




## Statistical assessment of employees' perception of nonmonetary compensations: The case of a regional hospital

 **Abiodun Ojemakinde<sup>1+</sup>**  
**Elizabeth Mwaura-Smith<sup>2</sup>**

<sup>1,2</sup>School of Business, Albany State University, Albany, GA 31705, USA.

<sup>1</sup>Email: [abiodun.ojemakinde@asurams.edu](mailto:abiodun.ojemakinde@asurams.edu)

<sup>2</sup>Email: [Elizabeth.Mwaura-Smith@asurams.edu](mailto:Elizabeth.Mwaura-Smith@asurams.edu)



(+ Corresponding author)

### ABSTRACT

#### Article History

Received: 11 May 2023

Revised: 7 September 2023

Accepted: 19 October 2023

Published: 24 November 2023

#### Keywords

Employees' perception  
Employees' satisfaction  
Incentive and reward programs  
Nonmonetary rewards  
Statistical significance  
Workers' productivity.

Organizations often attempt to incentivize employees with nonmonetary rewards for the purpose of increasing workers' productivity. The problem is that employers don't always know which nonmonetary rewards are most beneficial to the employees and the organizational goal. Therefore, we attempt to investigate the statistical significance of employees' perceptions of nonmonetary rewards at the workplace. A questionnaire was administered to the employees of the Accounting Department of a regional hospital to indicate their perception of the relevance of the nonmonetary rewards available to them vis-à-vis their work productivity. Employees' preference for each of the five nonmonetary rewards was measured on a binary scale of yes, the nonmonetary reward was valuable, or no, the nonmonetary reward was not valuable. The acquired data underwent analysis to examine the proportion of workers who expressed a preference for one nonmonetary reward over another. This analysis was conducted using the conventional normal probability distribution, ensuring that the condition of a large sample size was satisfied. We concluded that not all nonmonetary rewards were considered valuable by the employees and that supervisors' recognition of workers' good ideas at work and collegiality with coworkers were considered prime nonmonetary rewards. Additionally, non-monetary rewards that have no close substitutes or that employees cannot easily provide for themselves—such as supervisors praising employees for their creative ideas at work—are significant drivers of engagement and productivity in small- and medium-sized businesses like the one used for our research. This research provides managers with empirical and valuable information regarding nonmonetary incentives and reward programs.

**Contribution/Originality:** This study provides an empirical study of nonmonetary rewards from the employees' perspective in a medium-sized, private organization. Unlike most previous studies that focused on organizations' justifications for providing nonmonetary rewards, this study emphasizes the perspectives of workers on nonmonetary rewards vis-a-vis work productivity. Thus, this study is useful in guiding organizational investments in nonmonetary rewards to increase work productivity.

## 1. INTRODUCTION

The motivation of employees to perform optimally in their efforts to accomplish organizational objectives is a crucial concern for managers in both profit-driven and nonprofit organizations. In conjunction with financial remuneration, managers frequently explore non-monetary incentives as a means to stimulate people towards achieving optimal performance. Nonmonetary compensations such as flexible schedules, work-at-home schedules,

club memberships, recreational facilities or fitness centers, childcare facilities, etc. are often provided as incentives for employees' dedication and high performance. While employers have realized the need to invest in many nonmonetary incentives to foster employees' continued engagement and increased productivity, equally important are the nonmonetary rewards that the employees consider essential for their engagement and productivity.

A clear understanding of nonmonetary compensations and their significance to employee performance will enable employers to target their resources in providing nonmonetary rewards that will enable workers' engagement and productivity beyond the parameters of financial compensation. It has been documented in literature such as the [Society of Human Resources Management \(2017\)](#), which indicates that the engagement of employees is positively influenced by the workers' commitment and connection to the organizational goals. Hence, to enhance workers' engagement, employers often employ several nonmonetary rewards to incentivize workers' commitment and productivity. Several authors have provided their insights into the notion of workers' engagement. From a psychological viewpoint, [Khan \(1990\)](#) indicates that personal engagement is the harnessing of organization members' selves to their work roles and that in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances. Similarly, [Schaufeli and Bakker \(2004\)](#) define engagement as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption. In addition, Schaufeli and Baker articulated that vigor is high levels of energy and mental resilience; dedication is the sense of significance, enthusiasm, inspiration, pride, and challenge; and absorption is being fully concentrated and happily engrossed in one's work.

