Beyond the Paycheck: Unraveling the Influence of Intangible Rewards on Employee Motivation, with Autonomy as a Key Moderator

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Abstract

Employee retention poses a significant challenge for modern organizations, and understanding how to motivate employees to improve their performance is of critical importance in the current business environment. In this context, the strategic use of incentives becomes crucial to increase employee engagement. While traditional tangible rewards, such as salary and bonuses, have been widely utilized, their effectiveness may be limited by the inherent nature of pay as a form of compensation for work and the financial constraints of the organization. Consequently, firms should consider alternatives forms of incentives, such as intrinsic and extrinsic intangible rewards, which are emerging as viable alternatives to boost employee motivation and productivity. This paper investigates the differential impact of intrinsic and extrinsic intangible rewards on employee motivation, as well as the influence of employee autonomy on task performance in the presence of rewards. Through experimental research, it was observed that while intrinsic rewards did not have a statistically significant impact on motivation universally, they exhibited the tendency to motivate employees in certain situations. Moreover, the study revealed that employees were more satisfied when they received intrinsic intangible rewards over extrinsic intangible rewards, and that employees exhibited a preference for high autonomy at work when they received intrinsic intangible rewards, whereas they tended to prefer low autonomy at work when they received extrinsic intangible rewards.

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Resumo

A retenção de colaboradores representa um desafio significativo para as organizações modernas, e compreender como motivar os colaboradores a melhorar o seu desempenho é de importância crítica no atual ambiente empresarial. Neste contexto, a utilização estratégica de incentivos torna-se crucial para aumentar o empenhamento dos trabalhadores. Embora as recompensas tangíveis tradicionais, como o salário e os bónus, tenham sido amplamente utilizadas, a sua eficácia pode ser limitada pela natureza inerente do salário como forma de compensação pelo trabalho e pelas restrições financeiras da organização. Consequentemente, as empresas devem considerar formas alternativas de incentivos, tais como as recompensas intangíveis intrínsecas e extrínsecas, que estão a emergir como alternativas viáveis para aumentar a motivação e a produtividade dos trabalhadores. Este artigo investiga o impacto diferencial das recompensas intangíveis intrínsecas e extrínsecas na motivação dos trabalhadores, bem como a influência da autonomia dos trabalhadores no desempenho das tarefas na presença de recompensas. Através de uma investigação experimental, observou-se que, embora as recompensas intrínsecas não tivessem um impacto estatisticamente significativo na motivação a nível universal, tinham tendência para motivar os trabalhadores em determinadas situações. Além disso, o estudo revelou que os trabalhadores estavam mais satisfeitos quando recebiam recompensas intangíveis intrínsecas do que recompensas intangíveis extrínsecas, e que os trabalhadores mostravam uma preferência por uma elevada autonomia no trabalho quando recebiam recompensas intangíveis intrínsecas, ao passo que tendiam a preferir uma baixa autonomia no trabalho quando recebiam recompensas intangíveis extrínsecas.

Título: Para além do salário: Desvendar a influência das recompensas intangíveis na motivação dos trabalhadores, tendo a autonomia como principal fator de moderação.

Autora: Sara De Checchi

Palavras-chiave: motivação, recompensas intangíveis intrínsecas, recompensas intangíveis extrínsecas, autonomia no trabalho, satisfação no trabalho.

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"You don't build a business,

you build people,

then people build the business."

—Zig Ziglar

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List of Abbreviations

SDT – Self-Determination Theory

WEIMS – The Work Extrinsic and Intrinsic Motivation Scale

WDQ – Work Design Questionnaire

IM – Intrinsic Motivation

INTEG – Integrated Regulation

IDEN – Identified Regulation

INTRO – Introjected Regulation

EXT – External Regulation/Extrinsic motivation

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Chapter 1. Introduction

The most valuable assets in an organization are the people who work in it, which is interesting as people are also the most difficult resource to manage (Noko & Nwuzor, 2021). Given this, organizations need to manage and develop their employees by motivating them to perform at their best in order to achieve higher results. In fact, the concept of motivation has been described as one of the main issues that organizations are facing nowadays (Cerasoli, Nicklin, & Ford, 2014). In order to motivate employees to be satisfied with their jobs so that they will perform at high levels, organizations have been using different types of incentives. Generally, the incentives that organizations give to their employees are monetary in nature, such as salary, bonus, and compensation. Despite that, it must be taken into account that today all workers with a legal employment status, or at least in the countries where the study is conducted, receive several types of monetary compensation regardless of their performance. With this in mind, companies need to find other incentives to retain employees, reduce their turnover intentions and increase their work motivation, which will directly increase their job performance. As companies cannot always offer their employees additional monetary compensation, and because employees no longer value monetary compensation alone, organizations need to invest in other types of incentives. For instance, other types of rewards that companies can try to implement are intangible rewards. These types of rewards can be driven by external agents, extrinsic rewards, or from within the individual, intrinsic rewards, and can be used as motivational tools to increase employees' job satisfaction levels and consequently improve performance (Noko & Nwuzor, 2021). To increase employee satisfaction and performance effectively with the use of rewards, it is of pivotal importance to understand how these incentives can motivate employees. According to Ryan and Deci (2000), self-motivated employees, compared to other employees, are more interested in investing time and energy, and becoming psychologically, emotionally, and physically involved in the workplace (Ryan & Deci, 2000). In addition, previous studies reported that job autonomy can be an enhance of the effect of rewards on employees, which directly affects individuals' task performance (Dysvik & Kuvaas, 2011; Gagné & Deci, 2005). Therefore, organizations that provide autonomy-supportive work environments and management methods promote employees' satisfaction and motivation, which then results in effective performance, organizational commitment, individual psychological well-being and positive work attitudes (Dysvik & Kuvaas, 2011; Gagné & Deci, 2005). Therefore, this study will focus on whether

intrinsic and extrinsic intangible rewards can impact employees' motivation at work, and how job autonomy affects employee's perceptions of receiving intangible rewards, which consequently may affect motivation.

1.1 Problem Statement

The aim of this study is to understand what other incentives, other than monetary ones, organizations can use to motivate employees at work. Specifically, this dissertation will focus on studying how intangible rewards impact employee's work motivation and how job autonomy will moderate the relationship between intangible rewards and motivation at work. Therefore, the purpose of this paper goal is to answer the following research question:

How do different types of intrinsic and extrinsic intangible rewards impact employee motivation in the workplace, particularly when tangible rewards are provided independently of performance, and how does this impact changes based on employees' perceived level of autonomy?

1.2 Dissertation Outline

This dissertation consists of five chapters. The first chapter introduced the overview of this dissertation, the problem statement, and the main research question. The second chapter discusses the literature review, which includes previous research and the relevant topics for this study for the development of the hypothesis, and the conceptual framework is shown. Furthermore, the study and how it will be conducted will be discussed in the methodology and data collection chapter. Chapter four provides the analysis and results of the study, and in the fifth chapter the general discussion and conclusions, the managerial and theoretical implications, and the limitations of the study and future research are reported.

Chapter 2. Literature Review

2.1 Motivation

The topic of motivation has been a focal point for studies related to work and organizational psychology, as it can, for instance, determine job performance and contribute to the well-being of employees (Van den Broeck, Howard, Van Vaerenbergh, Leroy, & Gagné, 2021). To reach competitive advantage a motivated workforce is essential nowadays as it is a critical strategic asset for any work environment (Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2009). As stated by Ryan & Deci (2000), motivation is a highly valued phenomenon in the contemporary world, with consequences that extend to roles that must engage with other people, such as those of managers, for whom motivating employees is a key factor in achieving their objectives. Simply put, for employees to perform, they need to be motivated (Noko & Nwuzor, 2021). Motivation in people can occur because they value an activity or because there is strong external coercion, they can urge into action by a bribe or because they behave from a sense of personal commitment to excel (Ryan & Deci, 2000). There is a general classification of motivation: intrinsic motivation and extrinsic motivation. Intrinsic motivation occurs when people do an activity because they find it interesting and derive spontaneous satisfaction from the activity itself, extrinsic motivation requires an instrumentality between the activity and some consequences that are separate from it, such verbal and tangible rewards, meaning that satisfaction comes from the extrinsic consequences to which the activity leads (Gagné & Deci, 2005).

2.2 Rewards

Since the early days of scientific management, pay incentives have been widely used as a means of employee motivation (Deci E. L., 1972). Indeed, reward systems have always been an integral part of management, albeit in different forms and mostly practiced without formalization or explicit rules (Deci E. L., 1972). Employees rewards can be defined as motivation packages designed to attract and retain skillful workers with the aim of achieving competitive advantage (Noko & Nwuzor, 2021). According to Noko & Nwuzor (2021), rewarding employees is believed to be a motivation tool that increases their satisfaction levels,

and consequentially improve performance, in fact, there are empirical evidence that show that rewards systems have effects on workers' performance and is critical for organizations to make practical decisions that will keep and retain top performing employees. A significant link between the reward system and performance is the simple realization that employees do not work for free (Noko & Nwuzor, 2021). To enhance employee's performance, organizations offer various types of rewards (Malik, Butt, & Choi, 2015). Rewards are part of what is known as incentives, which are formally defined as the plans that have predetermined criteria and standards, as well as understood policies for determining and allocating them (Cerasoli, Nicklin, & Ford, 2014). Rewards are usually categorized into two types, intrinsic and extrinsic (Noko & Nwuzor, 2021). Intrinsic rewards come from the content of the task itself, and they are self-generated and directly experienced by an employee (Noko & Nwuzor, 2021). These rewards are not contingent to external factors, but derives from the association of the person "doing the job" (Mottaz, 1985). Intrinsic rewards at work include factors such as developing skills and abilities, learning new things, having interesting and challenging work and opportunities for career advancement (Woolley & Fishbach, 2017). Extrinsic rewards, on the other hand, are external to the job and are usually of financial nature (Noko & Nwuzor, 2021), and include receiving a paycheck, fringe benefits, having job security, and receiving praise from a supervisor (Woolley & Fishbach, 2017)

Organizations use varying degrees of intrinsic and extrinsic rewards to motivate and inspire employees to perform (Noko & Nwuzor, 2021). Both intrinsic and extrinsic incentives include rewards that can be tangible and intangible. Tangible rewards refer to those having visible, concrete and easily measurable characteristics, such as promotions and financial remuneration, while intangible rewards are relatively less observable and measurable such as social approval, verbal praise and the acknowledgement offered by peers or the management (Yoon, Sung, Choi, Lee, & Seongsu, 2015). Although tangible rewards are the most common and widely known and used, intangible rewards can also be used by an organization to increase employee's performance (Cerasoli, Nicklin, & Ford, 2014). In fact, Noko and Nwuzor (2021) reported that employee performance is maximized by rewards that include all forms of intangible and tangible benefits or by the returns that all employees enjoy as part of a defined employer-employee relationship. Yoon, Sung, Choi, Lee, & Seongsu (2015) reported that intangible rewards are important in the work environment, revealing that intrinsic and extrinsic motivation to complete tasks increases when employees are exposed to intangible rewards for

creativity. Indeed, the study reported the importance of domain-specific intangible rewards to generate desirable task behavior and outcomes and perceive the work climate as positive (Yoon, Sung, Choi, Lee, & Seongsu, 2015). The authors reported that although various forms of rewards are generally expected to produce extrinsic motivation, the effects of rewards and incentives on intrinsic motivation remain controversial (Yoon, Sung, Choi, Lee, & Seongsu, 2015). Moreover, Cerasoli, Nicklin, & Ford (2014) reported the need for further studies on the impact of non-tangibles rewards on intrinsic motivation. This paper will therefore focus on intangible rewards as the main variable that can have an impact on motivation.

