

INCENTIVES, MOTIVATION, AND PERFORMANCE OF EMPLOYEES: A CASE STUDY IN A GARMENT MANUFACTURING FIRM

INCENTIVOS, MOTIVAÇÃO E DESEMPENHO DE FUNCIONÁRIOS: ESTUDO DE CASO EM UMA INDÚSTRIA DE CONFECÇÃO

ABSTRACT

The purpose of our study was to evaluate the effect of incentive provision on the performance of employees from the operational sector of a garment manufacturing firm. Therefore, we conducted a case study with a mixed-method approach, involving structured questionnaires applied to employees, in which we obtained 29 answers, interviews with two managers, and statistical analysis of performance data provided by the firm, covering a period of 213 days, between March 2022 and October 2023. Results show that incentives have a positive and immediate impact on performance, especially in the short term. Peaks in productivity were observed on days when incentives were provided, as well as on the days leading up to the incentive distribution. However, this effect tends to gradually diminish in the subsequent days. Panel data analysis revealed that the positive effect is partially significant and only for the day before the incentives are distributed. Factors such as clarity in goal setting and a healthy work environment were highlighted as essential for maximizing the positive effects of incentives. The study emphasizes the importance of management strategies based on reward systems aligned with organizational objectives, contributing to more effective people management practices. Furthermore, the research provides data for the formulation of organizational policies that promote greater engagement and productivity in industrial settings.

Keywords: Motivation. Rewards. Incentives.

RESUMO

O estudo teve como objetivos analisar quais fatores influenciam a motivação e avaliar o efeito do fornecimento de incentivos sobre o desempenho de colaboradores do setor operacional de uma indústria de confecções. Para isso, foi realizado um estudo de caso com abordagem mista, que envolveu a aplicação de questionários estruturados aos colaboradores, com a obtenção de 29 respostas, entrevistas com duas gestoras e análise estatística dos dados de desempenho fornecidos pela indústria, referentes a um período de 213 dias, entre março de 2022 e novembro de 2023. Como resultados, observou-se que os incentivos exerceram impacto positivo e imediato sobre o desempenho, especialmente no curto prazo, sendo identificados picos de produtividade nos dias de fornecimento e na véspera da distribuição de incentivos. Por outro lado, verificou-se que esse efeito diminui gradualmente nos dias subsequentes. Contudo, os resultados da análise de dados em painel evidenciam que o efeito positivo se mostrou parcialmente significativo, restrito apenas ao dia anterior à atribuição dos incentivos. Fatores como a clareza nas metas estabelecidas e um ambiente de trabalho saudável foram destacados como essenciais para maximizar os efeitos positivos dos incentivos. O estudo destaca a relevância de estratégias de gestão baseadas em sistemas de recompensas alinhados aos objetivos organizacionais, contribuindo para práticas mais eficazes de gestão de pessoas. Além disso, a pesquisa fornece dados para a formulação de políticas organizacionais que promovam um maior engajamento e produtividade em ambientes industriais.

Palavras-chave: Motivação. Recompensas. Incentivos.

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1 INTRODUCTION

This study examines how financial and non-financial incentives affect the performance of employees in the focal organization. In this sense, motivation supports the exertion of effort toward specific organizational goals, with motivational forces described as extrinsic or intrinsic and guiding the direction, intensity, and persistence of performance behaviors (Cerasoli et al., 2014). Thus, motivation is viewed as a driving force behind the pursuit of fulfilling individual or collective needs and desires, leading individuals to act with a certain level of effort to achieve their goals (Antunes, 2011).

Management accounting plays an important role in motivating employees to improve their performance, which organizations can achieve through the use of incentives (Bonner et al., 2000). When considering some of the main management accounting frameworks (Ferreira & Otley, 2009; Malmi & Brown, 2008; Simons, 1995), incentives emerge as a ubiquitous element.

Theoretically, providing incentives leads to additional effort, which in turn increases task performance, although different mechanisms can shape this relationship (Bonner et al., 2000). Nevertheless, Garbers and Konradt (2014) show, based on meta-analytic evidence, that the relationship between incentives and performance is consistently positive, both at the individual and team levels.

Employees who work in an organization typically do not have interests that fully align with the organization's preferences; instead, they seek to satisfy a range of personal needs (Prendergast, 2008). Thus, if individuals do not find ways to satisfy their expectations at work, they will not feel motivated and will perceive the relationship as exploitation rather than exchange (Zonatto et al., 2017).

Given the importance of keeping employees motivated through incentives to enhance their performance, it is essential to understand the dynamics that influence this motivation and how it affects organizational commitment (Kontoghiorghe, 2025). Accordingly, studies indicate that, rather than merely designing incentive schemes with the expectation of increasing performance, it is important to understand the contextual factors that shape this relationship (Alves & Lourenço, 2023; Bonner et al., 2000; Landry et al., 2017). Moreover, it is also important to examine the possible effects of motivation and incentives at different points in time relative to when incentives are provided (Figueiredo et al., 2025; Frankort & Avgoustaki, 2022).

In light of the above, the following research question emerges: Which factors influence motivation, and what is the effect of assigning incentives on the performance of employees in the operations department of a garment manufacturing firm? To address this question, the study aims to analyze which factors influence motivation and to assess the effect of assigning incentives on the performance of employees in the operations department of a garment manufacturing firm. To achieve these purposes, the study examined aspects that influence employees' motivation using questionnaires administered to them, as well as interviews conducted with the company's management. In addition, the analysis included performance data provided by the focal company.

This study first contributes by analyzing factors that affect employees' motivation and job satisfaction (Alkandi et al., 2023; Trivedi et al., 2024). Studies from this perspective have shown, for example, that organizational commitment is related to job satisfaction (Westover et al., 2010) and that rewards are among the most powerful motivators driving job satisfaction (Chepkwony & Oloko, 2014). Thus, organizations need to develop policies that create conditions to motivate their employees and make them feel satisfied with the work they perform (Cuenca & Constantinov, 2016).

