Edelweiss Applied Science and Technology

ISSN: 2576-8484 Vol. 9, No. 5, 29-42 2025 Publisher: Learning Gate DOI: 10.55214/25768484.v9i5.6772 © 2025 by the authors; licensee Learning Gate

Herzberg's theory and job satisfaction: A study of industrial SMEs in Morocco

Faiçal Abou Moudriq^{1*}, DJalila AIT SOUDANE²

¹Laboratoire d'Etudes et de Recherche en Sciences de Gestion FSJES AGDAL RABAT, Morocco; faicalaboumoudriq@gmail.com (F.A.M.).

Abstract: Employee job satisfaction is a significant factor in corporate performance and competitiveness today. This article examines the applicability of Herzberg's theory and what motivates employees in Moroccan industrial companies and their level of job satisfaction, using "hygiene" and "motivation" factors. To this end, the study was conducted on a sample of 200 employees divided into two socioprofessional categories: administrative staff and blue-collar workers from three Moroccan industrial companies. Based on a multiple linear regression of responses collected via a live questionnaire, the analysis confirmed the applicability of Herzberg's theory. It showed that the factors determining job satisfaction among administrative staff differ from those of blue-collar workers. For blue-collar workers, salary and job security strongly impact job satisfaction, whereas for administrative staff, job satisfaction is determined more by job satisfaction and career development.

Keywords: Herzberg's hygiene, Job satisfaction, Motivation factors.

1. Introduction

People are an organization's most important asset and constitute a competitive advantage [1]. In addition, employee satisfaction has become a significant topic of interest for many researchers and theorists, who insist that employee satisfaction, particularly regarding quality, working conditions, and working relationships, is essential in promoting innovation in companies. Thus, employer behavior has evolved, directly affecting management methods and forming new organizational cultures focused on human resources.

However, this does not always seem to be the case in practice. In some companies, particularly in developing countries like Morocco, the human dimension and creative capacity are often underestimated. The result is a lack of motivation at work, which directly impacts their lives inside and outside the company. In the Moroccan context, employers generally demand better employee results but do not always bother to improve their working conditions. As a result, many young Moroccans emigrate abroad. Poor working conditions and lack of motivation are reasons for this talent drain. Hence, there is a need to create a relevant appraisal system capable of acting as a catalyst in this respect. This should make it possible to create synergies conducive to business development. Today's employees, especially those highly skilled, are no longer content with the conditions imposed on them but are looking for what they consider the best for their lives. Aware of this reality, Morocco is initiating a debate on balancing performance and employee motivation, as evidenced in particular by social dialogue with its remuneration and pension aspects, as well as legislation on the right to strike. Indeed, a pleasant working climate increases job satisfaction, which is a motivating factor in ensuring performance. However, for such measures to have a positive impact on employee job satisfaction, companies must, in turn, strive to understand the psychological and social characteristics of their staff

²Professor (PES) of Economics and Management, Mohammed V University of Rabat, Morocco.

and identify their intrinsic and extrinsic needs to put in place the best programs to satisfy them, thus meeting both organizational and individual objectives.

The employees who are not sufficiently motivated to be productive can react in several ways [2]:

- Make nasty comments about their company;
- Leaving the company;
- Develop interests outside work;
- Lose interest to the point of losing their skills.

To remedy this situation, a company's management needs to formulate sound, flexible policies, put in place a suitable organization to apply these policies over a long period, motivate and encourage individuals to give their best and adopt attitudes that make employees want to work well for the Company. No matter how good, employees will only be effective if motivated [3]. This article aims to verify the applicability of Herzberg's theory and to explore what motivates administrative staff and workers in three Moroccan industrial SMEs and affects their job satisfaction using Herzberg's two-factor theory of hygiene and motivation. By revealing the concrete drivers of job satisfaction, this research can help to enlighten managers of Moroccan industrial SMEs about the true motivations of staff categories and encourage them to set up their system for consolidating such motivations. The question of job satisfaction at the company level has been assessed in the light of Herzberg's model, which distinguishes two criteria that generate satisfaction in an employee: the first is physiological, also known as hygiene, and the second is psychological or motor. This study aims to verify the applicability of Herzberg's theory for measuring job satisfaction in Moroccan SMEs and to identify the motivational and hygienic factors that significantly influence job satisfaction.

1.1. Theoretical Underpinnings of Job Satisfaction and Motivation

Motivation is derived from the Latin word "movere," meaning "to move." An internal force, dependent on an individual's needs, drives them to achieve [4].

Supervisors must be aware of needs and motivations to understand employee behavior [4]. Intrinsic motivation is crucial to employees' affective commitment, especially during organizational change [5]. Meeting employees' needs through capacity-building programs enhances productivity and helps achieve organizational goals [6]. Motivation and transformational leadership are critical factors in boosting employee performance and productivity [7]. Job satisfaction mediates the relationship between organizational climate and employee performance, as shown by studies based on Herzberg's two-factor theory [8]. Strategies for employee retention have proven essential in improving job satisfaction, particularly in local authorities [9]. Colleague support and job security are significant determinants of employee performance, emphasizing the role of hygiene factors [10]. Job satisfaction, an emotional state influenced by job and work environment features, has important implications for individuals' lives, including their physical, mental, and social health [11]. Job satisfaction is closely related to life satisfaction, with a positive correlation between the two [12]. It also impacts absenteeism, complaints, and conflicts, making satisfied workers more productive and less likely to leave the organization [13]. Satisfied employees perform better and enhance customer satisfaction, contributing to a positive work environment [14]. Herzberg's theory posits that employees satisfied with motivational and hygienic factors are likely to perform better, a concept supported by recent studies [15]. However, some research suggests that Herzberg's findings may only be valid within the context of his original methodology [16]. In modern organizations, employee motivation is crucial for success, necessitating continual monitoring of job satisfaction [17]. There is a strong correlation between satisfaction and motivation, with some researchers identifying them as interdependent concepts [18]. Satisfaction can be seen as an indicator of motivation, reflecting its effectiveness or lack thereof [19].

