practices that should encompass an excellence model.

In addition, as it is proposed by Dahlgaard-Park and Dahlgaard (2007), all these measures have to be implemented as parts of a dynamic continuum between the micro–macro level. Between both levels there are mutual interrelationships and they cannot be separated. Managers should work with excellence models that integrate all the practices and tools used to have an incidence on individual behaviours (micro level) with its organisational characteristics (macro level). We cannot ignore that individuals' behaviours and actions are most of the times constrained and shaped by organisational characteristics (vision, mission, hierarchical structure, organisational culture, ...).

The paper also makes an academic contribution. It presents the underlying theory to develop the conjecture that efficiency wages can perfectly replace economic incentives. A future empirical research would consist in examining the existence of a positive relationship between the joint use of efficiency wages and informative feedback on higher business performance through the verification of the 'effort', 'selection', and 'direction' effects. Additionally, there will always be employees who will devote more effort than the rest, and who will prefer to have an incentive system to obtain higher pay. How can a firm attract those employees? Would it be feasible to jointly implement efficiency wages and an incentive system that only compensates for excellent contributions?

On the other hand, fairness is a standard for impartiality, just as much as equity is. Since both standards rely on values and beliefs, their interconnection to different cultures might be vast. In communal cultures, employees might prefer efficiency wages, whereas in individualistic cultures employees might prefer incentives. It would be opportune to perform additional research to confirm this conjecture, which could also incorporate the analysis of different business cultures. Another engrossing direction of potential empirical research would be to check whether the effectiveness of efficiency salaries is the same in the public sector as in the private one.

Additionally, an intensive (high-powered) incentive system favours the exit of the least productive employees and minimises shrinking. What are the effects of efficiency wages? Will all the employees aim to be diligent? Do unproductive employees voluntarily quit the organisation or are they fired? In summary, it should be analysed if, relative to incentive systems, efficiency wages provide superior results. Despite the facts and reasons that give support to the use of efficiency wages, there is still a need for additional research.

Finally, several excellent firms stand out due to their efficiency wages, low turnover rates, investment in training, provision of informative feedback, and employees' profit sharing schemes. Studying the causality of these variables could provide enriching information in the field of efficiency wages. Although scholars in the economic field have studied efficiency wages, their analysis lacks the behavioural perspective that is proposed in this paper. Under this theoretical framework, future research could also be directed to corroborate the theoretical analysis presented in a context in which efficiency wages are complemented by collective incentives for the plant, department, or business levels.

Limitations

Despite its potential to become the grounds of future research, this paper is not exempt of limitations. It is a conceptual study, and the conjecture developed is conducted through a literature analysis. Thus, the main limitation is its need for empirical validation. The absence of the use of qualitative and/or quantitative techniques limits the value of the conclusions drawn.

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References

- Abdullah, M., Hamid, M.R.A., Mustafa, Z., Husain, N., Idris, F., Suradi, N.R.M., & Ismail, W.R. (2012). Value-based total performance excellence model: A conceptual framework for organisations. *Total Quality Management & Business Excellence*, 23(5-6), 557–572. <https://doi.org/10.1080/14783363.2011.637786>
- Aguinis, H., Joo, H., & Gottfredson, R.K. (2013). What monetary rewards can and cannot do: How to show employees the money. *Business Horizons*, 56(2), 241–249. <https://doi.org/10.1016/j.bushor.2012.11.007>
- Akerlof, G. (1984). Gift exchange and efficiency-wage theory: Four views. *American Economic Review*, 74(2), 79–83.
- Akerlof, A., & Yellen, J. (1986). *Efficiency wage models of the labor market*. Cambridge University Press.
- Aladwan, A., & Forrester, P. (2016). The leadership criterion: Challenges in pursuing excellence in the Jordanian public sector. *The TQM Journal*, 28(2), 295–316. <https://doi.org/10.1108/TQM-08-2014-0064>
- Asif, M., Searcy, C., Garvare, R., & Ahmad, N. (2011). Including sustainability in business excellence models. *Total Quality Management & Business Excellence*, 22(7), 773–786. <https://doi.org/10.1080/14783363.2011.585784>
- Bannister, B.D. (1986). Performance outcome feedback and attributional feedback: Interactive effects on recipient responses. *Journal of Applied Psychology*, 71(2), 203–210. <https://doi.org/10.1037/0021-9010.71.2.203>
- Bartling, B., & von Siemens, F.A. (2010). The intensity of incentives in firms and markets: Moral hazard with envious agents. *Labour Economics*, 17(3), 598–607. <https://doi.org/10.1016/j.labeco.2009.10.002>
- Benkler, Y. (2011). *The penguin and the leviathan*. Crown Business.
- Berry, S.H., & Kanouse, D.E. (1987). Physician response to a mailed survey: An experiment in timing of payment. *Public Opinion Quarterly*, 51(1), 102–114. <https://doi.org/10.1086/269018>
- Camerer, C., Babcock, L., Loewenstein, G., & Thaler, R. (1997). Labor supply of New York city cab-drivers: One day at a time. *Quarterly Journal of Economics*, 112(2), 407–441. <https://doi.org/10.1162/003355397555244>
- Cappelli, P., & Chauvin, K. (1991). An interplant test of the efficiency wage hypothesis. *The Quarterly Journal of Economics*, 106(3), 769–787. <https://doi.org/10.2307/2937926>
- Cerasoli, C.P., Nicklin, J.M., & Ford, M.T. (2014). Intrinsic motivation and extrinsic incentives jointly predict performance: A 40-year meta-analysis. *Psychological Bulletin*, 140(4), 980–1008. <https://doi.org/10.1037/a0035661>

- Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, 59(3), 501–528. <https://doi.org/10.1111/j.1744-6570.2006.00045.x>
- Corbett, L.M., & Angell, L.C. (2011). Business excellence in New Zealand: Continuous improvement, learning, and change. *Total Quality Management & Business Excellence*, 22(7), 755–772. <https://doi.org/10.1080/14783363.2011.585782>
- Dahlgaard-Park, S.M. (2008). Reviewing the European excellence model from a management control view. *The TQM Journal*, 20(2), 98–119. <https://doi.org/10.1108/17542730810857345>
- Dahlgaard-Park, S.M. (2012). Core values – The entrance to human satisfaction and commitment. *Total Quality Management & Business Excellence*, 23(1), 125–140. <https://doi.org/10.1080/14783363.2012.655067>
- Dahlgaard-Park, S.M., & Dahlgaard, J.J. (2007). Excellence – 25 years evolution. *Journal of Management History*, 13(4), 371–393. <https://doi.org/10.1108/17511340710819606>
- Dahlgaard, J.J., Chen, C.K., Jang, J.Y., Banegas, L.A., & Dahlgaard-Park, S.M. (2013). Business excellence models: Limitations, reflections and further development. *Total Quality Management & Business Excellence*, 24(5-6), 519–538. <https://doi.org/10.1080/14783363.2012.756745>
- Deci, E.L., Koestner, R., & Ryan, R.M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627–668. <https://doi.org/10.1037/0033-2909.125.6.627>
- Deming, W.E. (1986). *Out of the crisis*. MIT Center for Advanced Engineering Study.
- de Waal, A. (2013). Evergreens of excellence. *Journal of Management History*, 19(2), 241–278. <https://doi.org/10.1108/17511341311307408>
- Doerr, J. (2018). *Measure what matters: How Google, Bono, and the Gates Foundation rock the world with OKRs*. Penguin Random House.
- Earley, P.C., Northcraft, G.B., Lee, C.D., & Lituchy, T.R. (1990). Impact of process and outcome feedback on the relation of goal setting to task performance. *Academy of Management Journal*, 33(1), 87–105. <https://doi.org/10.2307/256353>.
- Eisenhardt, K. (1988). Agency and institutional theory explanations: The case of retail sales compensation. *Academy of Management Journal*, 31(3), 488–511. <https://doi.org/10.2307/256457>.
- Fehr, E., & Gächter, S. (2002). Altruistic punishment in humans. *Nature*, 415(6868), 137–140. <https://doi.org/10.1038/415137a>
- Fehr, E., Gächter, S., & Kirchsteiger, G. (1997). Reciprocity as a contract enforcement device: Experimental evidence. *Econometrica*, 65(4), 833–860. <https://doi.org/10.2307/2171941>
- Ford, H. (1922). *My life and work*. Doubleday.
- Gerhart, B. (2009). Compensation. In A. Wilkinson, N. Bacon, T. Redman, & S. Snell (Eds.), *Handbook of human resource management* (pp. 210–230). SAGE.
- Gerhart, B., & Fang, M. (2014). Pay for (individual) performance: Issues, claims, evidence and the role of sorting effects. *Human Resource Management Review*, 24(1), 41–52. <https://doi.org/10.1016/j.hrmr.2013.08.010>
- Ghicajanu, M., Irimie, S., Marica, L., & Munteanu, R. (2015). Criteria for excellence in business. *Procedia Economics and Finance*, 23, 445–452. [https://doi.org/10.1016/S2212-5671\(15\)00388-3](https://doi.org/10.1016/S2212-5671(15)00388-3)
- Gilsom, L.L., & Goldberg, C.B. (2015). Editors' comment: So, what is a conceptual paper? *Group & Organization Management*, 40(2), 127–130. <https://doi.org/10.1177/1059601115576425>
- Gneezy, U., & List, J.A. (2013). *The why axis – Hidden motives and the undiscovered economics of everyday life*. Public Affairs.
- Gneezy, U., Meier, S., & Rey-Biel, P. (2011). When and why incentives (don't) work to modify behaviour. *Journal of Economic Perspectives*, 25(4), 191–210. <https://doi.org/10.1257/jep.25.4.191>
- Gneezy, U., & Rustichini, A. (2000). Pay enough or don't pay at all. *Quarterly Journal of Economics*, 115(3), 791–810. <https://doi.org/10.1162/003355300554917>
- Herzberg, F. (1968). One more time: How do you motivate employees? *Harvard Business Review*, 46(1), 53–62.
- Hossain, T., & List, J.A. (2012). The behaviouralist visits the factory: Increasing productivity using simple framing manipulations. *Management Science*, 58(12), 2151–2167. <https://doi.org/10.1287/mnsc.1120.1544>
- Huges, A., & Halsall, D.N. (2002). Comparison of the 14 deadly diseases and the business excellence model. *Total Quality Management*, 13(2), 255–263. <https://doi.org/10.1080/09544120120102487>