As a practical contribution, the study suggests actions to help firms retain qualified, loyal, motivated employees who are committed to the organization's success (Alnıaçık et al., 2012), so they can maximize their performance (Park & Kim, 2023). Understanding the factors that motivate employees can represent a competitive advantage for firms, both in terms of talent retention and in terms of overall firm performance. Likewise, testing and identifying the effects of different incentive designs also enables firms to find better ways to motivate employees and increase productivity.

In theoretical terms, this study adds to the literature that examines the relationship between incentives and performance (Bonner et al., 2000). Although this literature points to a positive relationship between incentives and performance (Garbers & Konradt, 2014), different studies identify circumstances that interfere in this relationship. For example, evidence indicates that providing only financial incentives is not, by itself, sufficient to increase performance, which contradicts agency theory (Alves & Lourenço, 2023). Thus, by considering discussions on the most appropriate ways to design incentive systems (Garbers & Konradt, 2014; Park & Kim, 2023) and on the temporal horizon of incentive effects (Frankort & Avgoustaki, 2022), this study also contributes insights into factors identified as important for improving employees' working conditions.

Finally, by identifying relevant factors for employee motivation, together with analyzing the effectiveness of different incentive systems, our study generates a social contribution aligned with Sustainable Development Goal (SDG) 8, Decent Work and Economic Growth, and with SDG 9, Industry, Innovation, and Infrastructure. Thus, while supporting firms and their sustainability, these efforts also help ensure that organizations can fulfill their role of providing work and livelihoods for people.

2 LITERATURE REVIEW

2.1 Management Control System (MCS)

Managerial control is one of the elements of organizations' strategy process and, more specifically, represents one of the administrative mechanisms that help implement strategies (Govindarajan, 1988; Mintzberg et al., 2006). It can be understood as the process of guiding organizations toward viable patterns of activity in an uncertain environment, by exerting the organizational role of enabling managers to influence the behavior of other organizational members in line with adopted strategies, using different information systems for this purpose (Berry et al., 2005; Anthony & Govindarajan, 2008).

Control is the process of monitoring a firm's activities to ensure that they are consistent with plans and that objectives are achieved (Drury, 2004). At the organizational level, a management control system requires information obtained through different control mechanisms, such as action or behavioral control, cultural or social control, and results control (Ouchi, 1979; Drury, 2004).

Action or behavioral controls involve observing individuals' actions while they perform their tasks; that is, it occurs when a person takes responsibility for the work of others, giving them instructions and monitoring their actions (Mintzberg, 1979). This type of control is appropriate when cause–effect relationships are well understood, so that if the appropriate means are followed, the expected results will occur (Drury, 2004).

Cultural and social controls allow reciprocal monitoring among different organizational actors through group norms and values. This type of control is appropriate when neither cause–effect relationships are well understood, nor results are easily measurable (Ouchi, 1979).

Finally, results controls involve collecting and issuing reports with information on the outcomes of work effort and consist of the following stages:

- i) establishing performance measures that minimize undesirable behavior;
- ii) setting performance targets;
- iii) measuring performance; and
- iv) providing rewards and punishments.

These controls are considered synonymous with management accounting systems (Drury, 2004). This type of control is appropriate when results are easily measurable, and the cause–effect relationships may or may not be well understood (Ouchi, 1979). Therefore, management accounting systems are an integral part of organizations' formal control structure (Waterhouse & Tiessen, 1978) and are responsible for providing information on how an organization uses its resources and for assessing the results achieved (Anthony & Reece, 1975).

The process of guiding the organization toward viable patterns of activity in a changing environment (Berry et al., 2005) does not subsist without a structured MCS that stimulates, guides, and informs managers about the relevant elements to be observed when seeking information that supports the development of the organization's management process (Frezzati et al., 2011).

Performance management and reward systems are important aspects of MCSs and play a significant role in developing strategic plans, analyzing organizational objectives, and compensating individuals (Chenhall, 2008). Therefore, a compensation system can be used to align or motivate individuals' expectations with those of the organization (Anthony & Govindarajan, 2008).

For Simons (1995), motivation, monitoring, and reward for achieving specific goals are embedded in the context of the diagnostic control system, which is used to motivate, monitor, and reward the achievement of specified goals. Malmi and Brown (2008) state that remuneration and rewards are based on symbols, such as employee retention and the encouragement of cultural control through group rewards, and, to conclude, Ferreira and Otley (2009) argue that rewards result from performance evaluation and are a logical aspect to be considered within the system.

It is worth noting that the literature provides abundant empirical applications of these frameworks, confirming the role of remuneration in management controls, whether based on Simons' (1995) study (Barros & Ferreira, 2022; Speklé et al., 2017), on Malmi and Brown (2008) (Altoé et al., 2018; Berg & Madsen, 2020), or on Ferreira and Otley (2009) (see the review by Franco-Santos & Otley, 2018).

2.2 Compensation and incentives

The concept of remuneration has evolved in a comprehensive way, going beyond the traditional financial meaning and encompassing the overall economic return that employees receive in exchange for the work performed (Krauter, 2009). Remuneration or compensation is related to the financial or non-financial benefits that an employee receives in exchange for their work and dedication and is divided into direct and indirect compensation. Whereas direct compensation refers to payments made to employees in the form of salary, bonuses, awards, or commissions, indirect compensation involves the provisions contained in collective labor agreements, as well as the benefits and service plans offered by the organization, which include vacation, bonuses, tips, allowances, and others (Chiavenato, 2024).