2- Motivation and satisfaction are both cause and effect and reinforce each other. Motivation is a cause, and satisfaction is an end state. The satisfaction obtained by the individual is likely to motivate him or her to continue the activity and thus obtain new satisfactions.

3- Motivation and satisfaction are linked to business performance, which can influence positively or negatively.

The elements of proximity between motivation and satisfaction are as follows:

- Both aspects are based on the same theories;
- Both attempt to explain performance;
- Both have given rise to several management approaches to increase satisfaction or motivation.

Since the initial classifications of motivation theories, a distinction has been made between content and process theories. Although this distinction was helpful, it quickly became too limited to encompass all the emerging theories [20]. Consequently, a new classification was developed, incorporating the latest advances and based on three paradigms: needs-motives-values, cognitive choice, and self-regulation-metacognition. Psychologists and managers were divided for a long time based on their adherence to one or another of these theoretical currents [21]. However, beyond the controversies, the main theories have significantly contributed to understanding a critical subject for society and businesses [22]. A thorough analysis of these theories helps to appreciate their limitations [23]. Among the many theories addressing motivation, the one focusing on hygiene and motivation factors stands out. This approach, derived from a study conducted with two hundred engineers and accountants Marsudi, et al. [24] concludes that humans have two fundamental needs: lower-level needs to avoid pain and deprivation and higher-level needs for psychological development. Factors related to job content and intrinsic aspects of the work contribute most to satisfaction, while dissatisfaction primarily stems from the work environment and salary [25].

1.1.1. Job satisfaction factors, according to Herzberg

Herzberg identifies two significant groups of factors that are at the root of job satisfaction and dissatisfaction, namely "motivational factors" and "hygiene factors" (see Table 1 below). The former concerns aspects related to the intrinsic content of the job and, thus, its ability to contribute to employees' personal and psychological development. Conversely, the latter relates to general working conditions that are likely to generate dissatisfaction in the worker.

Table 1.Job satisfaction factors

Hygiene factors	Motivation factors
Company policy	Accomplishments at work
Relations with superiors	Recognition
Peer relations	• The work itself
• Salary	Professional career
General working conditions	Personal development
Job security	

Source: Herzberg [14].

Herzberg's two-factor theory, therefore, proposes two meaningful relationships between hygiene factors, motivational factors, and job satisfaction, namely:

- when motivational needs are met, the worker will be satisfied;
- when these needs are not met, the worker will not be satisfied;
- as long as hygienic needs are met, the worker will be satisfied;
- Until these needs are met, the worker will be dissatisfied.

Hygiene factors do not promote job satisfaction but primarily prevent job dissatisfaction, similar to how good hygiene does not create good health, but a lack of hygiene leads to illness [26]. These factors are often called dissatisfaction or maintenance factors because their absence or inadequacy results in job dissatisfaction [27]. Certain factors are not true motivators, as they require ongoing reinforcement and

are increasingly perceived as entitlements rather than incentives for greater satisfaction and achievement [28]. Motivating factors, also known as growth factors, pertain to what a person does at work rather than the context in which the work is done [29]. It is possible to experience both satisfaction and dissatisfaction simultaneously; for instance, an individual might be satisfied with having an exciting and challenging job (motivational factor) but dissatisfied due to uncertainty about job stability (hygiene factor) \[\] 30\[\]. Motivation and Hygiene factors do not promote job satisfaction but primarily prevent job dissatisfaction, just as good hygiene does not produce good health. Still, poor hygiene causes disease [31]. Also calls them dissatisfaction or maintenance factors since their absence or inadequacy causes job dissatisfaction [32]. Some factors are not real motivators, as they require continuous reinforcement. According to Herzberg [9] they are increasingly seen as entitlements rather than incentives for greater satisfaction and achievement [33]. Motivating factors, also known as growth factors, relate to what a person does at work rather than the context in which he or she does it. These two aspects indicate that it is possible to experience both satisfaction and dissatisfaction; for example, an individual can be satisfied because the need to have an exciting and challenging job is fulfilled (motivational factor) and, at the same time, be dissatisfied because of uncertainty about the stability of the job itself (hygiene factor) [34]. Herzberg explains that the two sets of factors (motivation and hygiene) are distinct as they respond to different needs. However, they are not opposites and can coexist despite the historical importance of this theory, it remains one of the most controversial in management research]. Herzberg challenged some of the classic assumptions about what satisfies and motivates employees. For example, he argues that salary contributes little to satisfaction and that psychological needs and interpersonal relationships play a crucial role in dissatisfaction rather than satisfaction [35]. Although managers in various sectors have widely adopted Herzberg's theory, it has attracted academic criticism regarding its methodology and how it interprets certain concepts. For example, some researchers consider the research method biased and unique, pointing to inconsistent use of terms in applying the theory [36]. Nevertheless, Herzberg's theory remains relevant and adaptable to modern work situations, particularly when distinguishing between intrinsic motivators and hygiene factors, preventing work dissatisfaction. Its main contribution is using job satisfaction concepts to understand employees' motivational dynamics [37]. The distinction between these two factors justifies the choice of this theory in many management studies. According to Herzberg, the satisfaction of hygiene factors prevents employees from being dissatisfied, while motivational factors play a positive role in satisfaction and the incentive to perform better [38]. The theory is based on the use of job satisfaction to create motivation. Herzberg [9] theory also showed that individuals can experience "non-dissatisfying" situations, where, even if not all needs are met, the employee does not feel negatively about his or her work situation. This distinction between motivational and hygienic factors justifies the theory's continued adoption in various work environments, whether in the public or private sector. More than 45 years later, despite repeated claims that Herzberg's theory is obsolete, recent research in positive psychology continues to show great consistency with its fundamental principles [39]. Positive psychology, which focuses on well-being, optimism, creativity, and resilience, aligns with Herzberg's theories of intrinsic motivation and hygiene [37, 39]. Positive psychology aims to foster the optimal fulfillment and well-being of individuals and groups, a goal close to Herzberg's theory regarding the importance of intrinsic motivators, such as achievement, recognition, and personal growth. Modern research also supports that hygiene factors primarily influence dissatisfaction, while motivational factors are crucial for long-term satisfaction and motivation [32].