Without a doubt, employees' engagement is vital to the success of an organization. [Harter \(2021\)](#) reported that across companies, businesses, or work units, employees who are well engaged at work more than double their odds of success compared with those in the bottom half of engagement levels. Similarly, businesses that foster a high level of workers' engagement (99th percentile of workers' engagement) have nearly five times the success rate of achieving their goals than businesses with low support for workers' engagement (first percentile). [Byrnes \(2014\)](#) categorized the drivers of engagement between individuals and organizations into four areas: connection, support, voice, and scope. Byrnes further indicates that while connection, an employee's knowledge, and understanding of how their role impacts the organization's mission are basic, among the four engagement factors, scope, which entails the ability to build new skills and capabilities, advance in position, and enjoy challenging work, is the paramount driver of employees' engagement. [Eisenberger, Malone, and Presson \(2016\)](#) also shed some light on the engagement drivers and indicated that perceived organizational support, which is when an employee perceives that the organization values his or her work contributions and cares about the employee's well-being, is an essential engagement driver worthy of employers' attention. The last component of workers' engagement, voice, is also important. [Kalogiannidis \(2020\)](#) emphasized voice or organizational communication as an important engagement factor because effective communication helps build teamwork in the organization and consequently enhances employee performance. [Kalogiannidis \(2020\)](#) argued that weak business communication, on the other hand, could erode the general confidence of employees and negatively impact both the productivity of employees and the performance of the business entity.

[Joshi \(2016\)](#) referred to nonmonetary compensations as relational rewards that are difficult to classify and have more complex components than financial rewards. Joshi further argued that nonmonetary compensations are situation-related, with an infinite number of components that not only relate to the work situation but also relate to the physical and psychological well-being of the employees. [Jensen, McMullen, and Stark \(2007\)](#) emphasized that in addition to monetary rewards, managers should consider how to use intangible rewards in various forms for the mutual benefit of employees and employers.

This study does not minimize the importance of monetary or financial compensations such as wages, retirement plans, pensions, and health insurance payments to employees to achieve business goals. The primary objective of this study is to investigate the statistical significance of employees' perceptions of some nonmonetary rewards in the workplace. The study will attempt to understand which nonmonetary compensations appeal to employees and

highlight their significance in the workplace. Specifically, this paper attempts to investigate the statistical significance of some nonmonetary rewards for employees at a hospital in southwest Georgia. This study examines the statistical significance of the individual impact of nonmonetary rewards on employee work satisfaction and productivity improvement. The subsequent section presents an in-depth review of the literature that is relevant to the research.

## 2. LITERATURE REVIEW

Cassar and Meier (2018) indicated that economists have provided inadequate attention to workers' job satisfaction and productivity vis-à-vis nonmonetary compensations. They argued that the assumption that monetary compensation is the primary motivating factor for workers is not consistent with numerous observed situations in the workplace. While monetary incentives are important, other equally important nonmonetary factors of workers' motivation include organizational mission and job design. Organizational mission influences the employees' perception of self-worth, while job designs that allow for "autonomy, competence, and relatedness" enhance workers' valuation of their nonmonetary reward dimensions. This is particularly true for workers at nonprofit organizations.

The three dimensions of nonmonetary rewards articulated by Cassar and Meier (2018) rest on numerous scholarly works. Workers' "autonomy in business decision-making" is an important dimension of nonmonetary rewards that Oswald, Eugenio, and Daniel (2015) relate to economic productivity. Workers' competence, or "ability to apply talents, skills, or knowledge to attain a goal," was undergirded by the work done by Gallus (2017), which showed a direct correlation between work performance and nonmonetary or symbolic rewards. The third dimension of nonmonetary reward, workers' relatedness, or "connectedness with colleagues," is often motivated by workers' desire for equity in the workplace. Breza, Kaur, and Shamdasani (2018) show that, related to workers' desire for equity in the workplace, unjustified financial inequity in the workplace has detrimental effects on workers' productivity.

Lazear (2018) indicated the direct link between nonmonetary incentives and work productivity and that the notion that workers are not motivated by monetary reward alone is a generally accepted theory in economics. Also, it is a general notion that business profit incentives interact with worker preferences in terms of monetary and nonmonetary rewards. In many cases, intrinsic rewards are important because they are professionally satisfying to the workers. From a business standpoint, a firm could increase its productivity by appealing to the workers' tastes through nonmonetary rewards, even if it has exhausted its ability to raise productivity with monetary rewards. A business could create an incentive culture at the workplace through nonmonetary rewards that are suitable for the workers, and such an effort could motivate workers to increase productivity. In this situation, it should be noted that higher-paying workers are more likely to be motivated by nonmonetary rewards than lower-paid workers because the improved work conditions created by nonmonetary rewards are normal goods and luxury goods for the higher-paid workers and the lower-paid workers, respectively.