Firms that better remunerate their executives and employees tend to show superior performance compared with those that offer lower remuneration. Employees are more motivated to work when they believe that their efforts will

result in rewarding performance (Leite & Hein, 2019). To motivate employees to behave in ways that are aligned with the organization's objectives, it is essential that the firm provide incentives. These incentives can be either positive or negative and influence employees in different ways. Such stimuli are designed to satisfy individuals' needs within the organizational context, in which positive incentives (for example, bonuses or promotions for meeting targets) increase the satisfaction of individual needs, whereas negative incentives (for example, warnings or loss of bonuses for not meeting targets) decrease that satisfaction (Anthony & Govindarajan, 2008).

Incentives are essential in MCSs, playing a fundamental role in motivating employees to improve their performance and, in doing so, achieve organizational objectives (Santos, 2011). Granting incentives is an essential control mechanism to motivate all employees in the organization to achieve the targets set by the firm (Anthony & Govindarajan, 2008).

According to Malmi and Brown (2008), the purpose of remuneration is to motivate individuals and increase their performance by creating congruence between personal goals and objectives and those of the organization. It is worth noting that remuneration should be analyzed beyond cybernetic controls (in the typology of the management control system as a package), because while these involve aspects such as quantification and performance standards, there are forms of remuneration that go beyond this scope, such as employee retention and cultural controls through group-based rewards (Malmi & Brown, 2008).

Reward or incentive systems are linked to a set of material and immaterial benefits which main purpose is to reinforce job satisfaction, productivity, and organizational functioning. Employees obtain rewards based on their performance within the firm (Bilhim, 2004). The objectives of these systems are to attract and retain employees, reducing staff turnover and motivating workers both in terms of productivity and the organizational health of firms (Rito, 2006).

In addition, for an incentive system to be effective and motivating, it is essential that rewards are directly linked to employees' individual objectives. Employees need to understand that their roles are aligned with the organization's strategic objectives (Santos, 2011). In this context, rewards can be defined as tangible or intangible. Tangible rewards include prizes granted to employees for meeting goals established by the organization. In turn, intangible rewards involve recognition through public praise or career advancement resulting from an employee's accomplishment (Soares, 2009).

Finally, all companies adopt a complex reward system to align their employees with organizational objectives. In this context, organizations distribute these incentives based on each employee's contributions (Chiavenato, 2024).

2.3 Previous studies

Marcelino (2019) examined the effect that the Management Control System (MCS) has on the mental state and attitudes of employees in a large Brazilian food company. The results show that the MCS, as part of the organizational environment – together with organizational climate and management and leadership actions – constitutes a construct that can exert some influence on employees' Psychological Capital. The study emphasizes that the MCS can enhance individuals' potential, helping the organization gain competitive advantage. It can also bring benefits from an individual perspective, that is, for employees, since job satisfaction and affective organizational commitment are important attitudes as workers develop a sense of identity in the workplace.

Moraes' (2005) study investigated the possible links between the motivational phenomenon and the dimensions of commitment in an organizational setting at a Brazilian higher education institution. The results showed that extrinsic motivation is related to instrumental commitment, whereas intrinsic motivation is related to affective commitment. In this case, when workers are motivated by the benefits arising from performing their activity, they tend to show commitment to the organization that is based mainly on aversion to the costs associated with changing jobs. But when workers are motivated by the satisfaction of carrying out their activities, they display affective commitment, which is related to their level of involvement with the company.

By analyzing employees in a Brazilian public hospital, Grohmann et al. (2013) investigated how work motivation affects workers' commitment, satisfaction, and performance. They observed that motivation, commitment, and job satisfaction moderately influence employees' professional performance. They also found that there is no direct relationship between motivation and performance. Thus, to increase professional performance, workers must not only be motivated but also satisfied and committed to their work.

Focusing on employees in the administrative sector of a large internationalized industrial organization, Zonatto et al. (2017) analyzed the influence of work motivation on organizational commitment. They showed that workers whose motivation stems from the satisfaction of performing their activities and from the benefits associated with doing so have affective commitment, which is related to their emotional involvement with the company. They also found that the higher workers' level of education, the lower their affective and instrumental commitment, and that the analyzed employees are not concerned about unemployment or about the costs associated with leaving the company.

By examining how the characteristics of goals and rewards influence the motivation of civil servants in the public sector of Minas Gerais, Rodrigues et al. (2011) found that the overall evaluation of the goal system and the overall evaluation of the reward system did not show significant influences on motivation. They also observed that the aspects that influence motivation, in decreasing order of importance, are the value a person assigns to the reward received, the perception that performance leads to a reward, and the civil servant's belief in their own ability to carry out the work. The study showed that the management with goals and rewards has the potential to increase the motivation of the public servants analyzed.

Aguiar and Pimentel (2017) emphasize in their analysis the motivational effect and the composition of compensation on financial and market performance, both at contemporaneous and lagged levels. The results indicated that there is a relationship between compensation and performance, such that firms that pay higher compensation achieve higher performance levels in both the short and the long term.

In Machado's (2017) study, it was shown that incentive systems influence several aspects within the organization and represent an important variable that must be properly designed and implemented to have a real impact on the company. The study analyzed the influences of incentives on employees' satisfaction, their well-being, and their organizational performance. The results highlight the importance of the reward system, showing a positive influence on several variables, such as satisfaction, well-being, and organizational performance.

In the study by Nascimento et al. (2019), a systematic review was conducted to investigate the influence of reward systems on organizational motivation. The review revealed that in 71% of the cases analyzed there was a direct and positive relationship between the implementation of reward systems and increased motivation at work. Moreover, the study showed that different types of rewards create conditions for employees to feel more motivated.