1.1.2. Job Satisfaction and Job Performance

This cursory historical overview has helped us understand the evolution of employee motivation, satisfaction concepts, and companies' role in this respect. Employee satisfaction and motivation are not just a question of pay but also an environment offering a good quality of working life, combined with good human resources management. Job satisfaction is one of today's most complex areas when managing employees. Numerous studies have shown that the level of satisfaction impacts productivity

and, therefore, corporate performance. (Examples from Facebook, Google...). In terms of performance, it is clear that there is a reciprocal relationship between motivation and performance. When there is harmony between individual expectations and organizational requirements, there is also a chance of achieving performance at work. Otherwise, performance is more difficult to achieve and maintain. According to Joseph [40] and Nyuhuan [41] job performance is defined as the activity demonstrated by an employee in their tasks and is influenced by work motivation and discipline. Work performance, therefore, represents the level of accomplishment an employee achieves based on his or her efforts. When employees are motivated to achieve their professional goals, their level of job satisfaction increases, directly affecting company performance [42, 43]. Furthermore, employees' productivity and work efficiency depend to a large extent on their job satisfaction. Consequently, companies need to identify the factors affecting employee job satisfaction and strive to improve them. The relationship between motivation, satisfaction, and performance is still the subject of much controversy.

There are alternative viewpoints:

- satisfaction generates motivation;
- motivation generates satisfaction;
- satisfaction generates performance;
- performance generates satisfaction;
- motivation generates performance.

According to the human relations approach, interest in employees' needs, i.e., the attention they receive and the concern they are shown, constitutes valuable leadership. Such a management style is not supported on strictly humanitarian grounds, but it is generally indicated that it will benefit the organization by increasing employee productivity [44].

1.2. Theoretical Model

In the context of this article, we feel that the theory of motivation and hygiene is still helpful and can serve as an organizational framework for research into satisfaction and intrinsic and extrinsic motivation. This theory can help human resources professionals and managers to propose and evaluate satisfaction and motivation programs. For such considerations, Herzberg's model was chosen in this study to assess the issue of satisfaction at the corporate level. Based on Herzberg's model, our hypotheses are as follows.

H. Company policy influences job satisfaction;

H₂: Relationships with superiors influence job satisfaction;

 H_{s} : Peer relations influence job satisfaction;

*H*₄. Salary influences job satisfaction;

H₅ General working conditions influence job satisfaction;

 H_{α} Job security influences job satisfaction;

H₇. Job fulfillment influences job satisfaction;

H₈ Recognition influences job satisfaction;

H₉. Work itself influences job satisfaction;

 H_{10} Career influences job satisfaction;

 H_{11} : Personal development influences job satisfaction.

2. Empirical Analysis of Job Satisfaction Factors

It should be remembered that this analysis aims to verify the applicability of Herzberg's theory and explore what motivates administrative staff and workers in Moroccan industrial SMEs and affects their job satisfaction. By revealing the concrete factors of job satisfaction, the present analysis can help enlighten Moroccan industrial SME managers on the true motivations of staff categories and encourage them to set up their system for consolidating such motivations.

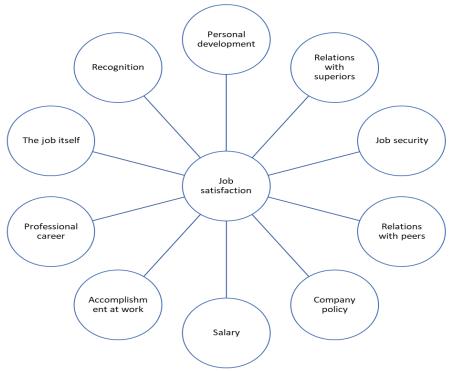


Figure 1. Representation of our study hypotheses.