Weibel, Rost, and Osterloh (2010) supported the notion that the impact of nonmonetary rewards on workers depends on the worker groups. In the public sector, senior-level public servants are more likely to be motivated by nonmonetary rewards than lower-level public servants because senior-level workers are interested in "interesting work" that enables them to utilize their skills and competence. Monetary rewards satisfy personal needs indirectly, while nonmonetary rewards satisfy personal needs directly by creating intrinsic rewards for the workers. Workers' motivation is multidimensional, and psychology and economics propose that nonmonetary-motivated work is often negated by monetary-motivated work. On the other hand, standard economic theory postulates that monetary rewards increase performance regardless of the type of task involved. In their study, Weibel et al. (2010) found that "pay for performance increases performance on uninteresting tasks but reduces performance on interesting tasks because "performance-contingent rewards subdue the internalized meaning of the work itself and lower the power of intrinsic motivation." Thus, their meta-analysis supported the psychological economics theory.

The direct link between workers' job satisfaction and work productivity has been established in the literature. There are several nonmonetary factors that workers consider important for productivity and job satisfaction. In their

research on Greek public servants' job satisfaction during a financially challenging time, [Karamanis, Arnis, and Pappa \(2019\)](#) indicated that Greek public workers considered lawfully guaranteed security at work, social responsibility, being active on the job, ethical values, and the ability to use skills as top factors for job satisfaction and motivation. Other important factors include workers' collegiality and supervisors' decision-making. The workers' satisfaction with these intrinsic factors is influenced by the workers' gender, position, and level of education.

[Singh and Loncar \(2010\)](#) indicated that some workers work for the inherent interest and importance of the job and not for its monetary rewards. In the medical field, for instance, monetary rewards are considered secondary, while employees value job satisfaction emanating from good collegiality, professional recognition, and pride in their skills. In the Canadian nursing profession, four major factors that influence job satisfaction are work satisfaction itself, promotional opportunities, workers' supervision, and collegiality with coworkers. Though the study was conducted in a unionized environment, the results were consistent with studies in nonunionized situations.

[Sabie, Briscariu, Pirvu, Burcea, and Gatan \(2020\)](#) suggest that the essence of nonmonetary rewards in the workplace is the notion of "emotional intelligence" and its strong direct relationship with productivity. [Mayer, Salovey, and Caruso \(2004\)](#) provide several perspectives on emotional intelligence. They define emotional intelligence as "the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth." [Pirvu \(2020\)](#) indicates that while many people primarily work for monetary rewards, the millennial generation, in large part, considers the emotional working environment essential. Therefore, investments in pertinent nonmonetary rewards as a means of creating effective emotional intelligence and increasing productivity are important in a labor market consisting of workers that value emotionally healthy environments.

The standard economic theory of the superiority of monetary rewards over nonmonetary rewards is not observable in some circumstances. According to [Viswanathan, Li, John, and Narasimhan \(2018\)](#), the use of merchandise incentives (rewards other than money) in sales compensation plans was both an empirical and theoretical puzzle. This is because standard economic theory says that cash incentives are better. In a large-scale field study, [Viswanathan et al. \(2018\)](#) concluded that "cash was not king in compensation plans" and merchandise incentives (noncash incentives) were superior to cash incentives. Statistical evidence supported the evidence that salespersons acted in preference for merchandise incentives. In line with similar studies, it was further concluded that preference for merchandise incentives (nonmonetary rewards) was associated with the level of income of the salespersons. The greater utility provided by the merchandise incentives is supported by the mental accounting theory ([Thaler, 1999](#)), under the assumption that salespersons initially evaluate merchandise and cash incentives separately rather than initially sum them ([Nunes & Park, 2003](#)).

[Kirkegaard \(2020\)](#) extended the principal-agent relationship by "treating leisure as an exogenous black box" and incorporating the notion that workers invest efforts in "work" and "life" or whatever activities the agent is pursuing when out of the workplace, such as leisure, home production, and moonlighting. In this situation, the agent decides on the allocation of his efforts for monetary rewards from work and nonmonetary rewards from "life." The efforts devoted to the two activities and their rewards are substitutes. This would suggest that employers offering nonmonetary rewards can manipulate the agent's entire work-life balance, with important consequences for productivity.

In his study of the recruitment of local community health workers in Uganda, [Deserranno \(2019\)](#) reported that financial incentives can crowd out pro-social motivation at the application stage by discouraging pro-social agents from applying, especially in the presence of incomplete information. Jobs with high financial rewards are perceived as less "social" and are less attractive to pro-socially motivated agents, who are often motivated by nonmonetary rewards. A similar crowding out of nonmonetary rewards by monetary rewards was documented by [Weibel et al. \(2010\)](#).