In summary, the reviewed studies show the relationship between MCSs and incentives with organizational performance, as well as related variables such as employees' satisfaction, commitment, and motivation. A well-implemented MCS can maximize individuals' potential and, consequently, help the organization achieve a competitive advantage, with evidence that the MCS positively influences employees' psychological capital, leading to higher satisfaction and affective commitment at work.

Goal and reward systems have an impact on employees' motivation, especially when workers perceive value in the rewards and believe in their ability to perform the work (Machado, 2017). Therefore, the relationship between MCSs and incentives with performance and other variables is complex (Marcelino, 2019). Implementing an efficient MCS, together with a well-designed incentive system, is crucial for improving organizational performance and creating a satisfactory and committed work environment (Nascimento et al., 2019; Zonatto et al., 2017).

2.4 Hypotheses development

For the performance data of employees collected in the company, we formulated and tested the following hypotheses. The first hypothesis assumes a positive relationship between incentives, on the day they are granted, and employees' performance. As highlighted in a meta-analysis, the relationship between the provision of incentives and performance is consistently positive (Garbers & Konradt, 2014). In this sense, the granting of incentives becomes one of the pillars of management accounting, because to align individuals' behavior, it is necessary to offer something in return (Bonner et al., 2000; Cabral et al., 2024).

Seminal research and recent studies show the positive effect of incentives (Nascimento et al., 2019). For example, evidence indicates that the effect is positive in cases such as incentives from government programs that support academic publications (AlShareef et al., 2023). However, given the results of studies on the topic, caution is needed, because several indicate that this positive relationship is context-dependent (Alves & Lourenço, 2023; Awasthi & Pratt, 1990; Park & Kim, 2023).

When considering the design of incentive systems, several types can be used, such as monetary, nonmonetary, and other benefits, and many firms use a combination of more than one type of incentive (Alves & Lourenço, 2023). There is another type of incentive, called a noncontingent incentive and very common in the market (Cerasoli et al., 2014), which is offered on a fixed or variable schedule and is not tied to the achievement of a predetermined performance level. Providing celebratory parties for employees, which is the incentive considered in the present study, fits the category of non-contingent incentive.

From a theoretical standpoint, noncontingent incentives do not produce significantly positive effects on performance, because when the incentive is not linked to performance, employees do not feel as motivated as in the case of contingent incentives (Deci, 1972; Podsakoff et al., 1982). Even so, there is evidence of aspects that can be positively related to performance in the case of non-contingent incentives. Manohar et al. (2017) found that although performance under non-contingent incentives is lower than under contingent incentives, it is still higher than when no additional incentive is offered. Córdova et al. (2021) report in their findings that non-contingent incentives are beneficial for inducing the adoption of new behaviors.

Taking these findings into account, we state the first hypothesis as follows:

H1: The relationship between incentives and employees' performance on the day the incentive is granted is positive.

The second hypothesis also assumes that the positive relationship between the granting of incentives and performance holds for the day before and the day after the incentive is granted. This premise is based on the idea that incentives are a form of extrinsic motivation that generate expectations among employees (Figueiredo et al., 2025). As employees anticipate receiving an incentive, current performance may be higher due to the expectation of the reward, and performance after the incentive may also be higher as a response to the incentive (Frankort & Avgoustaki, 2021). Furthermore, subsequent performance is higher when employees perceive the incentive as a form of recognition (Yang et al., 2022).

In this sense, we formulate the second hypothesis as follows:

H2: The relationship between incentives and employees' performance on the day before and the day after the incentive is granted is positive.

3 METHODOLOGY

This study is characterized as descriptive in terms of its objectives, as it describes the dynamics related to incentives, motivation, and performance in an organization. Regarding the approach, it is classified as mixed methods, since the analyses use both qualitative and quantitative data. Finally, with respect to the procedures, it is a case study. Regarding data collection techniques, the study used performance data provided in spreadsheets, questionnaires, interviews, and observation.

3.1 Data collection

Our paper is a case study because this procedure allows for an in-depth analysis. Accordingly, the research sought methodological triangulation, drawing on qualitative and quantitative data obtained through: a) a questionnaire administered to the organization's employees, allowing participants to play an active role not only as objects of study but also as self-assessment subjects; b) interviews with managers; c) analysis of spreadsheets; and d) observation of the company under study.

We carried out our study in a manufacturing firm located in Paraná - Brazil, operating in the garment industry since 2000, which employs 49 workers and has an average production of 11,100 pieces per month. We justify the choice of this company because it uses an incentive system that establishes performance targets and provides both contingent and non-contingent remuneration linked to those targets. The sample comprised 29 employees from the operations department and 2 from the management area, representing 63% of the company's workforce, who volunteered to respond to the research instruments. The interviews were conducted with the management team, which consists of two individuals. One of the managers is the owner of the company, and the other holds the position of general manager, having worked at the firm for 14 years and initially holding a position in the operations department.

3.1.1 Questionnaire and interview guide

Data collection took place through the administration of a structured questionnaire with closed-ended questions to the organization's employees (see Tables 2, 3, and 4 in the results section). Using this instrument, employees evaluated statements aimed at assessing constructs related to goal difficulty and importance, participation in goal setting, feedback on goal attainment, overall evaluation of the goal system, and the expectancy, instrumentality, and valence of rewards. The statements were rated on a Likert-type scale ranging from 01 (strongly disagree) to 07 (strongly agree).

We conducted interviews with management using an open-ended questionnaire (Table 1) to identify initiatives implemented by the company's leadership to inspire and motivate those under their direction, thereby eliciting the best from each employee in favor of collective performance.