Nonetheless, regardless of the type of reward and its expectancy to motivate employees, the presence and performance contingency of rewards can influence how they impact employee's motivation to work. Cerasoli, Nicklin, & Ford (2014), emphasized the difference between the presence of incentives and the contingency of incentives. The presence of incentive refers to when the incentive is offered, the incentive contingency refers to whether the incentive is related to performance (Cerasoli, Nicklin, & Ford, 2014). The authors argued that incentives can affect motivation and performance differently depending on the contingency of performance salient incentives, where the incentive is either directly salient to performance or indirectly salient to performance (Cerasoli, Nicklin, & Ford, 2014). When incentives are directly salient to performance, the incentives are given upon successful completion of varying degree of performance of the employees, such as sales commissions and end of the year bonuses (Cerasoli, Nicklin, & Ford, 2014). On the other hand, when incentives are indirectly salient to performance, there is still a link to performance, but the link is less direct and clear due to the fact that immediate improvements in performance do not impact the incentive given, such as base salary (Cerasoli, Nicklin, & Ford, 2014). Some level of performance is still expected when incentives are indirectly tied to performance, however base salary does not change based on employee's performance. Cerasoli, Nicklin, & Ford (2014) reported in their findings that performance increases when performance-contingent incentives are present, but they need to be used sparingly because, for instance, employees' well-being may decrease when pay is based solely on attaining objectives. The authors also reported that organizations can increase performance effectiveness directly and quickly by attempting to provide incentives that are closely tied to performance, however that may have negative effects on other factors, including individual well-being, morale and job satisfaction, and therefore may not be worthwhile for organization to implement (Cerasoli, Nicklin, & Ford, 2014). Deci (1972) also identified similar

findings, emphasizing the necessity of tangible incentives for attracting and retaining workers, specifically monetary ones, where he argued that the use of money as a motivator for performance implies that performance itself is the instrument that leads to the receipt of the money. Typically, this is achieved by companies making pay contingent on performance (Deci E. L., 1972). In simpler terms, the motivating factor is not the money itself, but rather the manner in which it is administered. When money is given based on performance, and therefore used as an extrinsic motivator that acts as a form of control, it tends to decrease intrinsic motivation (Deci E. L., 1972). Deci's study provides evidence that money, as an incentive, does not decrease intrinsic motivation when it is paid non-contingent (Deci E. L., 1972). Noncontingent pay satisfies workers, which leads to higher employee retention and maintains intrinsic motivation. Therefore, this paper will examine the impact of intangible rewards on employee motivation at work when they are contingent on performance, but assumes that tangible rewards, such as based salary, are provided and are not directly salient to performance.

2.3 Self-Determination Theory

Ryan & Deci (2000) developed a framework regarding the study of human motivation and personality. Self-determination Theory (SDT) suggest that individuals experience diverse types of motivation with respect of their work (Manganelli, Thibault-Landry, Forest, & Carpentier, 2018). Stemming from social psychology, the theory provides a theoretical framework for understanding human motivation and the psychological mechanisms that explain why reward satisfaction could increase workplace functioning for employees across industries and around the world, contributing to the satisfaction of the employees' three basic phycological needs for autonomy, competence, and relatedness (Gagné & Deci, 2005; Thibault Landry & Whillans, 2018). Thus, SDT examines people's inherent growth tendencies and innate psychological needs that underlie their self-motivation and personality integration, as well as for the conditions that foster these positive processes (Ryan & Deci, 2000). Much of the research guided by SDT has also examined environmental factors that hinder or undermine self-motivation, social functioning, and personal well-being (Ryan & Deci, 2000).

SDT distinguished between intrinsic motivation and extrinsic motivation, which were described previously in this study, and proposes that motivation moves along a continuous from

amotivation, which is where individuals either lack the intention to act or act passively, to extrinsic motivation to reach intrinsic motivation, and also differentiates extrinsic motivation into various levels of autonomy and therefore can be divided in four different subcategories of motivation (Ryan & Deci, 2000). SDT divides external motivation in (1) external regulation, which is when a person does an activity only to obtain a reward, (2) introjected regulation, where behaviors are performed to avoid guilt and anxiety or to attain ego enhancements such as pride, (3) identified regulation, which refers to doing an activity because one identifies with its value or meaning and accepts it as one's own, and (4) integrated regulation, which is the most autonomous form of extrinsic motivation and occurs when the individual identify themselves with the value of an activity to the point that it becomes part of the individual's sense of self (Ryan & Deci, 2000). In certain instances, external regulation and introjected regulation have been combined as one, as they have an external perceived locus of causality and are not experienced as part of the self, whereas integrated regulation shares many qualities with intrinsic motivation, but still is considered an externally motivated regulation due to the fact that it is done to attain separable outcomes rather than for the inherent enjoyment (Ryan & Deci, 2000). Therefore, in some cases, integrated and intrinsic regulations have been combined to form an autonomous motivation composite (Ryan & Deci, 2000). Studies in the past indicate that autonomous motivation maximizes heuristic performance, citizenship, trust commitment and well-being of workers (Gagné & Deci, 2005). For this dissertation, the paper will examine all regulations levels of external motivation, and internal motivation, however the amotivation regulation is discarded as it is assumed that there must be some level of motivation that drives workers to work.

In the field of Organizational Behavior, following the Self-Determination Theory, researchers argued about the differences between intrinsic and extrinsic motivation, because for one, when people are intrinsically motivated, the consequences and correlates are more positive in terms of the quality of their behavior as well as their health and well-being, and secondly, that extrinsic motivation is negatively related to intrinsic motivation (Ryan & Deci, 2000). Thus, in accordance with SDT, while an incentive enhances extrinsic motivation, intrinsic motivation is undermined (Kuvaas , Buch, Weibel, Dysvik, & Nerstad, 2017). It is possible for extrinsic and intrinsic motivation to coexist in an individual with respect to a particular task, but they are separate motivational dimensions and the influence of one is likely to dominate (Ryan & Deci, 2000). When a job is inherently satisfying and its incentives are indirectly tied

to performance, such as competitive base pay, it is more likely that the task is employees' primary interest and intrinsic motivation will likely dominate, on the opposite end, when a job is not inherently satisfying and incentives are tied to performance or outcomes, such as bonuses or commissions, extrinsic motivation will dominate as employees will see money as their primary driver to work (Kuvaas , Buch, Weibel, Dysvik, & Nerstad, 2017). Additionally, when the incentives are directly tied to performance and the job is inherently satisfying, extrinsic and intrinsic motivation will not undermine each other (Kuvaas , Buch, Weibel, Dysvik, & Nerstad, 2017). For instance, an organization may decide to implement a performance-based bonus system, where employees would receive monetary rewards contingent upon the successful competition of designed tasks (extrinsic motivation). An employee who is required to complete the specific task will do so because he finds it stimulating and challenging (intrinsic motivation). This intrinsic motivation will not be diminished by the introduction of performance-based bonuses, as the employee will still excel in the completion of the task as they genuinely enjoy the nature of the task given.

2.4 Relation between Intangible Rewards and Motivation

While an extensive body of literature has explored into the study of motivation and employee performance, there is a growing debate regarding the literature' approach in quantifying motivation, particularly in terms of intrinsic and extrinsic rewards (Noko & Nwuzor, 2021). Recent research suggests that workplace rewards play a significantly influence on both prospective employees' decision to apply for a job and current employees' turnover intention (Landry & Whillans, 2018). Thibault Landry & Whillans (2018) discovered that employees who are satisfied with the rewards provided by their workplace experience greater psychological need satisfaction, resulting in increased job satisfaction and lower psychological stress; in addition, it is experienced greater workplace contribution and productivity for those with higher intrinsic motivation, along with increased affective commitment. Their findings underlie the essentiality of reward satisfaction to foster a positive workplace experience and highlight the importance of looking beyond compensation to understand what these rewards signal to employees and how the rewards make them feel (Landry & Whillans, 2018). Another research reported that adequate intrinsic rewards have been shown to improve the performance levels of employees (Thomas, 2008; Noko & Nwuzor, 2021), and those activities such as

volunteering for challenging assignments, accomplishing set targets, taking up management and leadership responsibilities and pursuit of professional growth are intrinsic rewards that improve employee's satisfaction and consequentially job performance. Contrary to research indicating that intrinsic rewards have been shown to improve employees' motivation and job performance, studies on the impact of extrinsic rewards on motivation have yielded conflicting results. Past studies emphasized that extrinsic rewards are not motivators (Bowen, 2003; Victor & Hoole, 2017). Specifically, some research has found that extrinsic incentives undermine intrinsic motivation by: (1) reducing the association between the activity and its intrinsic value, such that the means of achieving a particular goal are perceived to be less effective (Kruglanski, Shah, Fishbach, & Ron , 2002), (2) decreasing activity enjoyment due to the presence of extrinsic incentives (Kruglanski, Alon, & Lewis, Retrospective misattribution and task enjoyment, 1972), or (3) exerting external control over people's behavior, undermining autonomy and exploration satisfaction (Ryan & Deci, 2000). By contrast, other researchers posited that intrinsic motivation may not decrease in the presence of performance-contingent extrinsic rewards (Yoon, Sung, Choi, Lee, & Seongsu, 2015). As a matter of fact there is ample recent evidence that extrinsic rewards have an influence on employee motivation (Bowen, 2000; Aktar, Sachu & Ali, 2007; Arnolds & Venter, 2012); and that there is a need for exploration of extrinsic rewards in the workplace (Victor & Hoole, 2017). Clearly there is a need for additional research to understand why rewards satisfaction matters, and how key reward satisfaction drives key organizational outcomes, which is emphasized by the fact that total rewards strategies are a core determinant of the quality of an organization's workforce (Landry & Whillans, 2018). Specifically, this paper will investigate the differential impacts of the two types of intangible rewards on employees. It is postulated that intrinsic intangible rewards, which originate from the individual employee and are independent of external factors, have a greater effect on employee performance and outcome, potentially serving as a stronger driver towards successful results. Moreover, further research is also needed on intrinsic and extrinsic motivation. Indeed, Gagné & Deci (2005), emphasized the extensive research conducted on intrinsic motivation in the past, while also highlighting the neglect of studies on autonomous extrinsic motivation by organizational psychologists and management theorists even though previous research indicates that autonomous extrinsic motivation may lead to the most effective performance for uninteresting tasks that require disciplined task engagement. This highlights the importance of extrinsic motivation alongside intrinsic motivation in the

workplace, and how both types of motivation need to be valued by companies to enhance workers' satisfaction levels.

Overall, incentives can take a variety of forms and affect performance in different ways. The lack of research that specifically examines intangible rewards, and the possible side effects that incentives may have when they are salient to performance, raise some interesting issues. Since tangible rewards, such as base salary, are given to employees regardless of their performance, and since organizations cannot always offer their employees extra monetary incentives to increase their motivation to work for the company, the topic of intangible rewards, which can always be implemented by organizations regardless of their size or financial situation, has come to the surface. Along with that, if tangible rewards, such as base salary, are given anyway and are not related to the performance of the employees, do intangible rewards have an impact on motivation? In summary, this dissertation will focus on intangible intrinsic and extrinsic rewards, and their impact on employees' motivation when they are directly related to performance. Specifically, consistent with previous research, this paper investigates the hypotheses that employees who receive an intrinsic intangible reward at work feel more satisfied than when they receive an extrinsic intangible reward, that intrinsic intangible rewards increase intrinsic motivation, extrinsic intangible rewards increase extrinsic motivation, and that extrinsic intangible rewards have a negative effect on intrinsic motivation.