It has been documented that when workers are incentivized to increase productivity by nonmonetary rewards, they are able to clearly indicate their preference among the nonmonetary rewards offered. For instance, Surephong, Dahlan, Chernbumroong, and Tongpaeng (2020) provided a research report on the effect of different nonmonetary rewards on employee performance at a food manufacturing company in Chiang Mai, Thailand. In that report, among the three nonmonetary rewards, “tangible nonmonetary rewards,” “social nonmonetary rewards,” and “job-related nonmonetary rewards” offered to employees to motivate them to complete a training exercise, the researchers reported that workers’ preference was overwhelmingly in favor of “tangible nonmonetary rewards.” Gupta, Chen, Dawande, and Janakiraman (2023) suggest that different workers are motivated by different nonmonetary rewards.

### 3. THEORETICAL MODEL

Several authors, such as Carr (1995) and Towers (2012), have indicated that employee engagement is not only a physical activity but also a mental and emotional expression. Therefore, it could be stated that mental and emotional stimuli could influence employee engagement, and positive stimuli might influence employees’ perceptions of workplace satisfaction and, invariably, work productivity. Workers who have several meaningful nonmonetary rewards tend to be more engaged and have high productivity. Therefore, workers should be provided vital nonmonetary compensation to motivate good engagement and productivity.

The worth of the nonmonetary reward depends on the perception of the workers receiving it. The statistical significance of workers’ perception of pairwise nonmonetary rewards is tested with the notion that for a group of workers, the proportion of workers preferring a particular nonmonetary reward ( $p_i$ ) is significantly higher than that of another nonmonetary reward ( $p_j$ ). The test hypothesis and the research hypothesis, respectively, are:

$H_0: p_i - p_j \leq 0$  and

$H_a: p_i - p_j > 0$ ,

Where  $p_i$  is the proportion of workers preferring nonmonetary reward  $i$  and  $p_j$  is the proportion of workers preferring nonmonetary reward  $j$ .

Following Anderson (2020), if the sample sizes are large such that  $n_i p_i$ ,  $n_i(1-p_i)$ ,  $n_j p_j$ , and  $n_j(1-p_j)$  are all at least 5, the sampling distribution of the point estimator of the difference between the two proportions is approximately normal with a known standard error. Therefore, the statistical significance of workers’ preference for one nonmonetary reward over another nonmonetary reward can be tested with the standard normal distribution as follow:

$$z = \frac{[(p_i - p_j) - D_0]}{se}$$

Where  $z$  is the standard normal score and  $(p_i - p_j)$  is the point estimate of the difference between the proportion of workers preferring nonmonetary reward  $i$  and that of nonmonetary reward  $j$ ,  $D_0$  is the hypothesized difference value, and  $se$  is the standard error of the point estimate of the difference between two proportions  $(p_i - p_j)$ . Specifically,  $se = \sqrt{[(p_i(1-p_i)/n_i + p_j(1-p_j)/n_j)]}$ , where  $n_i$  is the sample size of workers from population  $i$ . If the probability value of the computed  $z$  is less than or equal to the significance level, the null hypothesis is rejected in favor of the research hypothesis, and we conclude that the proportion of workers preferring nonmonetary reward  $i$  is significantly higher than that of  $j$ .

### 4. DATA SOURCES, ANALYTICAL RESULTS, AND DISCUSSION

In this study, employee engagement was measured using an anonymous questionnaire that asked participants about their perceptions of the relevance of nonmonetary rewards to their work engagement and productivity. The nonmonetary reward elements included were:

- (1) Employees’ perception of their ideas at work being considered valuable and useful is coded as “Ideas.”
- (2) Being granted absence from the workplace, such as work at home, other than entitlement and law-mandated leaves, coded as “Authorized Absence.”
- (3) Having friends or camaraderie at work is coded as “Work Friendship.”

(4) Use of employee’s sponsored facilities, such as childcare, Healthworks (Exercise Room), tuition reimbursement, etc., is coded as “Facilities Utilization.”

(5) Other nonmonetary rewards are coded as “Other Nonmonetary Reward.”

Data were collected from the Patient Accounting Department of the hospital, which consisted of 36 employees, excluding seven team leaders. Among the 36 questionnaires administered, 30 employee surveys were completed satisfactorily, while six employee surveys were not completed or returned. Thus, the response rate was 83.3%. A summary of the completed questionnaires is as follows:

Table 1. Observed frequencies of workers’ perception of nonmonetary reward importance.