Table 1 - Interview guide with management

1. Do you foster, among employees, the necessary conditions to provide quick responses to the company's challenges?
2. Do you promote competency development plans for employees?
3. Do you promote training plans for employees?
4. Are you open to suggestions from your employees?
5. Do you acknowledge your employees' skills?
6. Do you assess the contribution of each employee (or group) to the company's results?
7. Do you identify which employees need training?
8. Do you identify new talent?
9. Do you evaluate the compensation system?
10. Do you design reward programs?
11. Do you provide feedback to employees?
12. In your opinion, what are the effects of granting incentives on employees' performance?

Source: Prepared based on Rodrigues et al. (2011), Pires et al. (2015), and Zonatto et al. (2017).

Both questionnaires were developed based on the studies by Rodrigues et al. (2011), Pires et al. (2015), and Zonatto et al. (2017). The administration of the instruments took into account ethical aspects, as described in the Informed Consent Forms (ICFs), in which all procedures related to the research project and the option to participate or not were explained clearly and objectively to employees and to the organization's management.

At that time, all employees were informed of the researchers' commitment to preserve the privacy and confidentiality of the research data. We collected the data in a way that we maintained confidentiality, and we committed not to disclose this information in any manner that could, even remotely, allow the identification of employees or of the company's name. In this sense, each questionnaire received only a number, without any linkage to the respondent.

3.1.2 Performance archival data

Additionally, we used spreadsheets with production performance data provided by the company for months in which some non-contingent incentive was offered. Specifically, on the dates considered, gettogethers were held with employees during working hours. The data refer to the following months:

- a) March 2022 and 2023 – International Women's Day;
- b) April 2023 – Company anniversary;
- c) May 2022 and 2023 – Mother's Day and Seamstress's Day;
- d) August 2022 and 2023 – Father's Day;
- e) October 2022 and 2023 – Children's Day;
- f) November 2022 – International Men's Day.

The analysis considered only performance data from months in which some incentive was provided. For this reason, although the full period from March 2022 to October 2023 spans 1 year and 8 months, only 10 months were used in this analysis. Within this period, we collected data only for those 10 months, given that in those months some incentive was granted to employees. In addition, the analysis used performance data only for employees who remained with the company throughout the entire period.

Employees' performance data refers to a percentage relative to the target set for each day. For example, employee 3, who works as a seamstress and was absent on one of the days observed, achieved an average performance of 100% on all days worked. By contrast, employee 4, who also works as a seamstress and was not absent on any of the days observed, achieved an average performance of 109% on all days worked.

3.2 Data analysis

We analyzed the questionnaire items answered by employees using descriptive statistics, after organizing the database and performing the calculations in Excel. We analyzed the interview responses from the company's management by defining main categories based on the information obtained.

With respect to the available production performance data, which include performance observations for several employees over several days (periods), we conducted a panel data statistical analysis using Stata software. The dataset contains information for 18 employees over a period of 213 days for each employee, resulting in 3,834 observations.

The estimated model is as follows:

$$Perf_{it} = a_i + \beta_1 \cdot incent_{it} + \beta_2 \cdot gender_{it} + \beta_3 \cdot pre_{it} + \beta_4 \cdot post_{it} + \beta_5 \cdot absent_{it} + \varepsilon_{it}$$

Where:

perf: dependent variable that represents employees' performance.

incent: binary variable that takes the value 1 on incentive days and 0 on all other days.

pre: binary variable that takes the value 1 on the day preceding an incentive day and 0 on all other days.

post: binary variable that takes the value 1 on the day following an incentive day and 0 on all other days.

gender: binary control variable that takes the value 1 for female and 0 for male.

absent: binary control variable that takes the value 1 on days of absence or when performance was not recorded, and 0 on all other days.

We decided to analyze whether there is also a difference in performance on days preceding the provision of such incentives, given that incentives in the company usually occur on commemorative dates. In the same logic of effects that extend beyond the incentive day itself, we also examine the effect on subsequent days.

4 RESULTS

We then carried out a descriptive study after compiling the data, with the aim of presenting the demographic variables of the population under study, and found that, in the operations department, the seamstress position predominates,

79% of employees have up to 10 years with the company, 87% have at most a high school education, and 90% have held the same positions since they were hired.

4.1 Employees' satisfaction and motivation

Next, we present the questions administered to the company's employees (Tables 2, 3, and 4) in order to capture their perceptions of motivation levels and the dimensions of commitment in the organizational environment.

Table 2 - Questions regarding motivation for work

| Regarding your motivation for work, indicate how much you agree with the following statements, using 1 for "strongly disagree," 2 for "disagree," 3 for "slightly disagree," 4 for "neither agree nor disagree," 5 for "slightly agree," 6 for "agree," and 7 for "strongly agree." | Number of employees | Maximum | Minimum | Mean | Mode | Median | Standard Deviation |
|---|---------------------|---------|---------|-------|------|--------|--------------------|
| I have autonomy to carry out my activities efficiently. | 29 | 7 | 2 | 6.000 | 7 | 7 | 1.581 |
| I am satisfied with working at this company. | 29 | 7 | 3 | 6.310 | 7 | 7 | 1.072 |
| I have the freedom to express my opinions. | 29 | 7 | 2 | 5.448 | 7 | 6 | 1.549 |
| The company responds to my opinions. | 29 | 7 | 2 | 5.069 | 6 | 5 | 1.486 |
| I feel adequately compensated for the level of effort involved in performing my activities. | 29 | 7 | 1 | 5.000 | 6 | 6 | 1.669 |
| I feel professionally valued. | 29 | 7 | 2 | 5.517 | 7 | 6 | 1.724 |
| I have a good relationship with my supervisor. | 29 | 7 | 4 | 6.517 | 7 | 7 | 0.871 |
| I have a good relationship with my coworkers. | 29 | 7 | 1 | 5.586 | 7 | 6 | 1.701 |
| I feel that my job is stable. | 29 | 7 | 3 | 6.172 | 7 | 6 | 0.966 |
| I am satisfied with how the company's physical workspace is managed. | 29 | 7 | 2 | 5.621 | 7 | 6 | 1.656 |
| The goals that are set are difficult to achieve. | 29 | 7 | 1 | 4.483 | 4 | 4 | 2.011 |
| I am satisfied with the rewards for achieving goals. | 29 | 7 | 2 | 5.621 | 7 | 6 | 1.801 |
| I am committed to achieving the goal. | 29 | 7 | 4 | 6.586 | 7 | 7 | 0.825 |
| I feel that the company motivates me to work in a team. | 29 | 7 | 1 | 5.414 | 7 | 6 | 1.973 |

Source: Research data. Instrument adapted from Rodrigues et al. (2011), Pires et al. (2015), and Zonatto et al. (2017).