- Ivancevich, J.M., & McMahon, J.T. (1982). The effects of goal setting, external feedback, and self-generated feedback on outcome variables: A field experiment. *Academy of Management Journal*, 25(2), 359–372. <https://doi.org/10.5465/255997>.
- Iveta, G. (2012). Human resources key performance indicators. *Journal of Competitiveness*, 4(1), 117–128. <https://doi.org/10.7441/joc.2012.01.09>
- Jackman, J.M., & Strober, M.H. (2003). Fear of feedback. *Harvard Business Review*, 81(4), 101–107.
- Jurgensen, C.E. (1978). Job preferences (what makes a job good or bad?) *Journal of Applied Psychology*, 63(3), 267–276. <https://doi.org/10.1037/0021-9010.63.3.267>
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
- Kahneman, D., Knetsch, J.L., & Thaler, R.H. (1990). Experimental tests of the endowment effect and the Coase theorem. *Journal of Political Economy*, 98(6), 1325–1348. <https://doi.org/10.1086/261737>
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–292. <https://doi.org/10.2307/1914185>
- Katz, L.F. (1986). Efficiency wage theories: A partial evaluation. In S. Fischer (Ed.), *NBER Macroeconomics annual* (pp. 235–276). MIT Press.
- Kerr, S. (1975). On the folly of rewarding A, while hoping for B. *Academy of Management Journal*, 18(4), 769–783. <https://doi.org/10.5465/255378>.
- Kluger, A.N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119(2), 254–284. <https://doi.org/10.1037/0033-2909.119.2.254>
- Kohn, A. (1999). *Punished by rewards* (2nd ed). Houghton Mifflin Company.
- Kopelman, R.E. (1986). *Managing productivity in organization*. McGraw-Hill.
- Larkin, I., & Pierce, L. (2016). Compensation and employee misconduct: The inseparability of productive and counterproductive behaviour in firms. In D. Palmer, K. Smith-Crowe, & R. Greenwood (Eds.), *Organizational wrongdoing* (pp. 270–304). Cambridge University Press.
- Larkin, I., Pierce, L., & Gino, F. (2012). The psychological costs of pay-for-performance: Implications for the strategic compensation of employees. *Strategic Management Journal*, 33(10), 1194–1214. <https://doi.org/10.1002/smj.1974>
- Lawler, E.E. (2000). *Strategic pay*. Jossey Bass Publishers.
- Lazear, E.P. (1986). Salaries and piece rates. *Journal of Business*, 59(3), 405–431. <https://doi.org/10.1086/296345>
- Lazear, E.P., & Gibbs, M. (2009). *Personnel economics in practice* (2nd ed). John Wiley.
- Leung, K. (1997). Negotiation and reward allocations across cultures. In P. C. Earley, & M. Erez (Eds.), *New perspectives on international industrial/organizational psychology* (pp. 640–675). New Lexington Press.
- London, M. (2003). *Job feedback: Giving, seeking, and using feedback for performance improvement* (2nd Edition). Lawrence Erlbaum Associates, Publishers.
- Luthans, F. (2008). *Organizational behavior* (11th Ed.). MacGraw-Hill/Irwin.
- Malcomson, J.M. (1981). Unemployment and the efficiency wage hypothesis. *Economic Journal*, 91(364), 848–866. <https://doi.org/10.2307/2232496>
- Marsden, D. (2010). The paradox of performance related pay systems: ‘why do we keep adopting them in the face of evidence that they fail to motivate?’ In C. Hood, H. Margetts & P. 6 (Eds.), *Paradoxes of modernization: Unintended consequences of public policy reforms* (pp. 182–202). Oxford University Press.
- Milgrom, P., & Roberts, J. (1992). *Economics, organization and management*. Prentice-Hall.
- Mohammad, M., Mann, R., Grigg, N., & Wagner, J.P. (2011). Business excellence model: An overarching framework for managing and aligning multiple organisational improvement initiatives. *Total Quality Management & Business Excellence*, 22(11), 1213–1236. <https://doi.org/10.1080/14783363.2011.624774>
- Niederle, M., & Vesterlund, L. (2007). Do women shy away from competition? Do men compete too much? *The Quarterly Journal of Economics*, 122(3), 1429–1449. <https://doi.org/10.1162/qjec.122.3.1067>
- Novemsky, N., & Kahneman, D. (2005). The boundaries of loss aversion. *Journal of Marketing Research*, 42(2), 119–128. <https://doi.org/10.1509/jmkr.42.2.119.62292>
- Peters, T., & Waterman, R.H. (1982). *In search of excellence: Lessons from America’s best-run companies*. Harper and Row.