Response	Nonmonetary reward elements				
	(1) Acceptable worker’s ideas	(2) Authorized absence	(3) Work friendship	(4) Facilities utilization	(5) Other nonmonetary
Yes	24	19	24	22	19
No	6	11	6	8	11
Total	30	30	30	30	30

It should be noted that the reported data in Table 1 indicates that the observed frequencies are at least five. This observation affirms that for the nonmonetary reward elements in Table 1, the sample sizes are large such that for each nonmonetary reward element, the observed frequencies are at least 5, i.e.,  $n_i p_i$  and  $n_i (1-p_i) \geq 5$ . So, the sampling distribution of the point estimator of the difference between any two proportions of the nonmonetary rewards is pretty much normal, and the standard error is known. Consequently, the statistical significance of workers’ preference for one nonmonetary reward over another nonmonetary reward can be tested with the standard normal distribution as explained earlier under the theoretical model. Invoking the analytical procedure under the theoretical model provided earlier produced the following hypothesis testing results:

1.  $H_a: p(\text{Acceptable Ideas}) > p(\text{Authorized Absence}),$

i.e., the proportion of workers indicating recognition of their work ideas as valuable is higher than the proportion of workers indicating authorized absence as valuable.

Table 2. Paired significance test of “workers’ ideas” and “authorized absence”.

Factor proportion	Sample estimate	Std. error	z statistic	p-value	Significance
Ideas, $p_1 =$	0.8000				
Absence, $p_2 =$	0.6333				
$p_1 - p_2 =$	0.1667	0.1143	1.4576	0.0724	Yes, @ 0.10

Table 2 indicates that, as nonmonetary rewards, supervisors’ recognition of workers’ ideas at the workplace is statistically superior to authorized absences from work.

2.  $H_a: p(\text{Acceptable Ideas}) > p(\text{Other Nonmonetary Rewards}),$

i.e., the proportion of workers indicating recognition of their work ideas as valuable is higher than the proportion of workers indicating other nonmonetary rewards as valuable.

Table 3. Paired significance test of “workers’ ideas” and other nonmonetary rewards.

Factor proportion	Sample estimate	Std. error	z statistic	p-value	Significance
Ideas, $p_1 =$	0.8000				
Other, $p_2 =$	0.6333				
$p_1 - p_2 =$	0.1667	0.1143	1.4576	0.0724	Yes, @ 0.10

Table 3 indicates that the workers’ perception of supervisors’ recognition of workers’ ideas at the workplace is statistically superior to other nonmonetary rewards.

3.  $H_a: p(\text{Work Friendship}) > p(\text{Authorized Absence})$ ,

i.e., the proportion of workers indicating workplace friendship as valuable is higher than the proportion of workers indicating authorized absence from work as valuable.

Table 4. Paired significance test of “work friendship” and “authorized absence.”

Factor proportion	Sample estimate	Std. error	z statistic	p-value	Significance
Friendship, $p_1 =$	0.8000				
Absence, $p_2 =$	0.6333				
$p_1 - p_2 =$	0.1667	0.1143	1.4576	0.0724	Yes, @ 0.10

Table 4 indicates that the workers’ perception of comradery or friendship at the workplace is statistically superior to their authorized absence.

4.  $H_a: p(\text{Work Friendship}) > p(\text{Other Nonmonetary Rewards})$ ,

i.e., the proportion of workers indicating workplace friendship as valuable is higher than the proportion of workers indicating other nonmonetary rewards as valuable.

Table 5. Paired significance test of “friendship” and other nonmonetary rewards.

Factor proportion	Sample estimate	Std. error	z statistic	p-value	Significance
Friendship, $p_1 =$	0.8000				
Other, $p_2 =$	0.6333				
$p_1 - p_2 =$	0.1667	0.1143	1.4576	0.0724	Yes, @ 0.10

Table 5 indicates that the workers’ valuation of friendship at work is significantly higher than that of other nonmonetary rewards.

5.  $H_a: p(\text{Facilities Utilization}) > p(\text{Authorized Absence})$ ,

i.e., the proportion of workers indicating facility utilization as valuable is higher than the proportion of workers indicating authorized absence from the workplace as valuable.

Table 6. Paired significance test of “facilities” and “authorized absence.”

Factor proportion	Sample estimate	Std. error	z statistic	p-value	Significance
Facilities, $p_1 =$	0.7333				
Absence, $p_2 =$	0.6333				
$p_1 - p_2 =$	0.1000	0.1194	0.8374	0.2012	No

Table 6 indicates that the workers perceive that the employer’s provision of facilities such as childcare, health club membership, etc., is not significantly superior to authorized leave of absence as a nonmonetary reward.