Among the results shown in Table 2, regarding work motivation, the statements related to employees' effort to achieve goals and to having a good relationship with their supervisor displayed the highest levels of agreement, with mean scores of 6.586 and 6.517, respectively. Job satisfaction with working at the company appears to be the third-highest level of agreement.

Goal setting is a mechanism intended to motivate individuals (Locke & Latham, 2002) and can consequently lead to higher pay and performance (Machado, 2017). In this case, more motivated employees can positively have influence in aspects such as commitment and satisfaction (Zonatto et al., 2017). Regarding good relationships with supervisors, the literature also reports a positive effect on motivation, satisfaction, performance, and commitment (Dulebohn et al., 2012; Mynt et al., 2016).

Still regarding the results shown in Table 2, among the statements with the lowest levels of agreement among employees are the one related to the difficulty of achieving goals, with a mean of 4.483, and the one concerning how adequately employees feel they are compensated for the level of effort involved in performing their activities, with a mean of 5.00.

The low level of agreement with the statement about goals may indicate that employees consider them easy, and evidence suggests that goals that are too easy or too difficult are not suitable for motivation and performance (Locke & Latham, 2002; Höpfner & Keith, 2021). In turn, paying a salary that satisfies employees is also important for their motivation. Since salary alone does not function as an incentive, this aspect supports Alves and Lourenço's (2023) result that the granting of incentives cannot be considered sufficient motivation to align employees' behavior with organizational objectives.

Table 3 - Aspects that motivate employees to work at the company most

| Regarding your motivation for work, indicate how much you agree with the following statements, using 1 for "strongly disagree," 2 for "disagree," 3 for "slightly disagree," 4 for "neither agree nor disagree," 5 for "slightly agree," 6 for "agree," and 7 for "strongly agree." | Number of employees | Maximum | Minimum | Mean | Mode | Median | Standard Deviation |
|---|---------------------|---------|---------|-------|------|--------|--------------------|
| The salary. | 29 | 7 | 1 | 5.655 | 7 | 6 | 1.587 |
| Autonomy. | 29 | 7 | 1 | 5.379 | 7 | 6 | 1.801 |
| The work I do. | 29 | 7 | 3 | 6.138 | 7 | 7 | 1.125 |
| Professional growth. | 29 | 7 | 2 | 5.379 | 7 | 6 | 1.720 |
| Lack of alternatives. | 29 | 7 | 1 | 2.655 | 1 | 2 | 1.932 |

Source: Research data. Instrument adapted from Rodrigues et al. (2011), Pires et al. (2015), and Zonatto et al. (2017).

According to the results shown in Table 3, among the statements presented, the work employees perform is the one with the highest level of agreement, with a mean of 6.138. Performing work gives individuals opportunities to build their identity, interact and obtain social support, and find a purpose that is worth dedicating themselves to, spending time on, facing challenges, acquiring status, and earning income (Zanelli et al., 2010). By contrast, lack of alternatives is the statement with the lowest level of agreement among employees, with a mean of 2.655. The lack of job options is not a determining factor for employees to remain in the organization, given the high employability in the garment manufacturing segment, which, according to the Paraná Agência Estadual de Notícias (2024), was the second-largest employer in the state in the current year.

Table 4 - What would improve employees' motivation to perform their work in the company

| Regarding your motivation for work, indicate how much you agree with the following statements, using 1 for "strongly disagree," 2 for "disagree," 3 for "slightly disagree," 4 for "neither agree nor disagree," 5 for "slightly agree," 6 for "agree," and 7 for "strongly agree." | Number of employees | Maximum | Minimum | Mean | Mode | Median | Standard Deviation |
|---|---------------------|---------|---------|-------|------|--------|--------------------|
| The purchase of new equipment | 29 | 7 | 1 | 5.759 | 7 | 7 | 1.725 |
| 29 | 7 | 1 | 5.759 | 7 | 7 | 1.725 | 1.546 |
| An increase in bonuses | 29 | 7 | 1 | 6.310 | 7 | 7 | 1.391 |
| 29 | 7 | 1 | 6.034 | 7 | 7 | 1.546 | 1.895 |
| <i>An increase in salary</i> | | | | | | | |
| 29 | 7 | 1 | 6.310 | 7 | 7 | 1.391 | |
| <i>Improved relationships in the work environment</i> | 29 | 7 | 1 | 5.345 | 7 | 6 | 1.895 |

Source: Research data. Instrument adapted from Rodrigues et al. (2011), Pires et al. (2015), and Zonatto et al. (2017).

Regarding the results shown in Table 4, with respect to improving employees' motivation to perform their work, a salary increase is the option with the highest level of agreement among employees, with a mean of 6.310. Even if employees feel adequately compensated for the level of effort involved in performing their activities (Table 2), they see their salary as their main or only source of family livelihood. The salary aspect is important, for example, when considering the findings of Goerg et al. (2020), which indicate that in a system where workers can set their own wages, they tend to choose higher wages, perform better, and show greater motivation.