2.5 Work Autonomy

SDT include autonomy as one of the three basic psychological needs of employees (Ryan & Deci, 2000). Autonomy is a term that refers to the regulation by the self and has been defined as a "self-determined act", an act that reflects one's will from other form of striving or motivation (Ryan & Deci, 2006). Ryan & Deci (2006) recognized that people who function autonomously are deeply engaged and productive, generating well-being and human capital. The authors reported that the need for autonomy does not imply the absence of external pressures, influences, or mandates to act, rather the circumstances must create within the person a reason for willing compliance in order to have autonomy; thus, autonomy is not limited to initiatives taken solely independently, but also applies to actions that reflect full consent to external inputs or inducements (Ryan & Deci, 2006). This means that job autonomy may be

important to employees, even when rewards are provided. An employee who is motivated to work by rewards may seek some degree of autonomy in the workplace. Indeed, in work settings, it has been found that as employees' control over the work task increases, their overall motivation also increases, leading to higher levels of task proficiency and willingness to seek out novel challenges (Dysvik & Kuvaas, 2011). Studies support the propositions that autonomy-supportive, rather than controlling, work environments and managerial methods promote basic need satisfaction, intrinsic motivation, and full internalization of extrinsic motivation, which in turn lead to effective performance, organizational commitment, job satisfaction, persistence, positive work attitudes, and psychological well-being (Gagné & Deci, 2005). Aforementioned, Gagné & Deci (2005) had found that an autonomy-supportive interpersonal environment is the most important social-contextual factor to promote the internalization and integration of extrinsic motivation, which consequently promotes autonomous behavior, ending in a positive outcome. Hence, research by Koestner and Losier (2002) suggests that autonomous motivation is stronger when both intrinsic motivation and internalized extrinsic motivation are present, as the authors found that intrinsic motivation led to better performance on tasks that were interesting, and internalized extrinsic motivation let to better performance on tasks that were not interesting themselves but were important and required discipline and determination (Gagné & Deci, 2005). Henceforth, this suggests that higher motivation can be achieved when employees are given a high degree of autonomy in their work, and that when employees receive rewards for their work that are designed to increase their motivation and job satisfaction, the level of autonomy may also have an effect on the outcome. Therefore, this study hypothesizes that employees' motivation driven by intangible rewards may depend on the level of autonomy given to employees, and specifically, that employees with high autonomy at work will be more motivated to work when they receive a type of intangible reward.

2.6 Overview and Hypothesis

In summary, past researchers have demonstrated that rewards can affect motivation. Intrinsic rewards have been shown to have a positive effect on intrinsic motivation, while extrinsic rewards can enhance employees' extrinsic motivation to work. Researchers have also found discrepancies in the literature regarding the influence of extrinsic rewards on intrinsic motivation. Furthermore, it was found that employees' autonomy at work can influence their

motivation, which in turn affects their perception of the rewards that can be achieved by performing the task. Taking all of this into consideration, and considering that tangible rewards such as base salary are provided and are not directly related to performance, the following hypotheses are proposed:

H1: *Employees that receive intrinsic intangible rewards are more satisfied with their job than employees that receive extrinsic intangible rewards at work.*

H2: *Intrinsic intangible rewards, such as personal and professional growth, increase intrinsic employees' motivation at work.*

H3: *Extrinsic intangible rewards, such as praise, increase extrinsic employees' motivation at work.*

H4: *Extrinsic intangible rewards, such as praise, decrease intrinsic employees' motivation at work.*

H5: *The relationship between intangible rewards and employee motivation varies based on the level of work autonomy, suggesting that higher levels of work autonomy amplify the positive impact of intangible rewards on employee motivation.*

2.7 General Conceptual Framework

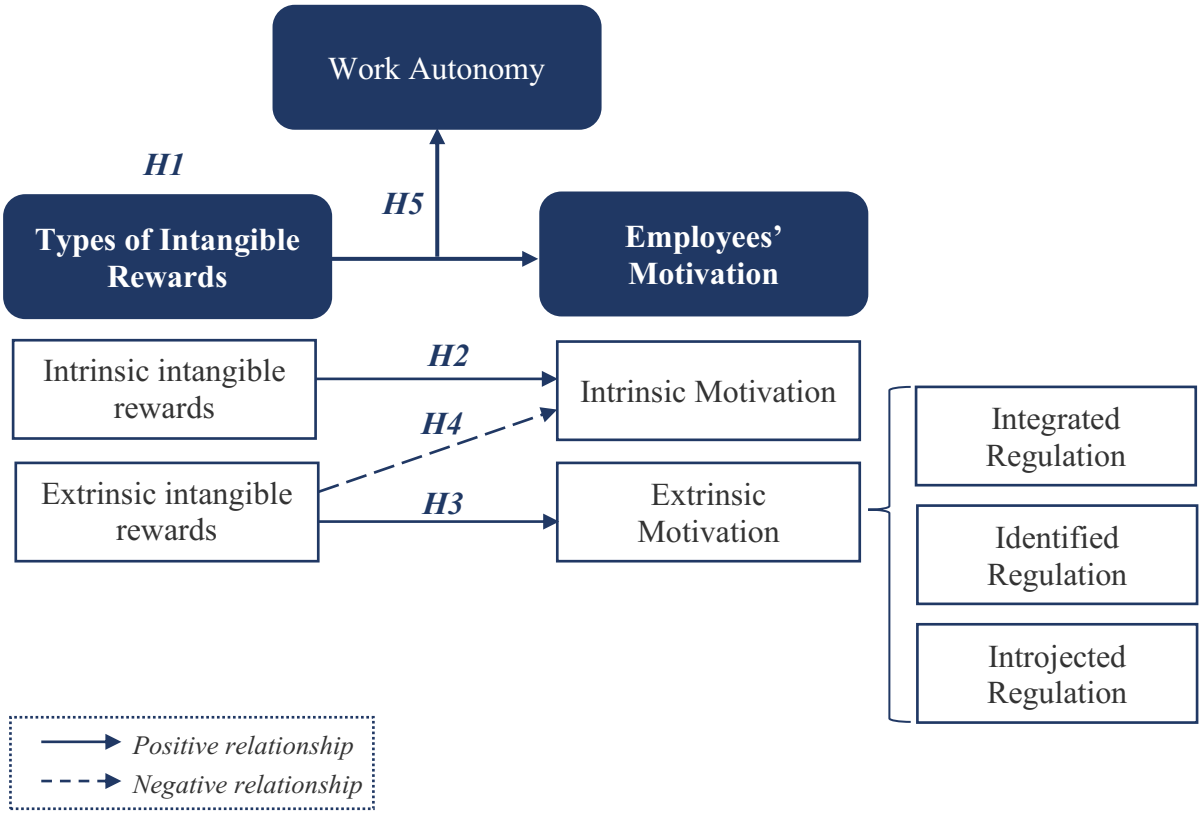

Figure 1: Conceptual Framework

Chapter 3. Methodology and Data Collection

3.1 Participants

The total number of survey responses received was 182. After the invalid or incomplete responses were excluded, the number of valid responses to the survey was 128. All participants in the survey were voluntary and were recruited through WhatsApp messages and social media platforms such as Instagram, LinkedIn and Facebook, or through family and friends. The survey included demographic information about the participants. An open-ended response was used to determine the age of participants. The average age of respondents, which included people between the ages of 19 and 67, is 38 years old (M = 37.69; SD = 14.578), although the majority of respondents appeared to be between 25 and 30 years old (n° participants = 52, 40.7%). Another question in the survey asked respondents to identify their gender. 61.7% of respondents were female, 36.7% were male, 0.8% were non-binary/third gender and 0.8% preferred to not disclose their gender. The survey could be answered in either Italian or English. Most respondents answered in Italian, with 82.8% (n = 106) responding in this language. The remaining participants (n = 22, 17.2%) who responded in English are a mix of people from several countries, including Canada, Germany, the Netherlands, and Luxembourg. Most respondents had a high school level of education (49.2%), followed by Master's degree (21.9%) and Bachelor's degree (13.3%).

3.2 Materials

3.2.1 Independent variables

Type of Intangible Rewards: There were two conditions of intangible rewards, which were manipulated by asking participants to imagine themselves working on a task while at work, and if they completed the task successfully, they could receive either praise from superiors or colleagues, or the inner knowledge that by completing the task they could grow professionally and personally. In the extrinsic intangible reward condition participants were told that they would receive praise from colleagues or superiors, while in the intrinsic intangible

reward condition participants were told that they would receive the opportunity to learn and grow professionally and personally.

Perceived Autonomy: Participants were given one of two possible autonomy assessment conditions. In the high autonomy condition, participants were asked to imagine that for the task they were hypothetically working on, they had full autonomy to decide how and when to complete the task. In the low autonomy condition, participants, for the same scenario in which they had to complete a task, participants had to ask for and follow any decision or order given to them by their supervisor.

3.2.2 Dependent variables

Rewards Satisfaction: Participants were asked to consider the type of reward they were assigned to, and to rate from 0 (completely dissatisfied) to 100 (completely satisfied) their overall satisfaction with the rewards they would receive if they successfully completed the task (Landry & Whillans, 2018). This measure was adapted from Landry & Whillans (2018) measure of "reward satisfaction". According to Fisher et al. (2016) and Wanous at al. (1997), single-item measures for similar constructs, such as job satisfaction, have been shown to adequately represent and highly correlate with broader, multi-item measures of the same construct (Landry & Whillans, 2018).

Autonomy Satisfaction: To assess participants' satisfaction with the autonomy they were given based on which condition they were assigned to, it was used Landry & Whillans' (2018) measure of "reward satisfaction" and adapted it again to assess participants' satisfaction with the level of autonomy they received. The question asked participants to rate their overall satisfaction with the level of autonomy they imagined while working on the task from 0 (completely dissatisfied) to 100 (completely satisfied) (Landry & Whillans, 2018).

Job Satisfaction: To measure employees' overall job satisfaction, the six-item version of Brayfield and Rothe (1951) Overall Job Satisfaction Scale developed by Agho, Price & Mueller (1992) was used. The six-item version includes statements that require respondents to rate their job satisfaction on a scale of 1 (Strongly disagree) to 5 (Strongly agree) (Agho, Price, & Mueller, 1992). Statements from this measure include "I am satisfied with my job for the

time being" and "I like my job better than the average worker does". All variables can be found in the Survey Structure in Appendix 1.

Work Motivation: The Work Extrinsic and Intrinsic Motivation Scale (WEIMS) developed by Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve (2009) was used to measure work motivation. The WEIMS measures the six types of motivation based on SDT (Ryan & Deci, 2000), intrinsic motivation (IM), integrated (INTEG), identified (IDEN), introjected (INTRO) and external regulations (EXT), and amotivation, each represented by three-item subscale (Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2009). For the current study, amotivation is omitted. The scale requires participants to indicate on a Likert-type scale from 1 (does not correspond at all) to 7 (corresponds exactly) the reasons they are currently involved in their work (Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2009). An overview of all WEIMS Measures is provided in Table 1 of Appendix B.