6.  $H_a: p(\text{Facilities Utilization}) > p(\text{Other Nonmonetary Rewards})$ ,

i.e., the proportion of workers indicating facility utilization as valuable is higher than the proportion of workers indicating other nonmonetary rewards as valuable.

Table 7 indicates that the workers’ valuation of facilities at the workplace is not significantly higher than that of other nonmonetary rewards.

Table 7. Paired significance test of "facilities" and other nonmonetary rewards.

Factor proportion	Sample estimate	Std. error	z statistic	p-value	Significance
Facilities, $p_1 =$	0.7333				
Other, $p_2 =$	0.6333				
$p_1 - p_2 =$	0.1000	0.1194	0.8374	0.2012	No

The data analyzed contained five nonmonetary rewards that resulted in 10 possible pairs of nonmonetary rewards. Among the 10 possible paired nonmonetary rewards, plausible differences appeared in six (6) pairs, while discernible differences were not observed in four paired nonmonetary rewards. Each of the six paired nonmonetary rewards with plausible differences was tested for a significant difference. Based on the analytical tests of the six paired nonmonetary rewards with plausible differences, it was found that:

1.  $H_a: p(\text{Acceptable Ideas}) > p(\text{Authorized Absence})$ , i.e., the proportion of workers indicating supervisors' recognition of their good ideas as valuable is higher than the proportion of workers indicating authorized absence as valuable.
2.  $H_a: p(\text{Acceptable Ideas}) > p(\text{Other Nonmonetary Rewards})$ , i.e., the proportion of workers indicating supervisors' recognition of their good ideas as valuable is higher than the proportion of workers indicating other nonmonetary rewards as valuable.
3.  $H_a: p(\text{Work Friendship}) > p(\text{Authorized Absence})$ , i.e., the proportion of workers indicating workplace friendship as valuable is higher than the proportion of workers indicating authorized absence from work as valuable.
4.  $H_a: p(\text{Work Friendship}) > p(\text{Other Nonmonetary Rewards})$ , i.e., the proportion of workers indicating workplace friendship as valuable is higher than the proportion of workers indicating other nonmonetary rewards as valuable.

Out of the six pairings that were evaluated, the statistical analysis revealed that the preferences of the employees for non-monetary benefits were statistically significant only in the four pairwise comparisons mentioned above. Between employees' assessments of facility use and authorized time off and their assessments of facility use and other non-cash benefits, no discernible variations were found. More crucially, only two of the five non-cash prizes that were offered to employees were thought to be the best for boosting productivity and motivation.

The analytical results suggested that workers identified supervisors' recognition of their good ideas and workplace collegiality among coworkers as the most important nonmonetary rewards to motivate their work productivity. The statistical analysis indicated that the proportion of workers indicating recognition of their work ideas as valuable was significantly higher than the proportion of workers indicating authorized absence from the workplace or other nonmonetary rewards as valuable. Hence, one could infer that the workers' perception was that the supervisor's recognition of their ideas at work was more valuable to them than granting them permission to be away from work or other nonmonetary rewards. This might be attributed to the possibility that workers in a small or medium-sized workplace view commendations or other forms of recognizing their opinions and ideas at work as important because such recognition from supervisors could set them apart from their peers for promotion and leadership positions in the future.

Likewise, the statistical analysis indicated that the workers considered having good camaraderie or professional friendship at the workplace more important than authorized absence from the workplace or other nonmonetary rewards. It seems that this might be the case for small or medium-sized organizations where workers value close-knit work relationships as an assurance of backing one another and being progressive in the workplace. Workers who have dependable relationships at work not only enjoy the synergy of working together but also the perceived benefits of collegiality and increased productivity in a collaborative group environment. The preference of the employees for using the facilities rather than taking approved time off or receiving other non-monetary advantages in this instance was not statistically significant. This might be the case because the employer sponsored workplace amenities were available for individual employees to use at their discretion, which meant that benefits like health clubs, child care,



tuition reimbursement, etc, were not as significant to the employees as things like approved time off, praise from managers for original ideas, or other non-cash incentives. Put another way, the presence of near substitutes for the sponsored facilities could make them less useful to the employees than non-monetary advantages like supervisors recognizing their ideas, even if there aren't any close equivalents.

## 5. CONCLUSIONS AND STUDY LIMITATIONS

This study investigates the statistical relevance of some nonmonetary rewards in a medium-sized workplace in southwest Georgia, USA. Altogether, this study indicates that workers consider the supervisors' recognition of their good ideas at the workplace and workplace camaraderie as the most valuable nonmonetary rewards. While organizations provide nonmonetary rewards to motivate workers and increase productivity, these organizations do not always know the most beneficial nonmonetary rewards to provide for their organizational goals. A good way of minimizing this problem is to continuously determine the employees' perspectives on the nonmonetary rewards being provided in relation to workers' productivity. By so doing, organizational investment in nonmonetary rewards will be more targeted, effective, and cost-efficient.