In turn, improved relationships in the work environment is the option with the lowest level of agreement among employees, with a mean of 5.345. Because people spend a significant amount of time at work, such relationships can influence several aspects. Evidence shows, for example, that when there are good relationships at work, including friendships, this contributes to relational energy and peer organizational citizenship behaviors, which can benefit motivation and engagement (Xiao et al., 2020).

4.2 Management's commitment to organizational motivation

Reward systems are an important tool for organizational motivation, and, in this sense, it is not enough to simply implement them; they must also be managed with a view to continuous improvement. The following sections present the main topics that emerged from the interviews conducted with the company's management, specifically employee suggestions, training, performance evaluation, and incentive systems.

Regarding employees' suggestions, management believes that the company's openness to listening to workers can create a better work environment. Collaborative communication between employees and management aims to solve common problems. Therefore, it is essential for the organization to encourage participation and create more open communication channels (Deetz, 2010), which allows for the construction of truly democratic environments that foster the exchange of diverse ideas. This aspect is also important for designing an effective incentive system, because beyond seeking performance improvement and alignment with organizational objectives, it is necessary to offer something that meets employees' expectations and keeps them motivated (Cerasoli et al., 2014).

Regarding the need for the organization to promote training plans for employees, management acknowledges the need to expand the provision of professional training for employees, who are key players in the organizational development process. In this sense, beyond preparing people for their roles, it is necessary to consider that training can also have positive effects on job satisfaction, in addition to performance (Ouabi et al., 2024).

When asked about verifying the contribution of each employee or group to the company's results, Manager 1 replied: "Yes, absolutely! Each employee's contribution is directly linked to the company's results (...)" . From this perspective, it is necessary to keep employees motivated, since their involvement can lead to greater commitment to organizational goals (Ahmad et al., 2023). Evidence shows a positive relationship between employees' commitment and engagement and organizational performance (Adam & Alfawaz, 2025).

Regarding the evaluation of the compensation system, Manager 1 stated that "the company is always innovating and seeking new awards and bonuses to ensure that compensation stays ahead of the market". To create rewards that truly motivate, they must be desired by employees; thus, managers play a key role in identifying the rewards to be implemented so that they generate expectations (Vroom, 1964) among employees. In addition, firms that offer higher compensation tend to generate better performance (Aguilar & Pimentel, 2017).

With regard to reward programs, it is worth noting that the company designs reward programs, as shown in question 10 (Table 1), adopting structures and practices aligned with the organization's strategic objectives to achieve competitive advantage by maximizing employees' performance (Rosa, 2012). According to Pontes (2007), the opportunity for professional growth is one way to recognize and reward employees' performance, prompting them to put more effort into their tasks in order to obtain greater rewards (Herpen, 2007).

4.3 Analysis of the effect of providing incentives

Initially, Table 5 presents the descriptive statistics for the employees' performance variable.

According to the results in Table 5, when comparing the incentive day with the other days, performance is 0.87% higher on the incentive day, even though employees worked one hour less. When examining the comparison between the day before the incentive is provided and the other days, performance on the previous day is 1.33% higher. In the comparison between the day following the incentive and the other days, there is a 0.85% reduction in performance relative to the remaining days.

According to expectancy theory (Vroom, 1964), one can expect employees to increase their work effort, since the theory posits that the greater their expectation of a reward and the greater its personal value, the higher their motivation to act, thereby contributing to the results achieved by the organization.

Table 5 - Descriptive statistics for performance by incentive days

| Comparison between the incentive day and the other days | | |
|---|----------------------|------------|
| | On the incentive day | Other days |
| Mean | 0.9380 | 0.9293 |
| Standard deviation | 0.0126 | 0.0035 |
| Comparison between the previous day and the other days | | |
| | On the previous day | Other days |
| Mean | 0.9423 | 0.9290 |
| Standard deviation | 0.0125 | 0.0035 |

| Comparison between the subsequent day and the other days | | |
|--|-----------------------|------------|
| | On the subsequent day | Other days |
| Mean | 0.9218 | 0.9303 |
| Standard deviation | 0.0143 | 0.0035 |
| Comparison by gender | | |
| | Male | Female |
| Mean | 0.9054 | 0.9453 |
| Standard deviation | 0.0053 | 0.0043 |

Source: Research data.

On the other hand, the achievement of targets may reflect the role of the organization's management in motivating followers and ensuring that they have the necessary conditions to obtain solid results through their own efforts. According to Manager 1, "incentives really motivate employees, encouraging them to pursue better results. They become more interested in improving because they know they will have opportunities for growth and greater rewards. I believe incentives are essential to driving the pursuit of new results". Leadership plays a major role in engaging and valuing followers, influencing them to achieve goals (Dulebohn et al., 2012; Robbins, 2005). The negative result, in turn, may express a certain emptiness or a post-goal euphoria until the employee recovers from internal pressures and starts to direct effort toward the targets set for the next period.

Regarding the panel data analysis (Table 6), the panel in this study is considered long, as there are more periods of observation than individuals observed (Fávero, 2015). Before estimating the model itself, we carried out several tests to determine how the model should be estimated (Fávero, 2015). The first is the Hausman test ($p = 0.998$), whose result indicates that the model should be estimated with random effects. Subsequently, the Wooldridge test ($p = 0.008$) and the Pesaran test ($p = 0.000$) suggest problems related to first-order serial correlation in the error terms and contemporaneous correlation, respectively. To address these issues, and as shown in Table 5, models were estimated with clustered robust errors (Model 1) and with Driscoll-Kraay standard errors (Model 2).

According to the results shown in Table 6, although the coefficient remains the same in both models, the standard error and p-value change. First, regarding the provision of incentives, the coefficient is positive, meaning that on days when some incentive is provided, performance is 0.3% higher. However, this result is not significant for both models. The coefficient for the day before incentives are provided is also positive, with performance 0.7% higher these days, and this effect is significant only in the clustered-errors model ($p = 0.046$). This result may indicate that the expectation of some incentive or reward can have a positive effect on performance.