- Pfeffer, J., & Sutton, R.I. (2006). *Hard facts, dangerous half-truths, and total nonsense*. Harvard Business School Press.
- Prendergast, C. (1999). The provision of incentives in firms. *Journal of Economic Literature*, 37(1), 7–63. <https://doi.org/10.1257/jel.37.1.7>
- Raff, D.M.G., & Summers, L.H. (1987). Did Henry Ford pay efficiency wages? *Journal of Labor Economics*, 5(4), Part 2, S57–S86. <https://doi.org/10.1086/298165>.
- Raharjo, H., & Eriksson, H. (2017). Exploring differences between private and public organizations in business excellence models. *International Journal of Operations and Production Management*, 37(12), 1795–1816. <https://doi.org/10.1108/IJOPM-09-2015-0593>
- Ringrose, D. (2013). Development of an organizational excellence framework. *The TQM Journal*, 25(4), 441–452. <https://doi.org/10.1108/17542731311314917>
- Sampson, E.E. (1975). On justice as equality. *Journal of Social Issues*, 31(3), 45–64. <https://doi.org/10.1111/j.1540-4560.1975.tb00996.x>
- Shaw, J., & Gupta, N. (2015). Let the evidence speak again! Financial incentives are more effective than we thought. *Human Resource Management Journal*, 25(3), 281–293. <https://doi.org/10.1111/1748-8583.12080>
- Shaw, J.D., & Mitra, A. (2017, third quarter). The science of pay-for-performance systems: Six facts that all manager should know. *WorldatWork Journal*, 19–27.
- Smilko, J., & Van Neck, K. (2004). Rewarding excellence through variable pay. *Benefits Quarterly*, 20(3), 21–25. <https://doi.org/10.2307/3094895>.
- Stone, D., & Heen, S. (2014). *Thanks for the feedback*. Penguin Books.
- Thaler, R. (2015). *Misbehaving. The making of behavioural economics*. W. W. Norton & Company.
- Thürer, M., Tomašević, I., Stevenson, M., Fredendall, L.D., & Protzman, C.W. (2018). On the meaning and use of excellence in the operations literature: A systematic review. *Total Quality Management & Business Excellence*, 1–28. <https://doi.org/10.1080/14783363.2018.1434770>
- Titmuss, R. (1970). *The gift relationship: From human blood to social policy*. Allen and Urwin.
- Torraco, R.J. (2005). Writing integrative literature review: Guidelines and examples. *Human Resource Development Review*, 4(3), 356–367. <https://doi.org/10.1177/1534484305278283>
- Trevor, C.O., Reilly, G., & 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. <https://doi.org/10.5465/amj.2006.0127>
- Tushman, M. (2002). *Hausser food products company*. Harvard Business School Case 9–402–055.
- Welch, J., & Welch, S. (2005). *Winning*. Harper Collins Publishers.