Job Autonomy: Job autonomy perceived by participants at work was taken from the Morgeson and Humphery (2006) scale. The questions used in this questionnaire were extracted from the Work Design Questionnaire (WDQ), from the autonomy section of the task characteristics dimension, and were used to study only job autonomy, which was previously done and tested by (Muzafary & Mdletshe, 2019) for the same reason. The questionnaire included questions to assess employees' perceptions of their autonomy in work scheduling, in decision-making, and autonomy in work methods (Morgeson & Humphrey, 2006). The WQD scale required participants to indicate the extent to which they agreed with each statement by rating 1 if they strongly disagreed with the statement, and rating 5 if they strongly agreed with the statement (Morgeson & Humphrey, 2006).

Control Variables: For this study demographics factors were included for research purposes. Those factors included gender, age, the level of education (Mottaz, 1985), and current occupation.

3.3 Procedure

Four questionnaires were created with the different combinations of the two variable conditions studied and were randomly assigned to the participants. The four questionnaires

were divided as follows: intrinsic intangible reward and high autonomy, intrinsic intangible regards and low autonomy, extrinsic intangible reward and high autonomy, extrinsic intangible reward and low autonomy. The questionnaires consisted of six blocks. All questionnaires began with an introductory block that introduced the study being conducted, then Block 1 included two conditions, one for the independent variable intangible rewards, and one for the moderator autonomy. Block 2 employed a previously developed six-item scale questionnaire to analyze job satisfaction. Similarly, Blocks 3 and 4 also utilized questionnaires developed by academics to investigate the different types of motivation and the perception of autonomy at work of the respondents, respectively. Block 5 measures the controlled variables that ask respondents for demographic information.

As previously mentioned, the questionnaire begins with a paragraph that introduces the reason for this study by explaining that the project is being conducted as part of a dissertation process and briefly explains the reason for the research, the time it would take to complete the questionnaire, the language in which the questionnaire can be conducted, and that the data provided are strictly confidential and the responses are completely anonymous.

After the introduction, in Block 1, participants were randomly assigned to one of the two conditions of the independent variable "intangible rewards", intrinsic intangible rewards or extrinsic intangible rewards, and one of the two conditions of "autonomy", low autonomy or high autonomy. After reading the instructions associated with their assigned rewards and autonomy contexts, participants rated their satisfaction with the reward. They then rated their satisfaction with the level of autonomy they were given.

In the second block, respondents were first asked to think about their current or a past work situation for the next part of the questionnaire. Respondents were then asked how they felt about their job based on six statements. This part of the survey was designed to examine the overall level of satisfaction that people feel about their jobs and was based on the six-item version of Brayfield and Rothe's (1951) Overall Job Satisfaction scale developed by Agho, Price & Mueller (1992). The six-items included "I am satisfied with my job for the being", "I find real enjoyment in my work" and "I am often bored with my job"; the latter of which has an inverted score (Agho, Price, & Mueller, 1992).

Moreover, in block 3, participants were asked to answer statements about why they are involved in their work. The statements are taken from the WEIMS scale developed by Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve (2009) and include statements such as "I work because I derive much pleasure from learning new things", "I work because it allows me to earn money" and "I work because it is the type of work I have chosen to attain certain important objectives.".

In addition, block 4 asked participants to indicate their level of satisfaction with the statements from Morgeson and Humphrey's (2006) Work Design Questionnaire, which included sentences such as "The job allows me to decide on the order in which things are done on the job", "The job allows me to make a lot of decisions on my own" and "The job allows me to make decisions about what methods I use to complete my work" .

Lastly, block five asks respondents to answer some questions about their demographic information, such as age, gender and current type of occupation.

3.4 Design

The experiment followed a 2 Reward X 2 Autonomy between subjects' design (table 1). The experiment included two independent variables with two levels of autonomy. Participants were asked to imagine that for successfully completing a task they would receive either an intangible extrinsic reward, represented by "praise", or to receive an intangible intrinsic reward, represented by (opportunity of) "growth". Then, participants were either asked to imagine that while working on that task they had a "high level of autonomy" or "low level of autonomy" to complete it.

	Intangible Intrinsic Reward	**Intangible Extrinsic Reward**
High level of Autonomy	***Growth; High Autonomy***	***Praise; High Autonomy***
Low level of Autonomy	***Growth; Low Autonomy***	***Praise; Low Autonomy***

Table 1: 2X2 Design Table

Chapter 4. Analysis and Results

4.1 Sample Characterization

To conduct the analysis of the data obtained from the survey, data cleaning was conducted, where it resulted that of the 182 survey responses, the valid questionnaires were 128. Of the valid questionnaires, the majority of respondents were female, 61.7% (n = 79), followed by male, 36.7% (n = 47), and 0.8% (n = 1) for non-binary/third gender, and 0.8% (n = 1) preferred to not to specify their gender. In terms of age demographic information, the average age of respondents is 38 years old (M = 37.69; SD = 14.578), ranging from people between 19 and 67 years old, with the largest cluster of respondents ageing between 25 and 30 years old. In addition, most respondents' education level is high school diploma, 49.2% (n = 63), followed by a master's degree, 21.9% (n = 28) and a bachelor's degree 13.3% (n = 17). Most of the participants, 106 people representing the 82.8% of the respondents, are Italian, the other 22 respondents (17.2%) responded answered in English and came from different countries. Further demographic information can be found in Appendix C.

4.2 Reliability Analysis

In order to ensure the reliability of the study conducted, the analysis of the scales used in the survey was carried out using the Cronbach's Alpha test. The test is a measure of reliability and assesses the correlation between several items (Cronbach, 1951). It ranges from 0 to 1, with zero indicating no correlation between items, and one indicating full correlation between the items, and a value of 0.7 or higher of Cronbach's Alpha is the value that indicates if the measure is reliable (Peterson, 1994). For this study all three scales used, the six-item version of the Overall Job Satisfaction Scale, the WEIMS, and the WDQ, were tested for reliability using the Cronbach's Alpha test, and all three scales showed a score higher than 0.7. The table below shows the reliability test of the scales.

Reliability Statistics

	Cronbach's Alpha	N of Items
Overall Job Satisfaction Scale (six-item version)	,872	6
WEIMS	,893	15
WDQ	,917	9

Table 2: Reliability Statistics Table

4.3 In-depth Analysis

For a deeper analysis of the data, the analysis is broken down into the various measures used to examine the different variables. The variables are then used to answer the hypothesis of this dissertation in the next section of the chapter.

4.3.1 Rewards Satisfaction

An ANOVA test between the two types of intangible rewards, intrinsic and extrinsic, was given to examine the effect of receiving an intrinsic intangible reward at work (growth) or an extrinsic intangible reward at work (praise) on respondents' satisfaction with the reward given. As expected, there is a significant main effect of reward type (F (1, 126) = 4.743, p = .031), indicating higher satisfaction with the opportunity to grow and learn as a reward (M = 73.45, SD = 20.89) than when they were given the opportunity to receive praise from peers or supervisors (M = 65.56, SD = 20.01). This supports the hypothesis that people feel more satisfied when they receive intrinsic intangible rewards over extrinsic intangible rewards.

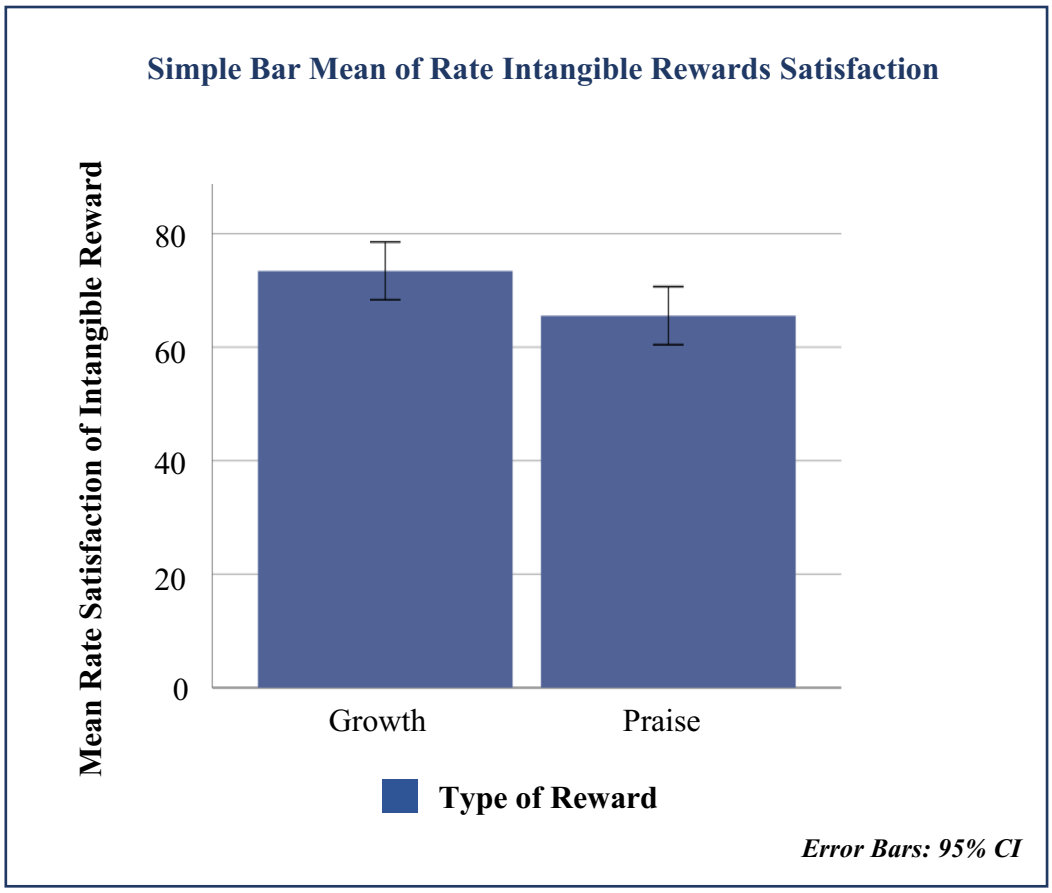

Figure 2: Simple Bar Mean of Rate Intangible Rewards Satisfaction

A second two-way ANOVA was conducted to investigate the effect of receiving a specific type of intangible reward and either low or high levels of autonomy on one's satisfaction with the reward in question. The interaction between the type of reward and the level of autonomy was not statistically significant, F (1, 124) = .042, p = .838. Simple main effects tests indicated that intangible rewards did have a statistically significant effect on the satisfaction of the employee with the reward given (F (1, 124) = 4.686, p = .032). This result demonstrated that growth had a significantly greater effect on employee satisfaction with the reward received than praise had. The levels of autonomy did not have a statistically significant effect on the satisfaction with the rewards received (F (1, 124) = .027, p = .869).

Descriptive Statistics –Intangible Rewards Satisfaction

	Condition	Mean	Std. Deviation	p-value
Praise	High Autonomy	66.18	16.34	.794
	Low autonomy	64.82	23.92	
Growth	High Autonomy	73.37	21.61	.977
	Low autonomy	73.51	20.58	
Total	High Autonomy	69.60	19.21	.838
	Low autonomy	69.77	22.33	

Table 3: Descriptive Statistics – Intangible Rewards Satisfaction

4.3.2 Autonomy Satisfaction

As expected, from a Two-way ANOVA test between high and low autonomy and the employee satisfaction with the level of autonomy given, we found a significant difference (F (1, 126) = 19.338, p = .001) between the different levels of autonomy, when employees were given either high or low autonomy conditions, they were more satisfied when they were given high autonomy (M = 85.65, SD = 15.24) compared to when they were given low autonomy at work (M = 68.51, SD = 27.06).