Table 6 - Effects of incentives on performance

| Variables | Model 1 - Clustered | | | Model 2 - Driscoll-Kraay | | |
|------------------|---------------------|---------------|---------|--------------------------|---------------|---------|
| | Coefficient | Standard dev. | p-value | Coefficient | Standard dev. | p-value |
| Incentive day | 0.003 | 0.005 | 0.561 | 0.003 | 0.012 | 0.794 |
| Gender | 0.031 | 0.048 | 0.517 | 0.031 | 0.104 | 0.766 |
| Previous day | 0.007 | 0.004 | 0.046 | 0.007 | 0.010 | 0.477 |
| Subsequent day | -0.005 | 0.007 | 0.476 | -0.005 | 0.012 | 0.659 |
| Absent | -0.928 | 0.050 | 0.000 | -0.928 | 0.012 | 0.000 |
| Constant | 0.932 | 0.033 | 0.000 | 0.932 | 0.077 | 0.000 |
| Observations | | | 3834 | | | 3834 |
| Individuals | | | 18 | | | 18 |
| R ² | | | 0.4741 | | | 0.4741 |
| p Q ² | | | 0.000 | | | 0.000 |

Source: Research data.

It is also observed that, although not statistically significant, the effect on performance is 3.1% higher for females and 0.5% lower on days following the provision of incentives. Whereas on the previous day there is some anticipation regarding incentives, the result for the subsequent day may reflect the opposite logic and have a negative effect on performance. However, we emphasize that this result is not significant. Finally, as expected, the value of the coefficient for absence is equal to the mean performance, but negative and significant ($p = 0.000$), since there is no recorded performance when employees are absent or do not record their performance.

Although the statistical tests were not significant, through the participant observation we indicate that the implementation of incentives or celebrations has a positive effect on employees' performance.

Although the statistical tests were not significant, through the participant observation we indicate that the implementation of incentives or celebrations has a positive effect on employees' performance. We observed that, on days with events such as theatre performances, dance shows, barbecues, or parties, there is a significant increase in employees' motivation, which directly translates into higher productivity. Thus, non-financial incentive elements not only affect productivity but also contribute to aspects such as employees' satisfaction and engagement with organizational goals.

5 CONCLUSION

This study aimed to analyze the effects of granting incentives on the performance of employees in the operational sector of a garment company. The study sample comprised 29 operational employees and 2 managers from the organization, representing 63% of the company's workforce. We collected data using procedures such as document analysis, participant observation, interviews, and questionnaires. For the analysis, we used descriptive statistics for the questionnaire data, we also applied descriptive and inferential statistics to performance observed over a 213-day period, and content analysis was conducted for the interviews.

The results showed that employees' effort to achieve targets and a good relationship with supervisors were the attributes that most motivated participants. Implementing a goal-based reward policy and establishing an open communication channel between managers and employees proved to be relevant strategies for fostering engagement with organizational objectives, as well as boosting efficiency and effectiveness. These findings reinforce the importance of balancing intrinsic and extrinsic rewards, as discussed by Rito (2006), who highlights that intrinsic rewards such as autonomy and recognition foster long-lasting bonds with the organization.

The results also show that financial and non-financial incentives have a positive impact on performance, especially in the short term, with productivity peaks on incentive days and on the days before incentives are granted. Activities such as theatre performances, dances, barbecues, or parties were associated with increased employee motivation and productivity, reinforcing the relevance of practices that balance extrinsic and intrinsic motivation. This finding is consistent with Machado (2017), who found that reward systems explain up to 40.4% of the variance in employee satisfaction and 31.6% of the variance in perceived organizational performance.

Furthermore, the results showed that even with a one-hour reduction in the working day on the incentive distribution day, employees' performance was higher compared with the other days. This indicates that incentives not only boost productivity but also contribute to a more engaged and productive work environment. On the other hand, the analysis of the subsequent day revealed a drop in performance compared with the other days, indicating the need for complementary practices to sustain motivation and productivity. However, the panel data analysis results show that the positive effect is only partially significant and only for the day preceding the allocation of incentives.

As theoretical contributions, the study is valuable in demonstrating the positive effect, in terms of expectations, that incentives create in workers and in their performance. In this sense, although the findings are in line with other studies showing that the effect of incentives on performance is not universal, the study demonstrates another condition under which incentives can be beneficial. In addition, the study contributes by highlighting aspects that employees consider relevant for improving motivation and satisfaction.

Considering managerial implications for practice, the study provides evidence of what employees consider important in an incentive system and which aspects need to be encouraged to increase motivation. Taking these aspects into account—such as creating expectations about incentives, the relationship between supervisors and subordinates, goal difficulty, and salary increases—and aligning them with the expectations of both employees and management can lead to better outcomes in terms of performance, motivation, and satisfaction.

With regard to limitations, this study was restricted to a single organization and a limited number of participants, which prevents the results from being generalized. There are also limitations related to how managers and employees answered the questions, which are inherent to the data collection instruments. Since there are only two managers, one of whom is the owner of the organization, the responses may have been aimed at improving the organization's image. Similarly, in the case of employees, the answers may not necessarily reflect their opinions, nor is it possible to ensure that the questions were clearly understood.

This study may serve as a starting point for developing further, more in-depth research, with more representative samples of employees from the same sector and expanded analyses for different sectors and cultural contexts. It is also recommended to investigate the long-term impact of incentives and to combine qualitative and quantitative methods to explore management practices, strategic alignment, and reward policies, thereby contributing to an improved understanding of the effectiveness of incentive systems in organizational settings.

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