3. Methodology

The reasoning adopted is hypothetico-deductive. It aims to verify the applicability of Herzberg's theory for measuring job satisfaction in Moroccan industrial SMEs and identify the motivational and hygiene factors that significantly influence job satisfaction. The sample was selected using the convenience sampling method for practical reasons of accessibility and cost. It comprises 200 participants divided between administrative staff and workers from three Moroccan industrial SMEs. Nonetheless, the sample size was deemed sufficient to allow statistical inferences to be made, the analysis of which was carried out using SPSS version 26 software. Respondents were interviewed using a 37-item face-to-face questionnaire (cf. appendix). Respondents' consent was sought and obtained for ethical reasons before the questionnaire's content was developed. Responses were rated on a five-point Likert scale, ranging from 1 for "strongly agree," 2 for "agree," 3 for "neutral," 4 for "disagree," and 5 for "strongly disagree." The questionnaire items concerning the determinants of job satisfaction were inspired by the studies of several authors, notably [45, 46]. The results obtained regarding job satisfaction were measured using four items inspired by Klassen, et al. [47]. As several items represented each job satisfaction factor, a reliability analysis was carried out to ensure that the items making up each factor reflected the same concept. Each set of items was then grouped into a single dimension (factor) using principal component analysis (PCA). A correlation analysis was performed between job satisfaction and the hygiene and motivation factors developed by Herzberg. Finally, logistic regression analysis was performed to test the influence of Herzberg's motivation-hygiene factors on job satisfaction

3.1. Sample

Our study sample comprised 200 employees, divided between administrative staff and workers from three Moroccan industrial SMEs. The analysis was carried out using SPSS version 26 software.

Table 2. Characteristics of respondents to the questionnaire.

Respondent profile	Number of employees	Percentage	
Gender			
Men	146	73%	
Woman	54	27%	
Age			
18-25 years	26	13%	
26-35 years	94	47%	
36-45 years	54	27%	
45 and over	26	13%	
Years of experience			
Less than one year	40	20%	
1-4 years	26	13%	
4-7 years	80	40%	
Over seven years	54	27%	

Table 2 reveals that the majority of respondents are men (73%), with a predominance in the 26 to 35 age bracket (47%) and 4 to 7 years experience (40%). Young employees under 25 account for 13%, while older workers (45 and over) and those with less than a year's experience are less numerous. These results indicate a predominantly male and experienced workforce in Moroccan industrial SMEs, with notable stability in employees' careers and a potential need to attract more women and young talent.

3.2. Presentation Of Results

After presenting details of the respondents' demographic profile, this section reveals the factors influencing job satisfaction among employees of three Moroccan industrial SMEs.

The questionnaire's content was first subjected to a reliability test to validate its internal consistency. Next, a correlation between the various satisfaction factors was conducted before concluding with a linear regression analysis. The data obtained were entered into SPSS version 26 software. Data reliability was tested using Cronbach's Alpha coefficients. The results revealed that all motivation and hygiene factors were positively correlated with job satisfaction. However, linear regression analysis showed that for all respondents, only job security, salary, and career significantly affected job satisfaction, with the other factors having a negligible effect. Such conclusions seem logical in a country where unemployment is rife, salaries are low, and career development is a significant concern.

3.3. Questionnaire Reliability

The questionnaire's internal consistency validation results are satisfactory overall, with Cronbach's alpha coefficients above 0.7 Likert [48] as shown in Table 3 below. This confirms that the items making up each factor measure the same concept.

Table 3. Reliability test using Cronbach's alpha coefficient.

Job satisfaction factors	Number of items	Cronbach's Alpha
Accomplishment at work (AAT)	3	0.71
Professional career (CAR)	2	0.89
work itself (TLM)	3	0.73
Recognition (REC)	5	0.67
Personal development (DVP)	3	0.78
Corporate policy (PLE)	3	0.73
Peer relations (RAP)	3	0.73
Job security (SDE)	3	0.72
Relations with superiors (RAS)	4	0.66
Salary (SAL)	5	0.65
General working conditions (CGT)	4	0.85
Job satisfaction (SAT)	4	0.73

Table 4. Restatement of variables with items <0.7

Job satisfaction factors	Number of items	Cronbach's Alpha		
Recognition (REC)	Four instead of 5	0.72		
Relations with superiors (RAS)	Three instead of 4	0.82		
Salary (SAL)	Three instead of 5	0.75		

3.4. Correlation between Satisfaction Factors

A principal component analysis (PCA), which groups the elements of each factor into a single dimension, supported the search for correlations between the various satisfaction factors.

The correlation between the various dimensions constructed is shown in the table below. It shows that job satisfaction (SAT) is significantly positively correlated with the various factors (r > 0.7 (AAT), professional career (CAR), work itself (TLM), recognition (REC), personal development (DVP), company policy (PLE), relationship with peers (RAP), job security (SDE), relationship with superiors (RAS), salary (SAL), and general working conditions (CGT).

Table 5. Correlation matrix between satisfaction factors.

	AAT	CAR	TLM	REC	DVP	PLE	RAP	SDE	CLEAR	SAL	CGT	SAT
AAT	1											
CAR	0.849**											
TLM	0.904**											
REC	0.855**											
DVP	0.840**	0.870**	0.866**	0.849**	1							
PLE	0.856**	0.856**	0.884**	0.867**	0.853**							
RAP	0.894**	0.860**	0.894**	0.863**	0.862**	0.825**	1					
SDE	0.852**	0.872**	0.897**	0.868**	0.855**	0.846**	0.882**	1				
CLER	0.859**	0.870**	0.860**	0.845**	0.846**	0.805**	0.885**	0.862**	1			
SAL	0.686**	0.765**	0.780**	0.763**	0.729**	0.750**	0.709**	0.721**	0.693**	1		
CGT	0.827**	0.764**	0.789**	0.794**	0.755**	0.769**	0.768**	0.784**	0.814**	0.663**	1	
SAT	0.839**	0.894**	0.897**	0.856**	0.829**	0.849**	0.847**	0.897**	0.862**	0.813**	0.788**	1

Note: ** signifiaction au niveau 1% (99% confidence.