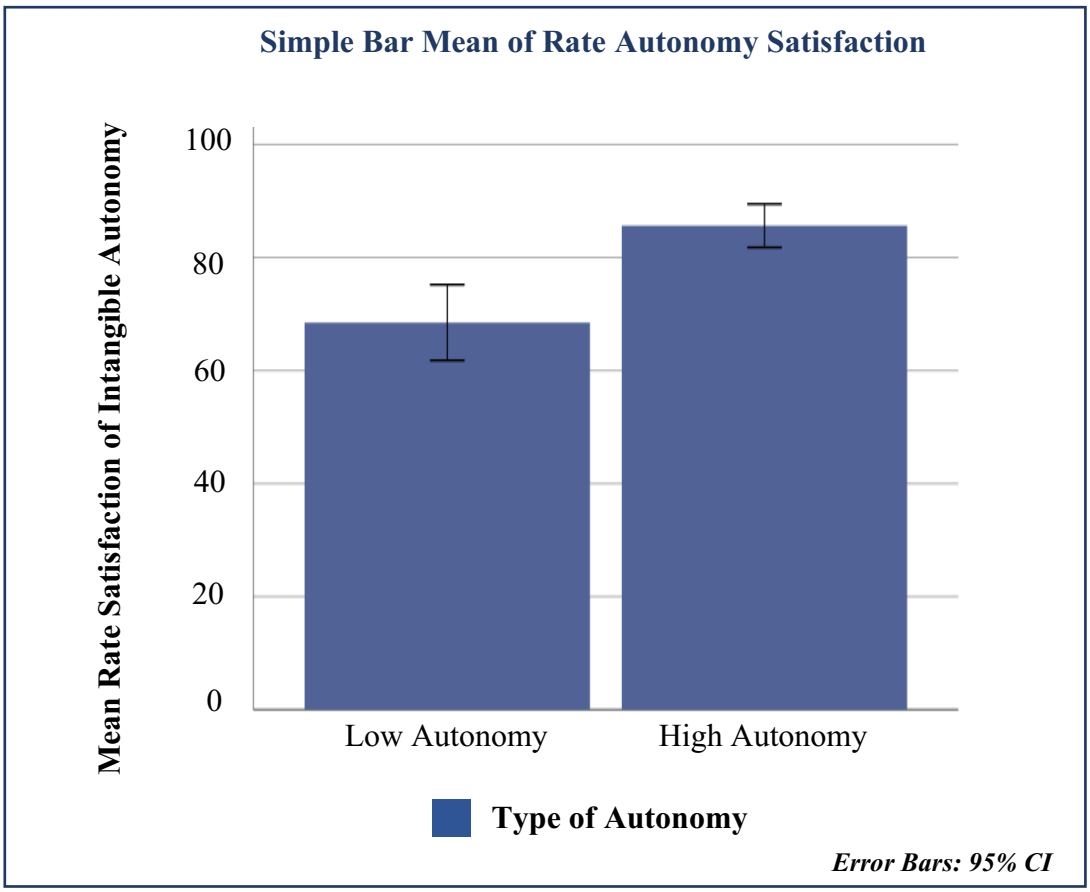

Figure 3: Simple Bar Mean of Rate Autonomy Satisfaction

The test conducted examined the effect of the type of reward given and the level of autonomy given on autonomy satisfaction, and it was found that there was a no statistically significant interaction between the type of intangible reward given and the level of autonomy given on employees own' autonomy satisfaction, F (1, 126) = 1.664, p = .199. However, the simple main effects analysis revealed that autonomy did have a statistically significant effect on the satisfaction with the level of autonomy given (F (1, 124) = 21.639, p = .001). This was also true for the effect of intangible rewards on the variable studied, demonstrating a statistically significant effect under p < 10% on the satisfaction with the level of autonomy given (F (1, 124) = 3.265, p = .073). This implies that both independent variables, intangible rewards and autonomy, significantly affect employee satisfaction with the level of autonomy provided, and on the type of intangible rewards. Additionally, independent samples T-tests were also conducted to compare the two types of rewards on the two levels of autonomy. When respondents were given high autonomy, they preferred to receive an intrinsic intangible reward

(M = 86.70, SD = 12.23) over an extrinsic intangible reward (M = 84.70, SD = 17.68), although the difference was not significant (t (57) = .518, p = .606). Likewise, for those with low job autonomy, employees preferred to receive growth (M = 73.68, SD = 24.27) rather than praise (M = 61.68, SD = 29.41), indicating a significant difference when p < 10% (t (51) = 1.801, p = .076).

As hypothesized, employees who were in either the intrinsic intangible reward condition or the extrinsic intangible reward condition were more satisfied when given high levels of autonomy than when given low level of autonomy, and that they were more satisfied when given growth, an intrinsic intangible reward, than when given praise, an extrinsic intangible reward. Another finding in response to what was previously discussed is that employees in the intrinsic intangible reward condition were more satisfied with low autonomy than when in the extrinsic intangible reward condition.

Descriptive Statistics – Autonomy Satisfaction

	Condition	Mean	Std. Deviation	p-value
Praise	High Autonomy	84.70	17.68	.001
	Low autonomy	61.68	29.41	
Growth	High Autonomy	86.70	12.23	.009
	Low autonomy	73.68	24.27	
Total	High Autonomy	85.65	15.24	.199
	Low autonomy	68.50	27.06	

Table 4: Descriptive Statistics – Satisfaction with Autonomy

4.3.3 Job Satisfaction

The analysis of the two-way between-subjects ANOVA design examining the effects of the two types of intangible rewards and the two levels of autonomy on employees' overall job satisfaction, revealed a statistically significant interaction between the effects of the types of rewards employees could receive and the level of autonomy given on job satisfaction, F (1,

124) = 6.990, p = .009. However, the simple main effects analysis showed that receiving a reward did not have a statistically significant effect on job satisfaction (F (1, 124) = .287, p = .593), which was also found for the effect of receiving autonomy on the variable (F (1, 124) = .056, p = .813). These findings indicate that receiving a reward or autonomy at work does not directly impact employee job satisfaction, but, when both a reward and a certain degree of autonomy are provided to the employee, there is a discernible effect on overall job satisfaction.

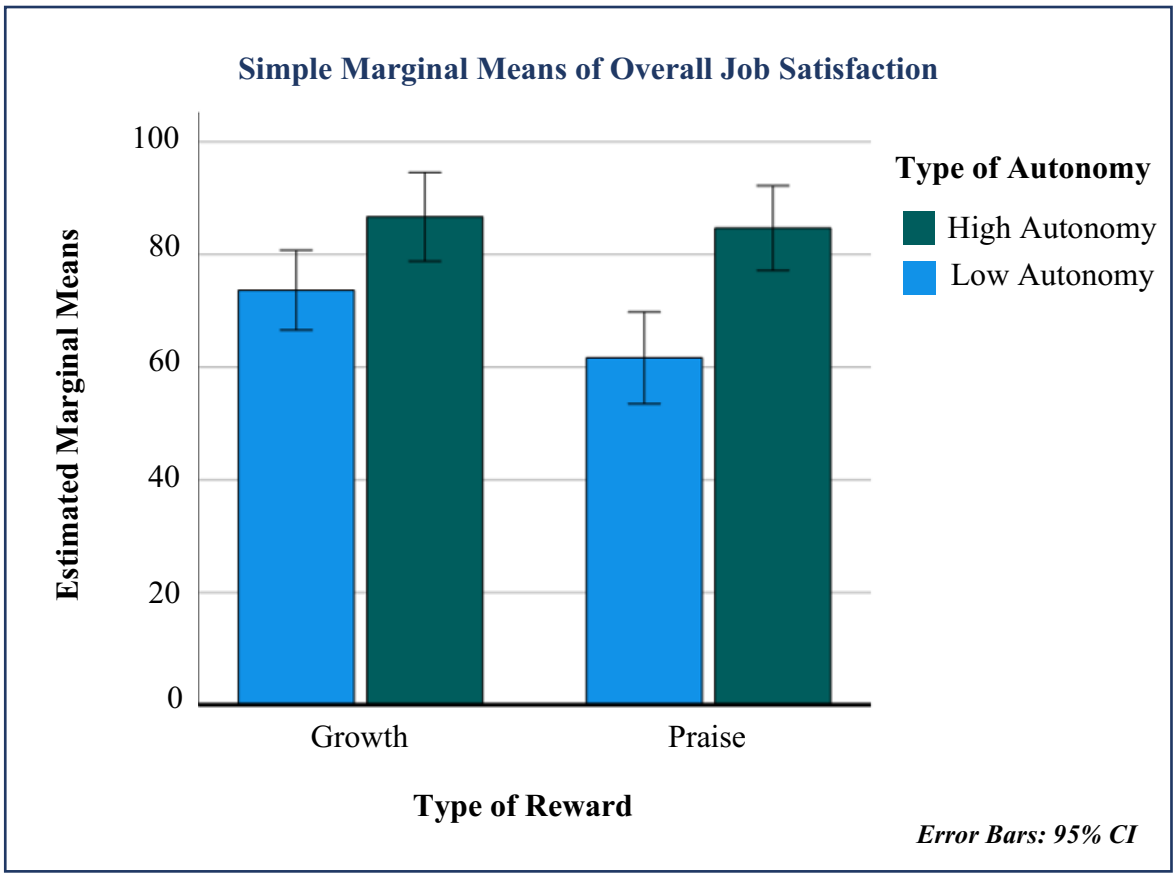

Figure 4: Bar Chart Estimated Marginal Means of Overall Job Satisfaction

Independent samples T-test revealed that when employees are given as a reward the opportunity to learn and grow, job satisfaction is higher when they have high autonomy at work (M = 3.70, SD = .79) then when they have low autonomy at work (M = 3.27, SD = .92; t (65) = 2.002, p = .049), reporting that employees are more satisfied with their jobs when they receive an intrinsic intangible reward and are given high levels of autonomy at work than when they

are given low levels of autonomy, which is consistent with what was found previously. However, employees who receive an extrinsic intangibles reward are marginally more satisfied with their job when they receive low autonomy at work (M = 3.74, SD = .80), rather than when they receive high autonomy (M = 3.39, SD = .79; t (57) = -1.748, p = .086). Additional T-test further explored differences between intrinsic and extrinsic rewards for high and for low autonomy conditions. When employees receive high levels of autonomy at work, they are more satisfied when they receive intrinsic intangible rewards than extrinsic intangible rewards, although the difference is not statistically significant (t (60) = -1.561, p = .124). On the contrary, when employees receive a low level of autonomy at work they are significantly (t (62) = 2.519, p = .035) more satisfied with their jobs when they receive extrinsic intangible rewards than intrinsic intangible rewards. In summary, employees who received an intrinsic intangible reward are more satisfied with their job when they have high level of autonomy at work, on the contrary, employees who received an extrinsic intangible reward are more satisfied with their job when they have a low level of autonomy at work.