Considering the two nonmonetary rewards that employees consider most valuable, we conclude that to motivate workers' productivity, supervisors in small or medium-sized organizations should endeavor to implicitly and explicitly recognize workers who have the disposition for good ideas at the workplace. Such workers could be recognized at formal and informal gatherings and be promoted as potential future leaders of the organizations they serve. This is a cheap means of increasing workers' commitment to the organization and productivity. Also, such low-cost actions could be a cheap and effective strategy for investing in the future leadership of the organization. Workers in small or medium-sized organizations tend to be more sensitive to their work environment and the opinions of others around them. In such a close-knit environment, workers who are recognized for their good ideas have a great sense of accomplishment and are motivated to support organizational goals. In the same vein, equally important is having good camaraderie among coworkers who are dependable and supportive. Thus, enabling workers' development or forging excellent workplace camaraderie might be useful in increasing workers' productivity in group settings. Such good relationships among workers could provide good synergy among workers in a united effort to achieve the overarching goal of the organization.

Employers should bear in mind that not all monetary rewards are useful, and it must be understood that the relevance of nonmonetary rewards changes over time as the labor pool in the labor market changes. While essential nonmonetary rewards should be considered for motivating workers' productivity, it should be noted that the value of nonmonetary rewards to employees differs with employees' demographic status, such as gender, educational level, income level, position at work, etc. More importantly, employers should endeavour to provide nonmonetary rewards that have no close substitutes or that workers cannot readily provide by themselves, because such nonmonetary rewards tend to motivate workers' engagement and productivity. Business organizations differ in size and complexity, and what works in one situation might not work in other situations. It is important for organizations to have a clear understanding of their situations and determine appropriate nonmonetary rewards that might serve them best.

This study provides managers with empirical and valuable information regarding nonmonetary incentives and reward programs. In particular, it provides an empirically validated means of evaluating workers' perceptions of nonmonetary rewards. Managers could then appropriately target their investments in pertinent nonmonetary rewards that are valuable to their employees' productivity and the organizational goal. As previously stated, organizations vary in size and complexity. Hence, the results of this study are limited by the nature and size of the organization studied. Also, the size of the participants on the questionnaire is a major limitation. We recommend that future studies include more participants and more departments in the organization for a wider application of the results and more reliable statistical estimates.

**Funding:** This study received no specific financial support. The APC was funded by Albany State University's, USA.

**Institutional Review Board Statement:** The Ethical Committee of Albany State University's, USA has granted approval for this study.

**Transparency:** The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

**Data Availability Statement:** The corresponding author can provide the supporting data of this study upon a reasonable request.