3.5. Linear Regression Linking Independent Variables to Job Satisfaction

A multiple linear regression was set up to determine the mutual relationship between the various motivation and hygiene factors and job satisfaction.

However, to deal with the problem of multi-colinearity, the Variance Inflation Indicator(VIF) was calculated. All explanatory variables with a VIF greater than ten were removed from the analysis as the other factors could explain them. The table below suggests that the motivation and hygiene factors can explain 87% (Adjusted R2) of job satisfaction. The F statistic of 52.9 indicates that the model is globally significant. ($p_value = .00$) indicates that the model is globally significant. The table below shows that only career, job security, and salary variables significantly contribute to job satisfaction (B>0).

Table 6.

Linear regression (dependent variable: job satisfaction).

	В	Standard error	Beta	t	Sig.	VIF
(Constant)	1.15E-16	0.041		0.000	1.000	
Accomplishment at work (AAT)	0.043	0.114	0.043	0.374	0.709	7.695
Professional career (CAR)	0.247	0.111	0.247	2.224	0.030	7.312
Recognition (REC)	-0.023	0.108	-0.023	-0.216	0.830	6.878
Personal development (DVP)	-0.101	0.101	-0.101	-1.000	0.321	6.033
Corporate policy (PLE)	0.078	0.102	0.078	0.771	0.444	6.140
Peer relations (RAP)	-0.037	0.119	-0.037	-0.314	0.754	8.384
Job security (SDE)	0.359	0.107	0.359	3.352	0.001	6.805
Relations with superiors (RAS)	0.169	0.109	0.169	1.559	0.124	7.002
Salary (SAL)	0.251	0.069	0.251	3.641	0.001	2.811
General working conditions (CGT)	0.041	0.081	0.041	0.505	0.615	3.925
R2	0.89					
F	52.9					
Adjusted R2	0.875		•			

3.6. Linear Regression Linking Independent Variables to Job Satisfaction for Administrative Staff

The table below shows linear regression models for job satisfaction among administrative staff. It can be seen that the regression model is globally significant (F = 44.18. P - value = 00). On the other hand, we note that the variables that significantly and positively influence job satisfaction for administrative staff are safety at work and working conditions.

Table 7.Linear regression for administrative staff (dependent variable: job satisfaction)

Standard error Beta VIF В t sig -1.673 (Constant) -0.118 0.070 0.107 0.303 Personal development (DVP) 0.156 1.053 5.793 0.1650.162 0.057Peer relations (RAP) 0.1920.0570.2990.768 8.848 Job security (SDE) 0.3740.1580.389 2.3720.026 6.610 0.100 Salary (SAL) 0.1200.092 0.828 0.415 3.054 General working conditions (CGT) 0.304 0.1530.310 1.985 0.058 6.010 R2 0.890 F 44.18Adjusted R2 0.870

3.7. Linear Regression Linking Dependent Variables to Job Satisfaction for Blue-CollarWorkers

The table below presents linear regression models of job satisfaction for blue-collar workers. It should be noted that their job satisfaction is significantly influenced by job safety and salary.

 $Vol.\ 9,\ No.\ 5:\ 29\text{-}42,\ 2025$

 $\pmb{DOI:}\ 10.55214/25768484.v9 i 5.6772$

© 2025 by the authors; licensee Learning Gate

Table 8.Linear regression for blue-collar workers (dependent variable: job satisfaction).

	В	Standard error	Beta	t	Sig.	VIF
(Constant)	0.069	0.059		1.177	0.247	
Professional career (CAR)	0.156	0.150	0.153	1.040	0.306	7.591
Personal development (DVP)	-0.176	0.134	-0.177	-1.317	0.197	6.32
Corporate policy (PLE)	-0.004	0.120	-0.004	-0.036	0.972	4.538
Job security (SDE)	0.467	0.142	0.449	3.282	0.002	6.571
Relations with superiors (RAS)	0.188	0.134	0.190	1.397	0.172	6.515
Salary (SAL)	0.320	0.085	0.335	3.762	0.001	2.782
General working conditions (CGT)	-0.048	0.099	-0.047	-0.484	0.632	3.333
Accomplishment at work (AAT)	0.026	0.142	0.023	0.182	0.857	5.656
Recognition (REC)	0.134	0.138	0.123	0.970	0.339	5.679
Peer relations (RAP)	-0.015	0.154	-0.014	-0.097	0.924	7.759
R2	0.900					
F	31.87					
Adjusted R2	0.870					

4. Discussion

The data obtained were entered into SPSS version 26 software. Data reliability was tested using Cronbach's Alpha coefficients. The results revealed that all motivation and hygiene factors were positively correlated with job satisfaction.

However, linear regression analysis showed that for all respondents, only job security, salary, and career significantly affected job satisfaction, with the other factors having a negligible effect. Such conclusions seem logical in a country where unemployment is rife, salaries are low, and career development is a significant concern.