Descriptive Statistics – Overall Job Satisfaction

	Condition	Mean	Std. Deviation	p-value
Praise	High Autonomy	3.39	.79	.086*
	Low autonomy	3.74	.80	
Growth	High Autonomy	3.70	.79	.049
	Low autonomy	3.27	.92	
Total	High Autonomy	3.48	.80	.009
	Low autonomy	3.54	.89	

*Not significant at p < .05, significant at p = < .10.

Table 5: Descriptive Statistics – Overall Job Satisfaction

4.3.4 Work Motivation

Extrinsic Motivation: A two-way analysis of variance (ANOVA) was conducted to examine the effect of the independent variables' intangible rewards and the two levels of

autonomy on extrinsic motivation. The results indicated a non-significant interaction, F (1, 124) = .029, p = .865. The simple main effects analysis also indicated that there was no significant effect of intangible rewards on extrinsic motivation (F (1, 124) = .209, p = .651), nor was there a significant effect of the level of autonomy on extrinsic motivation (F (1, 124) = .061, p = .806). In fact, there is no significant difference between praise and growth and when people are either in the praise condition (t (57) = .056, p = .955) and have high autonomy (M = 4.98, SD = 1.07) or low autonomy (M = 4.96, SD = 1.07) at work, or in the growth condition (t (63) = .286, p = .776), and they have high autonomy (M = 4.92, SD = 1.18) or low autonomy (M = 4.84, SD = 1.21) at work. The results demonstrated that the use of external agents does not influence employee motivation, regardless of the type reward (intrinsic or extrinsic) or the level of autonomy. However, the respondents indicated a slight preference for extrinsic intangible rewards over intrinsic intangible rewards when extrinsic motivation was employed.

Introjected Regulation: A two-way ANOVA revealed that there were no statistically significant differences in the data. The test indicated that when employees were motivated by introjected regulation, there were no differences between the intangible rewards and the amount of autonomy given, F (1, 124) = ,043, p = ,836. Furthermore, the analysis revealed that there were no simple main effects of either intangible rewards (F (1, 124) = .103, p = .749) or autonomy (F (1, 124) = .069, p = .793), on introjected regulation. Indeed, the results of independent samples T-tests indicated that employees did not exhibit a preference for receiving an intrinsic intangible reward (M = 4.25, SD = 1.63) rather than an extrinsic intangible reward (M = 4.16, SD = 1.78). Similarly, they did not express a preference for high autonomy at work (M = 4.25, SD = 1.68) over low autonomy (M = 4.17, SD =1.74). While not statistically significant, both rewards were found to be slightly highly valued by employees when they were motivated by identified introjected regulation and received high levels of autonomy at work.

Identified Regulation: The results of the two-way ANOVA analysis indicated that the interaction between the types of intangible reward and the levels of autonomy was not statistically significant, F (1, 124) = 2.265, p = .135. The simple main effects analysis yielded comparable results, indicating that intangible rewards had no statistically significant effect on identified regulation (F (1, 124) = 1.510, p = .666), which is also consistent with the finding that autonomy had no effect on identified regulation (F (1, 124) = .088, p = .768). Consequently, there were no statistically significant differences between high autonomy (M = 4.21, SD = 1.69)

and low autonomy (M = 4.54, SD =1.28) in the praise condition (t (58) = -.830, p = .410), and between high autonomy (M = 4.83, SD = 1.54) and low autonomy (M = 4.35, SD = 1.46) given to employees in the growth condition (t (60) = 1.312, p = .194). The findings indicated a tendency for employees to receive intrinsic intangible rewards rather than extrinsic ones when granted high levels of autonomy at work, although the results were not statistically significant. Conversely, when employees were given low levels of autonomy at work, they demonstrated a preference for receiving an extrinsic intangible reward rather than an intrinsic one.

Integrated Regulation: As with all the previous types of motivation, this type of regulation also showed a nonstatistical interaction between low and high autonomy and intrinsic and extrinsic intangible rewards, F (1, 124) = .006, p = .937, as evidenced by a two-way ANOVA. The analysis of the sample main effects indicated that autonomy did not have a statistically significant effect on integrated regulation (F (1, 124) = .001, p = .976), as the simple main effect showed that intangible rewards had no statistically significant effect on integrated regulation (F (1, 124) = 1.628, p = .204). Accordingly, there is no statistically significant difference between the praise condition (t (58) = .038, p = .969) in high autonomy (M = 5.00, SD = 1.22) and low autonomy (M = 4.99, SD = 1.89), and in the growth condition (t (59) = -.072, p = .943) between high autonomy (M = 4.67, SD =1.62) and low autonomy (M = 4.69, SD = 1.43). Although the data is not significant, it suggests that when employees are motivated by integrated regulation, they prefer to receive an extrinsic intangible reward rather than an intrinsic intangible reward.

Intrinsic Motivation: This type of motivation, which was postulated to be strongly correlated with intrinsic intangible rewards, was also reported by a two-way ANOVA to have no statistically significant interaction between the type of reward and the level of autonomy, F (1, 124) = 2.481, p = .118. Moreover, the simple main effects of intrinsic rewards showed a no statistically significant effect on intrinsic motivation (F (1, 124) = .062, p = .804), and showed that autonomy did not have a statistically significant effect as well on intrinsic motivation (F (1, 124) = .017, p = .897). Further independent samples T-tests were conducted to analyze the differences between the levels of autonomy. In the growth condition, the test results indicated that although not statistically significant (t (65) = 1.127, p = .264), high autonomy (M = 5.40, SD = 1.05) was preferred to low autonomy (M = 5.06, SD = 1.33) when respondents were asked about intrinsic motivation. In the praise condition, the results were also not statistically

significant (t (58) = -1.099, p = .276), although respondents indicated that low autonomy (M = 5.49, SD = 1.19) was preferred to high autonomy (M = 5.09, SD = 1.57).

In this regard, employees reported a slight preference for praise (M = 5.27, SD = 1.41) over growth (M = 5.21, SD = 1.22) as a type of reward. In addition, results indicated that, although not statistically significant, employees who were granted high levels of autonomy demonstrated a preference for growth, an intrinsic intangible reward, whereas those who were given low levels of autonomy at work exhibited a preference for praise, an extrinsic intangible reward. As expected, high levels of autonomy were preferred by individuals who received intrinsic intangible rewards and were motivated by intrinsic motives. In contrast, when employees have low autonomy at work and are intrinsically motivated, they prefer to receive extrinsic intangible incentives.

Descriptive Statistics – Motivation

		Condition	Mean	Std. Deviation	p-value
Extrinsic Motivation	Praise	High Autonomy	4.98	1.07	.955
		Low autonomy	4.96	1.07	
	Growth	High Autonomy	4.92	1.18	.776
		Low autonomy	4.84	1.21	
	Total	High Autonomy	4.95	1.12	.865
		Low autonomy	4.89	1.15	
Introjected Regulation	Praise	High Autonomy	4.17	1.74	.971
		Low autonomy	4.15	1.87	
	Growth	High Autonomy	4.33	1.63	.723
		Low autonomy	4.19	1.65	
	Total	High Autonomy	4.25	1.68	.836
		Low autonomy	4.17	1.74	
Identified Regulation	Praise	High Autonomy	4.21	1.69	.410
		Low autonomy	4.54	1.28	
	Growth	High Autonomy	4.83	1.54	.194
		Low autonomy	4.35	1.46	

	Total	High Autonomy	4.51	1.64	.135
		Low autonomy	4.43	1.38	
Integrated Regulation	Praise	High Autonomy	5.00	1.22	.969
		Low autonomy	4.99	1.19	
	Growth	High Autonomy	4.67	1.62	.943
		Low autonomy	4.69	1.45	
	Total	High Autonomy	4.84	1.42	.937
		Low autonomy	4.82	1.34	
Intrinsic Motivation	Praise	High Autonomy	5.09	1.57	.276
		Low autonomy	5.49	1.19	
	Growth	High Autonomy	5.40	1.05	.264
		Low autonomy	5.06	1.33	
	Total	High Autonomy	5.25	1.35	.118
		Low autonomy	5.24	1.31	

Table 6: Descriptive Statistics – Motivation

4.3.5 Job Autonomy

To further analyze how people perceive autonomy at their work, three types of autonomy from the Work Development Questionnaire are examined.

Work Scheduling Autonomy: A two-way analysis of variance was conducted to determine if there were statistically significant differences between the two types of rewards and the two levels of autonomy that employees could receive in relation to the impact of autonomy in scheduling their own work. The statistical analysis revealed that there were no significant effects of the interaction between the two variables, F (1, 124) = .093, p = .760. Furthermore, the analysis indicated that there were no statistically significant effects of intangible rewards on work scheduling autonomy (F (1, 124) = .073, p = .788), and no statistically significant effect of the levels of autonomy that an employee could have on work scheduling autonomy (F (1, 124) = .430, p = .513). To examine whether any statistical differences existed, a series of independent samples T-tests were conducted. The analysis of the

Work Scheduling Autonomy variable revealed no statistical interaction between praise (t (53) = -.673, p = .504) and people who were given the opportunity to have full autonomy at work (M = 4.16, SD = .72) and individuals who had to ask for every decision they had to make to complete their task (M = 4.30, SD = .86), and also no significant difference was found in the growth condition (t (64) = -.251, p = 0.803) and high autonomy (M = 4.17, SD = .65) and low autonomy (M = 4.22, SD = .91). It is noteworthy that employees in both reward conditions expressed a preference, even if the results are not significant, for work scheduling autonomy when they were afforded low autonomy at work. Moreover, it was observed that individuals in the praise condition (M = 4.22, SD = .78) placed a slightly greater value on work scheduling autonomy more than those in the growth condition (M = 4.19, SD = .80).

Decision Making Autonomy: A two-way ANOVA and some independent samples T-tests were conducted to assess the impact of this type of work autonomy. The results showed that there were no statistically significant effects observed on work decision autonomy between intangible rewards and levels of autonomy, F (1, 124) = 1.116, p = .293. Similarly, there was no significant effect of intangible rewards on decision-making autonomy (F (1, 124) = .005, p = .943), and the levels of autonomy on decision making autonomy (F (1, 124) = .169, p = .682). The mean autonomy scored for workers in the praise condition (M = 4.13, SD = .77) was nearly identical to that of workers in the growth condition (M = 4.12, SD = .89). When presented with the option of high autonomy, employees did not report a statistically significant difference, although a slightly higher proportion of those in the growth condition (M = 4.17, SD = .86) indicated a preference for high autonomy than those in the praise condition (M = 4.03, SD = .72). In the case of low autonomy, no statistically significant difference between the types of rewards was observed, even though employees in the praise condition rated the autonomy to make decisions slightly higher when they received praise (M = 4.25, SD = .83) than when they received growth (M = 4.08, SD = .93).

Work Methods Autonomy: From the two-way ANOVA test, work methods autonomy was also found to not have any statistical effect by the independent variable types of intangible rewards and the levels of autonomy, F (1, 124) = .331, p = .566. Additionally, the simple main effects analysis revealed no statistical effect of types of intangible rewards on work methods autonomy (F (1, 124) = .395, p = .531) or levels of autonomy on work methods autonomy (F (1, 124) = .599, p = .440). The independent sample T-tests were conducted as well, revealing

that when workers were in the praise condition and given low autonomy ($M = 4.33$, $SD = .71$), they valued the work methods with autonomy slightly higher than those who were given high autonomy to complete a task ($M = 4.15$, $SD = .67$). However, this difference was not statistically significant (t (56) = -1.027, p = .311). Likewise, the results reported that employees in the growth condition valued work methods autonomy independently of having high autonomy (M = 4.14, SD .85) to low autonomy (M = 4.17, SD = .78), though the results were also not statistically significant (t (59) = -.133, p = .894).