**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

## REFERENCES

- Anderson, D. R. (2020). *Essentials of statistics for business and economics* (9th ed.). Boston, MA USA: Cengage.
- Breza, E., Kaur, S., & Shamdasani, Y. (2018). The morale effects of pay inequality. *The Quarterly Journal of Economics*, 133(2), 611-663. <https://doi.org/10.1093/qje/qjx041>
- Byrnes, O. (2014). *An investigation into employee engagement in the hotel sector in the West of Ireland*. Diss. Dublin, National College of Ireland.
- Carr, J. (1995). Using leadership criteria to measure and reward performance. *Physician Executive*, 21(8), 22-25.
- Cassar, L., & Meier, S. (2018). Nonmonetary incentives and the implications of work as a source of meaning. *The Journal of Economic Perspectives*, 32(3), 215-238. <https://doi.org/10.1257/jep.32.3.215>
- Deserranno, E. (2019). Financial incentives as signals: Experimental evidence from the recruitment of village promoters in Uganda. *American Economic Journal: Applied Economics*, 11(1), 277-317. <https://doi.org/10.1257/app.20170670>
- Eisenberger, R., Malone, G. P., & Presson, W. D. (2016). Optimizing perceived organizational support to enhance employee engagement. *Society for Human Resource Management and Society for Industrial and Organizational Psychology*, 2(2016), 3-22.
- Gallus, J. (2017). Fostering public good contributions with symbolic awards: A large-scale natural field experiment at wikipedia. *Management Science*, 63(12), 3999-4015. <https://doi.org/10.1287/mnsc.2016.2540>
- Gupta, S., Chen, W., Dawande, M., & Janakiraman, G. (2023). Three years, two papers, one course off: Optimal nonmonetary reward policies. *Management Science*, 69(5), 2852-2869. <https://doi.org/10.1287/mnsc.2022.4482>
- Harter, J. (2021). *The relationship between engagement at work and organizational outcomes*. Retrieved from <https://www.gallup.com/workplace/321725/gallup-q12-meta-analysis-report.aspx?thank-you-report-form=1#ite-321731>
- Jensen, D., McMullen, T., & Stark, M. (2007). *The manager's guide to rewards what you need to know to get the best for --and from--your employees*. New York: American Management Association.
- Joshi, P. (2016). *Relational rewards: Creating a fulfilling workplace environment*. Retrieved from [https://www.ijemr.net/DOC/RelationalRewardsCreatingAFulfillingWorkplaceEnvironment\(1-5\).pdf](https://www.ijemr.net/DOC/RelationalRewardsCreatingAFulfillingWorkplaceEnvironment(1-5).pdf)
- Kalogiannidis, S. (2020). *Impact of effective business communication on employee performance*. Retrieved from [https://www.academia.edu/44956826/Impact\\_of\\_effective\\_business\\_communication\\_on\\_employee\\_performance631\\_Article\\_Text](https://www.academia.edu/44956826/Impact_of_effective_business_communication_on_employee_performance631_Article_Text)
- Karamanis, K., Arnis, N., & Pappa, P. (2019). Impact of working environment on job satisfaction: Evidence from Greek public sector. *Theoretical and Empirical Researches in Urban Management*, 14(3), 5-21.
- Khan, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724. <https://doi.org/10.5465/256287>
- Kirkegaard, R. (2020). Contracting with private rewards. *The RAND Journal of Economics*, 51(2), 589-612. <https://doi.org/10.1111/1756-2171.12326>
- Lazear, E. P. (2018). Compensation and incentives in the workplace. *The Journal of Economic Perspectives* 32(3), 195-214. <https://doi.org/10.1257/jep.32.3.195>

- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Target articles: "Emotional intelligence: Theory, findings, and implications". *Psychological Inquiry*, 15(3), 197-215. [https://doi.org/10.1207/s15327965pli1503\\_02](https://doi.org/10.1207/s15327965pli1503_02)
- Nunes, J. C., & Park, C. W. (2003). Incommensurate resources: Not just more of the same. *Journal of Marketing Research*, 40(1), 26-38. <https://doi.org/10.1509/jmkr.40.1.26.19131>
- Oswald, A. J., Eugenio, P., & Daniel, S. (2015). Happiness and productivity. *Journal of Labor Economics*, 33(4), 789-822.
- Pirvu, C. (2020). Emotional intelligence – a catalyst for sustainability in modern business. *Theoretical and Empirical Researches in Urban Management*, 15(4), 60-69
- Sabie, O. M., Briscariu, R. M., Pirvu, C., Burcea, S. G., & Gatan, M. L. (2020). The relationship between emotional intelligence and human resources employee performance: A case study for Romanian's companies. *Management Research and Practice*, 12(3), 45-59.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315. <https://doi.org/10.1002/job.248>
- Singh, P., & Loncar, N. (2010). Pay satisfaction, job satisfaction, and turnover intent. *Industrial Relations*, 65(3), 470-490. <https://doi.org/10.7202/044892ar>
- Society of Human Resources Management. (2017). *Developing and sustaining employee engagement*. Retrieved from <https://shrm.org/ResourcesAndTools/tools-and-samples/toolkits/Pages/sustainingemployeeengagement.aspx>
- Sureephong, P., Dahlan, W., Chernbumroong, S., & Tongpaeng, Y. (2020). The effect of non-monetary rewards on employee performance in massive open online courses. *International Journal of Emerging Technologies in Learning*, 15(1), 88-102.
- Thaler, R. H. (1999). Mental accounting matters. *Journal of Behavioral Decision Making*, 12(3), 183-206.
- Towers, W. (2012). *Global workforce study - employee engagement*. Retrieved from <https://employeeengagement.com/wp-content/uploads/2012/11/2012-Towers-Watson-Global-Workforce-Study.pdf>
- Viswanathan, M., Li, X., John, G., & Narasimhan, O. (2018). Is cash king for sales compensation plans? Evidence from a large-scale field intervention. *Journal of Marketing Research*, 55(3), 368-381. <https://doi.org/10.1509/jmr.14.0290>
- Weibel, A., Rost, K., & Osterloh, M. (2010). Pay for performance in the public sector—benefits and (Hidden) costs. *Journal of Public Administration Research and Theory*, 20(2), 387-412. <https://doi.org/10.1093/jopart/mup009>

*Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Public Policy and Administration Research shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.*