A breakdown of results by employee category shows that:

job security and general working conditions have a significant effect on job satisfaction among administrative staff. while the other factors have only a negligible effect;

job security and salary significantly affect workers' job satisfaction. while the other factors have a negligible effect.

These findings show that job security is a primary concern shared by both employee categories. However, they differ because general working conditions precede administrative staff, while salary determines satisfaction among blue-collar workers.

Such conclusions seem to be supported by the Moroccan context. as described above, regarding unemployment levels and labor compensation.

The workers' low pay could explain this. Pay becomes an issue when it is perceived to be significantly lower than the wages of others performing similar tasks in other organizations.

Thus, the principle is confirmed for blue-collar workers: The best-paid workers are generally the most satisfied at work. At the same time, administrative staff are more interested in general working conditions since this category benefits from better pay.

Given the results obtained factors considered "hygienic" by Herzberg namely job security wages and general working conditions can be considered motivating factors in developing countries such as Morocco.

All the above conclusions need to be qualified by two primary considerations: the relatively limited size of the sample and the respondents' ability to grasp the meaning of the questions asked fully.

In order to better assess Herzberg's model's applicability, parallel analyses should also be undertaken in other Moroccan companies to test the responsiveness of measures inspired by hygiene and motivation factors in terms of satisfaction and motivation.

5. Conclusion

Moroccan industrial SMEs. applying Herzberg's two-factor theory. The results highlighted significant elements and notable differences between the expectations of different employee categories.

The variables with the most significant influence on job satisfaction in these industrial SMEs were company policy. relations with superiors. pay. job fulfillment. recognition. and personal and professional career development opportunities. These motivating factors are crucial to fostering a positive working environment. especially in a sector marked by economic pressures and often centralized management.

Company policy and relations with superiors are critical pillars in maintaining employee satisfaction due to the more rigid hierarchical structure and frequent contact with management. Competitive salaries and opportunities for advancement are also vital in ensuring a stable. motivated workforce. Though often linked to repetitive tasks in the industrial sector. personal fulfillment and recognition remain powerful levers of satisfaction.

The results also revealed that certain factors, such as peer relations, job security, and the nature of the work, do not significantly influence employee satisfaction in this context. This may be explained by the nature of work in industrial SMEs, where the emphasis is more on individual production than teamwork and where economic fluctuations are accepted as unavoidable.

Applying Herzberg's theory enabled us to distinguish between "hygiene" and "motivation" factors influencing job satisfaction. The results confirm that hygiene factors such as pay and working conditions are essential in avoiding dissatisfaction in Moroccan industrial SMEs. In contrast. motivational factors, such as personal fulfillment and career opportunities, are essential in stimulating lasting satisfaction.

6. Recommendations

The results of this study provide several pointers for managers of industrial SMEs. Companies are advised to focus on improving internal policies. managing hierarchical relationships, and offering competitive remuneration packages. In addition, investment in personal development and employee recognition could be an effective strategy for boosting commitment and satisfaction, thus contributing to the overall performance of SMEs.

This research underscores the critical role of motivational and hygiene factors in shaping job satisfaction within Moroccan industrial SMEs. The findings reveal that while hygiene factors like job security and salary are essential in preventing dissatisfaction. the motivational elements—such as personal fulfillment and opportunities for career development—drive lasting employee satisfaction. The study highlights the distinct priorities of different employee categories, with administrative staff valuing working conditions and blue-collar workers prioritizing salary. To enhance employee engagement and overall organizational performance, management must adopt a holistic approach that integrates effective policies, competitive compensation, and growth opportunities. This balanced strategy addresses the challenges faced in the Moroccan context and fosters a more committed and motivated workforce in an increasingly competitive environment.

Transparency:

The authors confirm that the manuscript is an honest accurate and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Copyright:

©2025 by the authors. This open-access article is distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