Descriptive Statistics – Work Autonomy

		Condition	Mean	Std. Deviation	p-value
Work Scheduling Autonomy	Praise	High Autonomy	4.16	.72	.760
		Low autonomy	4.29	.85	
	Growth	High Autonomy	4.17	.65	.252
		Low autonomy	4.22	.90	
	Total	High Autonomy	4.16	.68	.401
		Low autonomy	4.25	.88	
Decision Making Autonomy	Praise	High Autonomy	4.03	.72	.274
		Low autonomy	4.25	.83	
	Growth	High Autonomy	4.18	.86	.663
		Low autonomy	4.08	.93	
	Total	High Autonomy	4.10	.78	.293
		Low autonomy	4.15	.89	
Work Methods Autonomy	Praise	High Autonomy	4.15	.67	.309
		Low autonomy	4.33	.71	
	Growth	High Autonomy	4.14	.86	.894
		Low autonomy	4.17	.78	
	Total	High Autonomy	4.15	.76	.566
		Low autonomy	4.24	.75	

Table 7: Descriptive Statistics – Work Autonomy

4.5 Overview of the results

The overview of the results from the analyzed data is divided according to the different hypotheses previously developed in Chapter 2, which are addressed in this chapter.

H1: *Employees that receive intrinsic intangible rewards are more satisfied with their job than employees that receive extrinsic intangible rewards at work.*

As expected, according to the findings of the statistically significant data analysis, employees feel more satisfied when they are rewarded for successfully completing a task with the opportunity to learn and grow, rather than receiving praise from colleagues and their superiors. Therefore, the hypothesis is supported as the results report that intrinsic intangible rewards provide employees with greater satisfaction when they successfully complete a task than employees who receive extrinsic intangible rewards.

H2: *Intrinsic intangible rewards, such as personal and professional growth, increase intrinsic employees' motivation at work.*

The data showed that there was no statistical significance in higher employees' intrinsic motivation when people received intrinsic intangible rewards rather than extrinsic intangible rewards. Although not significant, the data showed a trend where employees were more intrinsically motivated by receiving an intrinsic intangible reward than by receiving an extrinsic intangible reward. Interestingly, integrated regulation, the most intrinsic regulation of the extrinsic motivation group and sometimes combined with intrinsic motivation to create an autonomous motivation composite (Ryan & Deci, 2000), although not statistically significant, was also expected to show a stronger preference by respondents of being satisfied with intrinsic intangible rewards over extrinsic ones, however the results reported a slightly preference was for praise, the extrinsic reward, over growth, the intrinsic reward.

H3: *Extrinsic intangible rewards, such as praise, increase extrinsic employees' motivation at work.*

The hypothesis that extrinsic intangible rewards would increase extrinsic motivation is not supported by the data, as there are no significant differences in the value placed on different types of rewards. The analysis yielded no statistical significance in accordance with the hypothesis that extrinsic intangible rewards increase extrinsic intangible motivation. Although not statistically significant, employees who received praise as a reward preferred extrinsic motivation to those who received growth as a reward. This is only true for extrinsic motivation, as introjected regulation, the most extrinsically driven regulation, does not follow the path of extrinsic motivation, where results showed that employees preferred the intrinsic intangible reward to the extrinsic one. Therefore, although the hypothesis is rejected, it is possible to see the tendency that extrinsic motivation can be increased with the use of extrinsic rewards.

H4: *Extrinsic intangible rewards, such as praise, decrease intrinsic employees' motivation at work.*

This hypothesis is rejected as there is no statistical evidence from the analysis of the data that extrinsic intangible rewards reduce employees' intrinsic motivation at work. The data show that extrinsic intangible incentives are less motivating than intrinsic intangible incentives, but are still highly valued as there are no significant differences between the two types of rewards. Interestingly, intrinsic and extrinsic motivation where the two types of motivation were people strongly showed a preference to receive intrinsic over extrinsic intangible rewards or the opposite for extrinsic motivation. This differs for the types of regulations developed in the Self-Determination Theory. For introjected regulation, the most extrinsic regulation, it was expected that employees had a preference for extrinsic intangible reward over the intrinsic one, and in the opposite end, in the integrated regulation, the most intrinsic regulation, individuals would have a preference for intrinsic intangible reward over the extrinsic one. Oppositely from the assumption, although all results showed no statistical significance, employees preferred to receive growth as a reward when they were motivated by introjected regulation and to receive praise as a reward when they were motivated by integrated regulation. Despite that, according to the SDT, motivation moves along a continuum from one extreme, where people are

motivated by the use of external agents, to the other, where people are motivated by doing the action itself because they enjoy it, the intangible rewards that can be used to increase this motivation from these results seems to not move equally along with the continuum.

As stated previously, these hypotheses (hypotheses 2, 3, 4) do not show statistical significance. This could be attributed to respondents being asked to base their answers on their past and current work experiences rather than responding solely based on the manipulation of the scenarios created. Taking this into account, while a manipulation scenario could have confined the interpretation of the variables dependencies, the personal experience of the respondents could have included other factors, that were outside the scope of the research, and could have indirectly impacted the significance of the results.

H5: *The relationship between intangible rewards and employee motivation varies based on the level of work autonomy, suggesting that higher levels of work autonomy amplify the positive impact of intangible rewards on employee motivation.*

The results reported that there is statistical significance showing that employees feel more satisfied when they are given high levels of autonomy at work than when they are given low levels of autonomy at work. Specifically, their satisfaction is higher when they receive intrinsic intangible rewards than extrinsic intangible rewards for both levels of autonomy.

Data based on the overall job satisfaction variable indicates that there is a statistical difference between high and low autonomy. Oppositely to what previously stated, according to the results people feel more satisfied overall with their jobs when given low levels of work autonomy compared to high levels of work autonomy. Moreover, data showed that workers in the praise condition reported higher satisfaction overall with their jobs when they have low autonomy at work, while they reported higher satisfaction for high autonomy when in the growth condition.

Furthermore, results from the WDQ reported how in the respondents' experience, they perceive the level of autonomy at work in the specific settings of work scheduling autonomy, decision making autonomy and work methods autonomy. For this scale, for all three dimensions

of autonomy employees preferred to have low autonomy rather than high autonomy at work, although the difference showed not statistical significance.

These results suggest that the hypothesis can only be partially supported, in fact, as hypothesized when employees expect to receive an intrinsic reward, they prefer to have high autonomy, on the other hand, this is not always true as when employees expect to receive an extrinsic intangible reward, they prefer to have low levels of autonomy.

Based on the two different analyses conducted for autonomy, only the analysis concerning satisfaction with the levels of autonomy demonstrated statistical significance. This can be attributed to the fact that this measurement of autonomy was based on a scenario manipulation. In the second analysis of autonomy, which utilized the WDQ, respondents were asked to answer based on their past or current working experiences, similarly to hypotheses 2,3,4. Consequently, as the responses were no longer constrained by the controlled environment of the scenario manipulation, subjective factors and respondents' perception might have influenced the assessment of autonomy. This study did not consider the potential influence that subjective elements could have on both the responses and the statistical significance of the results. This consideration is particularly pronounced for autonomy compared to motivation as the level of autonomy an individual perceives typically involves interactions with others and their contributions to one's autonomy. For instance, an employee may believe they have a high degree of autonomy at work, only to have their manager make decisions they had expected to make independently. Thus, the employee experiences a lack of autonomy despite ostensibly having been granted significant autonomy.

Chapter 5. General Discussion

5.1 Main Conclusions

The concept of motivation has been described as one of the main problems that organizations are facing nowadays (Cerasoli, Nicklin, & Ford, 2014). Organizations use different types of incentives, such as rewards, to retain the best workers and motivate them to achieve higher performance. Reward strategies are a core determinant of the quality of an organization's workforce, and there is a need for further research on why reward satisfaction matters and how it drives key organizational outcomes (Landry & Whillans, 2018). Indeed, this paper has aimed to focus on these issues, specifically seeking an answer to how different types of intrinsic and extrinsic rewards affect employee motivation in the workplace, when tangible incentives, such as base salary, are provided and are not salient to performance, and how autonomy affects their work motivation when they receive an intangible reward.

The results indicate that there is no significant difference in the impact of intrinsic or extrinsic intangible rewards on employee motivation at work. Despite that, there is a tendency to suggest that intrinsic intangible rewards have a greater effect on intrinsic motivation than extrinsic intangible rewards, while extrinsic intangible rewards have a slightly greater effect on extrinsic motivation than intrinsic intangible rewards. Furthermore, the study found that employees would prefer to receive the opportunity to learn and grow rather than receive praise from peers or superiors, indicating that employees feel more satisfied with an intrinsic intangible reward than an extrinsic one, even when they also receive tangible rewards that does not depend on the performance outcomes, such as monetary compensation. Regarding autonomy, the study reports that employees do prefer high autonomy over low autonomy. However, this preference occurs specifically when they receive intrinsic intangible rewards. When receiving praise from colleagues and superiors as a reward for successfully completing a task, even if there are some discrepancies from the findings that are not all statistically significant, employees prefer to receive low autonomy at work.

In summary, it can be concluded that intangible rewards do not have a clear effect on employees' motivation at work, though results show that there is a tendency for them to affect motivation depending on the contextual factors at play, such as the type of reward received and how the individual values it.

5.2 Theoretical and Managerial Implications

The present study contributes theoretically and managerially to the understanding of how employees can be motivated with the use of intangible rewards, and how autonomy can increase their motivation to complete tasks to receive those rewards. Theoretically, there is a lack of previous research that focused on studying specifically intangible rewards. Although there are many previous studies around motivation and employee performance, there has been a lack of research on how companies can motivate their employees by understanding what interests' people when basic pay is given, as workers are not valuing only pay in the workplace, and how motivation is impacted by intrinsic and extrinsic rewards (Noko & Nwuzor, 2021).

In terms of managerial implications, the result of this paper suggests that the organizational management teams should focus on using available resources, such as intangible rewards, to retain employees and create a work environment where they feel motivated and satisfied with their jobs so that they can reach their full potential and improve organization performance. In addition, a company with satisfied and motivated employees is likely to be more attractive to prospective candidates, resulting on a larger pool of new talents to hire. Therefore, organizations must be mindful of how and when to use rewards programs to avoid implementing only financial incentives and cash rewards based on the assumption that these monetary incentives are a sufficient motivation for employees (Landry & Whillans, 2018).

5.3 Limitations and Future Research

The present dissertation focuses on contributing to the knowledge of how intangible rewards can increase employee's motivation in the workplace, and how autonomy has an impact on this. Nevertheless, this study counts for some limitations that must be considered and identifies possible research that can be done later in the future to increase the understanding of these topics. A first limitation relates to the type of reward used in the manipulation check. In the study, participants were asked to imagine either receiving praise from colleagues or superiors in the extrinsic intangible reward condition, or receiving the opportunity to learn and grow professionally and personally as an individual in the intrinsic intangible reward condition. The choice of two different types of rewards to represent intrinsic and extrinsic intangible

rewards may have influenced the results of the study. Future research could use different types of rewards and see if there are meaningful differences with the rewards chosen for this dissertation.