References

- R. Bent and P. Freathy, "Motivating the employee in the independent retail sector," Journal of Retailing and Consumer [1]Services, vol. 4, no. 3, pp. 201-208, 1997. https://doi.org/10.1016/S0969-6989(97)00008-9
- M. A. Hitt, L. Bierman, K. Shimizu, and R. Kochhar, "Direct and moderating effects of human capital on strategy and [2] performance in professional service firms: A resource-based perspective," Academy of Management Journal, vol. 44, no. 1, pp. 13-28, 2001.
- [3] L. L. Cummings and D. P. Schwab, Performance in organizations: Determinants and appraisal. Scott: Foresman and Co,
- V. H. Vroom, Work and motivation. John Wiley, 1964.
- $\begin{bmatrix} 4 \\ 5 \end{bmatrix}$ S. Schulz and T. Steyn, "Educators' motivation: Differences related to gender, age and experience," Acta academica, vol. 35, no. 3, pp. 138-160, 2003.
- Y. Ibragimov and N. B. Berishvili, "Analysis of intrinsic motivation influence on employee affective commitment [6] during digital change," London JournalSocialSciences, vol. of6. https://dx.doi.org/10.17758/heaig14.h0923501
- R. H. S. Lestari, A. K. Damayanti, and I. R. Hamid, "Outbound Capacity Building Program to Improve the Quality of [7] Employee Productivity," *Tepis Wiring: Jurnal Pengabdian Masyarakat*, vol. 2, no. 2, pp. 22-30, 2023. https://dx.doi.org/10.33379/tepiswiring.v2i2.3100
- A. Yakin, A. Aprilia, C. Camelia, and M. I. Anshori, "Behavioral transformation drives organizational productivity," [8] JUMBIWIRA: Jurnal Manajemen Bisnis Kewirausahaan, vol. 2, no. 3. https://dx.doi.org/10.56910/jumbiwira.v2i3.1087
- F. Herzberg, "One more time: How do you motivate employees?," Harvard Business Review, vol. 46, no. 1, pp. 53-62, [9]
- [10] F. I. Herzberg, Work and the nature of man. Thomas Y. Crowell, 1966.
- F. I. Herzberg, The managerial choice is to be efficient and human, 2nd ed. Olympus, 1982. [11]
- [12] F. I. Herzberg, "Happiness and unhappiness: A brief autobiography of Frederick I. Her<zberg," Unpublished Manuscript, University of Utah, Salt Lake City, 1991.
- F. I. Herzberg, B. Mausner, and B. Snyderman, The motivation to work, 2nd ed. John Wiley, 1959. [13]
- [14]
- H. F. Herzberg, "Motivation-hygiene profiles," 1976. N. L. M. A. I. Paramitha, N. L. P. and P. N. S. Yasa, "The role of job satisfaction as a mediator of work discipline and [15] organizational climate on employee performance," International Journal of Environmental, Sustainability, and Social Science, vol. 5, no. 4, pp. 928-945, 2024.
- N. P. Nyoni, "Employee retention strategies and job satisfaction in local government authorities in Tanzania," South [16] Asian Journal of Social Studies and Economics, vol. 21, no. 7, 2024. https://dx.doi.org/10.9734/sajsse/2024/v21i7844
- S. Ramli, N. Y. M. Raffin, R. Borhnnudin, and N. Z. Zailani, "Unravelling the Influence of Management Support, [17] Colleague Support, Compensation and Benefits, and Job Security on Employee Job Performance during the Business Recovery Phase," e-Academia Journal, vol. 12, no. 2, 2023. https://dx.doi.org/10.24191/e-aj.v12i2.23946
- A. Samsudin, M. Ikaningtiyas, F. Mulia, and M. Rintalla, "Exploring the Relationship Between Career Advancement, [18] Work-Life Balance, and Corporate Financial Performance: A Systematic Review," Atestasi: Jurnal Ilmiah Akuntansi, vol. 7, no. 2, pp. 1091-1110, 2024. https://dx.doi.org/10.57178/atestasi.v7i2.918
- L. R. Natarini, K. R. Dantes, and N. L. G. E. Sulindawati, "The contribution of leadership style, work motivation, [19] work climate and job satisfaction to employee performance in the undiksha akpk environment. thesis departement of education administration," Jurnal Administrasi Pendidikan Indonesia, vol. 14, no. 2, pp. 256-264, 2023. https://dx.doi.org/10.23887/jurnal_ap.v14i2.1856
- T. M. D., "The investigation of effects of job satisfaction on performance among academicians using Herzberg's [20] theory," 2023. https://dx.doi.org/10.37745/ejlpscm.2013/vol11n12642
- A. P. Hanif and S. U. Ady, "The Influence of Work Discipline, Job Satisfaction and Work Motivation on Employee [21] Performance in Development Institutions East Java Province Construction Services," Sinergi: Jurnal Ilmiah Ilmu Manajemen, vol. 12, no. 2, pp. 54-62, 2022. https://dx.doi.org/10.25139/sng.v12i2.5737
 R. A. Pratama, M. Japar, P. Purwati, F. K. Nikmah, and I. S. Kurniawan, "Effect of extrinsic job satisfaction hygiene
- [22] factors and intrinsic job satisfaction motivation on turnover intention," Bulletin of Counseling and Psychotherapy, vol. 5, no. 2, pp. 148-158, 2023. https://dx.doi.org/10.51214/00202305605000
- M. A. Junaedi and K. Digdowiseiso, "The influence of work motivation, organizational culture and work discipline on [23] employee performance through job satisfaction as intervening variables at BPJS Ketenagakerjaan throughout DKI Jakarta Region," JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan), vol. 8, no. 2, pp. 686-705, 2023. https://dx.doi.org/10.31851/jmksp.v8i2.11233
- D. Marsudi, A. Ahadiat, and H. Jimad, "Analysis of the effect of motivation factors and hygiene factors on employee [24] performance with job satisfaction as a mediation factor," International Journal of Business, Management and Economics, vol. 3, no. 4, pp. 401-418, 2022. https://dx.doi.org/10.47747/ijbme.v3i4.938