Secondly, a limitation that this dissertation faced was the subjectivity of the responses received. Since the questionnaire asked participants to think about their past or present work experiences, some results reported in the analysis may have been influenced by other factors that were not accounted for, such as the respondents' personalities or real-life professional experiences. As this study used a controlled group that was asked to base their responses on their work experiences, one way to partially address the issue of subjectivity in responses is to conduct similar research in a controlled environment, for instance, by administering the questionnaire in an organization where culture and norms are the same for all participants. Moreover, to address the limitation that lies in the manipulation and control of the group, future research should replicate the study but base all the responses for the different measures on a given scenario. This would help to analyze the differences of results more accurately, compared to this study where motivation and autonomy measured with the WDQ were no longer based solely on the manipulation but were influenced by the controlled group experiences.

Another limitation is the sample size and the diversity of the respondents. The sample for the study conducted counted 182 responses, where only 128 were considered valid responses and therefore analyzed. This sample size could have benefited from a larger size, since the design of the study was a 2X2 between subjects' design and for each condition there were less than 50 valid responses. This affected the validation of the data, in fact, as can be seen in Chapter 4, some of the data that were not statistically significant had a tendency to show significance, but most likely due to the sample size this was not the case. It should be noted that this limitation is mainly due to the time constraints of writing this paper. Another limitation is the diversity of the sample. Since most of the respondents were Italian, the answers could have been influenced by the general and organizational culture of this country. Another factor to consider is the age cluster of the respondents, which mainly included people between 25 and 30 years old. Experience, generational differences, and years in the workforce may have influenced the results in terms of how people interpret and value the questions and topics asked. Future research should include a larger number of respondents with different backgrounds and

ages. Further, future research could analyze how different ages and generations may value and view the topics of this study differently.

Lastly, this study focuses specifically on intangible rewards, and there is a lack of research on this specific topic compared to tangible work incentives, especially those involving monetary compensation. Future research could focus on studying tangible and intangible rewards together, such as how intangible rewards can affect employee motivation when tangible rewards are salient to performance. In addition, this paper explored how job autonomy could affect how employees perceive receiving a type of reward and how this would affect their motivation to do their job. To gain further understanding of this topic, other moderators could be investigated. For example, proactivity could be a moderator to see how it affects the relationship between intangible rewards and employee motivation.

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Appendix

Appendix A: Survey Structure

RANDOMIZATION

Participants are redirect to one of four surveys, where each include one of the following conditions:

- Praise *(extrinsic intangible reward)* - Low Autonomy
- Praise *(extrinsic intangible reward)* - High Autonomy
- Growth *(intrinsic intangible reward)* - Low Autonomy
- Growth *(intrinsic intangible reward)* - High Autonomy

Introduction Block: Welcome page

Q1) Dear Participant,

Thank you for participating in this survey. Your participation is greatly appreciated! This study is being conducted as part of my Master's thesis as a student at the Católica Lisbon School of Business and Economics, and aims to investigate how intangible rewards motivate employees in the workplace and how autonomy moderates this relationship. The survey will take approximately 4 minutes to complete. It is very important to me that you complete it and answer all the questions. The survey is available in two languages: English and Italian, please select the language you are most comfortable with in the top right corner. By completing this questionnaire, you consent to the use of the data for research purposes. All your answers are strictly confidential, and your data will remain completely anonymous, so I ask you to answer honestly.

If you have any doubts, concerns, or would like to know more about this study, please do not hesitate to contact me at s-schecchi@ucp.it.

Thank you again for taking the time to complete this survey!
Sara De Checchi

Block 1

Q2) Please imagine yourself currently at your job working on a task. The task you are completing cannot impact in any way your salary and is not related to any tangible benefits (such as salary, bonuses, etc.). If you successfully complete the task, you will receive **praise** from your superiors and/or colleagues.

OR

Q2) Please imagine yourself currently at your job working on a task. The task you are completing cannot impact in any way your salary and is not related to any tangible benefits (such as bonuses, etc.). If you successfully complete the task what you will receive is your own satisfaction that you **have learned something new that allows you to growth both personally and professionally** by possibly acquiring new knowledge, abilities, or skills.

Q3) Furthermore, please imagine that for the task you are working on you are given **full autonomy** to complete it.

OR

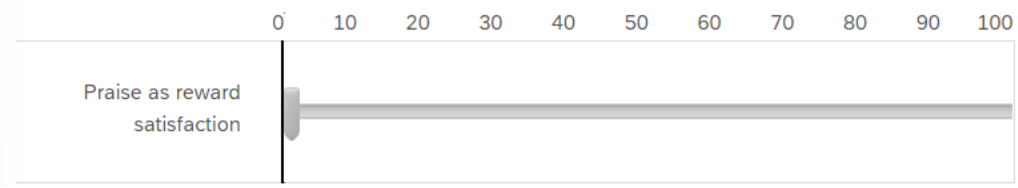
Q3) Furthermore, please imagine that for the task you are working on you **must ask and follow every decision that your superior gives to you**.

Q4) Based on the scenario just described, on a scale of 0 to 100, where 0 is completely dissatisfied and 100 is completely satisfied, how would you rate your overall satisfaction with **the reward you would be given (praise),** considering that completing the task has no impact on tangible job benefits such as base pay and benefits you receive from the company?

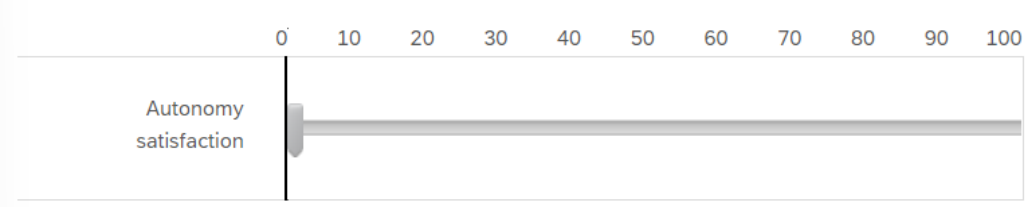
OR

Q4) Based on the scenario just described, on a scale of 0 to 100, where 0 is completely dissatisfied and 100 is completely satisfied, how would you rate your overall satisfaction with

the **reward you would be given (possibility to grow)**, considering that completing the task has no impact on tangible job benefits such as base pay and benefits you receive from the company?



Q5) Based on the scenario just described, on a scale from 0 to 100, with 0 being completely dissatisfied and 100 being completely satisfied, how would you rate your overall satisfaction with the **autonomy** you are given to complete the task?



Block 2

Q6) For the following questions, please answer the statements by thinking about your current or a past work situation. Please remember that all questions are completely anonymous and are for research purposes only.

Q7) Using a scale of 1 (strongly disagree) to 5 (strongly agree), please answer the following affirmations about how you feel about your job.

	1 Strongly disagree	2	3	4	5 Strongly agree
I am often bored with my job.	○	○	○	○	○
I feel fairly well satisfied with my present job.	○	○	○	○	○
I am satisfied with my job for the time being.	○	○	○	○	○
Most days I am enthusiastic about my work.	○	○	○	○	○
I like my job better than the average worker does.	○	○	○	○	○
I find real enjoyment in my work.	○	○	○	○	○

Block 3

Q8) Now, on a scale of 1 (Does not correspond at all) to 7 (Corresponds exactly), please indicate the extent to which each statement describes why you are involved in your work.

Q9) I work because this is the type of work I chose to do to attain a certain lifestyle.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q10) I work for the income it provides me.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q11) I work because I derive much pleasure from learning new things.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q12) I work because it has become a fundamental part of who I am.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q13) I work because I want to succeed at this job, if not I would be very ashamed of myself.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q14) I work because I chose this type of work to attain my career goals.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q15) I work for the satisfaction I experience from taking on interesting challenges.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q16) I work because it allows me to earn money.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q17) I work because it is part of the way in which I have chosen to live my life.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q18) I work because I want to be very good at this work, otherwise I would be very disappointed.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q19) I work because I want to be a "winner" in life.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q20) I work because it is the type of work I have chosen to attain certain important objectives.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q21) I work for the satisfaction I experience when I am successful at doing difficult tasks.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q22) I work because this type of work provides me with security.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Q23) I work because this job is a part of my life.

1 Does not correspond at all	2	3	4	5	6	7 Corresponds exactly
○	○	○	○	○	○	○

Block 4

Q24) Please indicate your level of satisfaction with the following statements on a scale from 1 (strongly disagree) to 5 (strongly agree).

	1 Strongly Disagree	2	3	4	5 Strongly Agree
The job allows me to make my own decisions about how to schedule my work.	○	○	○	○	○
The job allows me to decide on the order in which things are done on the job.	○	○	○	○	○
The job allows me to plan how I do my work.	○	○	○	○	○
The job gives me a chance to use my personal initiative or judgment in carrying out the work.	○	○	○	○	○
The job allows me to make a lot of decisions on my own.	○	○	○	○	○
The job allows me to make decisions about what methods I use to complete my work.	○	○	○	○	○
The job gives me considerable opportunity for independence and freedom in how I do the work.	○	○	○	○	○
Be able to to decide on my own how to go about doing my work.	○	○	○	○	○

Block 5

Q25) Please indicate your gender:

- ○ Male
- ○ Female
- ○ Non-binary / third gender
- ○ Prefer not to say

Q26) How old are you?

Q27) Please indicate your highest level of education:

- ○ Middle School
- ○ High School
- ○ Bachelor's Degree
- ○ Master's Degree
- ○ PhD
- ○ Other

Q28) Please indicate what is your current occupation:

- ○ Student
- ○ Working-student
- ○ Employed
- ○ Self-employed
- ○ Unemployed/Retired

Appendix B. WEIMS Measures

WEIMS Measures

Type of motivation	Questions WEIMS
External Motivation	▪ I work for the income it provides me. ▪ I work because it allows me to earn money. ▪ I work because this type of work provides me with security.
Introjected Regulation	▪ I work because I want to succeed at this job, if not I would be very ashamed of myself. ▪ I work because I want to be very good at this work, otherwise I would be very disappointed. ▪ I work because I want to be a "winner" in life.
Identified Regulation	▪ I work because I want to be a "winner" in life. ▪ I work because I chose this type of work to attain my career goals. ▪ I work because it is the type of work I have chosen to attain certain important objectives.
Integrated Regulation	▪ I work because it has become a fundamental part of who I am. ▪ I work because it is part of the way in which I have chosen to live my life. ▪ I work because this job is a part of my life.
Intrinsic Motivation	▪ I work because this job is a part of my life. ▪ I work for the satisfaction I experience from taking on interesting challenges. ▪ I work for the satisfaction I experience when I am successful at doing difficult tasks.

Table 8: WEIMS Measures Table

Appendix C. Statistical Demographical Data

Demographical Information (n° participants = 128)

		N	%
Nationality	Italian	106	82.8%
	Others (answered in English)	22	17.2%
Gender	Male	47	36.7%
	Female	79	61.7%
	Non-binary/third gender	1	0.8%
	Prefer to not say	1	0.8%
Level of Education	Middle School	12	9.4%
	High School	63	49.2%
	Bachelor's Degree	17	13.3%
	Master's Degree	28	21.9%
	PhD	3	2.3%
	Other	5	3.9%
Current Occupation	Employed	84	65.6%
	Self-employed	22	17.2%
	Working student	14	10.9%
	Unemployed/Retired	5	3.9%
	Student	3	2.3%

Table 9: Statistical Demographical Data