- [25] N. i. N. Hidayah, N. I. Rahmawati, and D. Wismar'ein, "The effect of compensation and work motivation on employee work productivity through employee satisfaction as an intervening variable at PT. Tarindo 3 Juwana Pati," *KnE Social Sciences*, pp. 142–156, 2024. https://dx.doi.org/10.18502/kss.v9i17.16318
- [26] M. R. Pahlevi and K. Digdowiseiso, "RETRACTED: The effect of job satisfaction, work motivation, work environment, and training on employee productivity at PT. Wijaya Karya Beton Tbk in East Jakarta," *Journal of Social Science*, vol. 5, no. 2, pp. 537-547, 2024. https://dx.doi.org/10.46799/jss.v5i2.800
- N. Sari, K. Wilchan, and D. L. Gaol, "The effect of motivation and work environment on employee job satisfaction (case study at PT. Latexindo)," *International Journal of Social and Labor Studies*, vol. 2, no. 1, pp. 89–101, 2024. https://dx.doi.org/10.61306/ijsl.v2i1.94
- Z. Arifin, S. Sudarwati, and I. Istiatin, "Effect of motivation, satisfaction, work ethic and environment on employee performance the Klaten regency regional secretariat," *Journal of Economics, Management, and Business*, vol. 6, no. 2, pp. 67–82, 2023. https://dx.doi.org/10.35914/jemma.v6i2.2093
- [29] M. Popa, Motivating and rewarding human resources course notes. University of Bucharest Publishing House, 2008.
- [30] M. Zlate, Work psychology interhuman relations. Didactic and Pedagogical Publishing House, 1981.
- [31] J. Campbell, M. Dunnette, E. Lawler, and K. Weick, Managerial behavior, performance, and effectiveness. McGraw-Hill, 1970.
- [32] R. Kanfer, "Motivation theory and industrial and organizational psychology," *Handbook of Industrial and Organizational Psychology*, vol. 1, no. 2, pp. 75-130, 1990.
- [33] P. Roussel, "Collection recherche en gestion," *Economica*, 1996.
- D. R. Kim, "A study on the factors that influence job satisfaction of police officers: Focused on Herzberg's two-factor theory," *Korean Social Science Journal*, vol. 23, no. 1, pp. 1–15, 2024. https://dx.doi.org/10.56603/jksps.2024.23.1.1
- [35] S. Chachar, F. Lothi, and N. Naz, "Comparative study in the light of herzberg's two factor theory of job satisfaction among academic staff in public and private sector universities of Islamabad," *Journal of Social Sciences and Humanities*, vol. 61, no. 2, pp. 91-112, 2022. https://dx.doi.org/10.46568/jssh.v61i2.635
- [36] J.-Q. Jiang, J. Yao, K.-R. Yu, and C.-N. Li, "An empirical study on 'how to retain rural teachers with emphasis on hygiene or motivation factors': A case of Western China," Frontiers in Psychology, vol. 14, p. 1114107, 2023. https://dx.doi.org/10.3389/fpsyg.2023.1114107
- [37] M. Ghorbani, "Investigating factors related to social workers'job satisfaction: Public and private hospitals in tehran and karaj provinces," *Turkish Journal of Applied Social Work*, vol. 6, no. 1, pp. 1-16, 2023. https://dx.doi.org/10.54467/trjasw.1288810
- [38] J. Y. Lee and M. H. Lee, "Structural model of retention intention of nurses in small-and medium-sized hospitals: Based on Herzberg's motivation-hygiene theory," in *Healthcare*, 2022, vol. 10, no. 3, p. 502.
- [39] M. Zhang and S. Devi, "Toward a theory of motivation and performance for organizational employees: A case study of a walmart store in the USA," *Public Administration Research*, vol. 13, no. 2, pp. 1-9, 2024. https://dx.doi.org/10.5539/par.v13n2p9
- [40] A. Joseph, "Employee behavior and job satisfaction in an organization using herzberg's two-factor model: a theoretical study," *Jurnal Multidisiplin Madani*, vol. 3, no. 10, pp. 67–89, 2023. https://dx.doi.org/10.55927/mudima.v3i10.2938
- [41] G. Nyuhuan, "Beyond rewards and punishments: Enhancing children's intrinsic motivation through self-determination theory," World Journal of Advanced Research and Reviews, vol. 21, no. 2, pp. 85–98, 2024. https://dx.doi.org/10.30574/wjarr.2024.21.2.0457
- [42] K. B. and H. R., "An analysis of the role of work motivation and work discipline in improving employee performance: Job satisfaction as a mediating factor (Case study on PT Prima Sejati Sejahtera I)," *International Journal of Current Science Research and Review*, vol. 7, no. 8, pp. 45–56, 2024.
- [43] R. Maharani and A. Haeba Ramli, "The roles of family-supportive supervisor behaviour, work-life balance, job satisfaction, motivation, and job performance among married private employees," *Journal of HRM*, vol. 27, no. 1, 2024. https://dx.doi.org/10.46287/pkyk4429
- [44] R. Pleşa, "Relationship between motivation, satisfaction and performance at work," *Ann Universității Petrosani, Economie*, vol. 19, no. 2, pp. 119–124, 2019.
- [45] R. M. Klassen, E. L. Usher, and M. Bong, "Teachers' collective efficacy, job satisfaction, and job stress in cross-cultural context," *The Journal of Experimental Education*, vol. 78, no. 4, pp. 464-486, 2010. https://doi.org/10.1080/01443410903493954
- [46] T. L.-P. Tang, J. K. Kim, and D. S. H. Tang, "Does attitude toward money moderate the relationship between intrinsic job satisfaction and voluntary turnover?," *Human relations*, vol. 53, no. 2, pp. 213-245, 2000. https://doi.org/10.1177/0018726704042921
- [47] R. M. Klassen, N. E. Perry, and A. C. Frenzel, "Teachers' relatedness with students: An underexamined aspect of teachers' basic psychological needs," *Journal of Educational Psychology*, vol. 102, no. 3, pp. 625-638, 2010. https://doi.org/10.1037/a0019400
- [48] R. Likert, New patterns of management. McGraw-Hill, 1961.