

# ANALYZING THE INFLUENCE OF HYGIENIC AND MOTIVATING FACTORS ON EMPLOYEE PERFORMANCE: INSIGHTS OF UNIVERSITY'S HRM PRACTICES AND INDUSTRY SETTINGS

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## ABSTRACT

Many contemporary HRM systems have been developed based on motivation theories. Herzberg's theory of motivation serves as a methodology for examining and constructing motivation systems within organizations. This study aims to uncover the relationship between respondents' descriptive characteristics and hygienic/motivating factors and their impact on employee performance in the university and the industry. Employing a questionnaire method and utilizing Likert's 5-point scale for assessment, the authors collected, coded, and analyzed data using the SPSS Statistics Program. The study establishes the influence of hygienic and motivating factors on employee performance. When the hygienic factor increases by one unit, university employees' performance decreases by 0.239 units. In industry, it decreases by 0.085. Both research subjects showcase a direct relationship between performance and motivating factors, demonstrating a positive correlation. When the motivating factors see an increase of one unit, university employees' performance likewise increases by 0.643 units. In the Industry context, this rise in motivation corresponds to a 0.245 unit increase. Within the two-factor theory framework, both factors are deemed significant for employees, yet providing motivating factors is considered more crucial. Enhanced motivation through equitable and adequate stimuli practices corresponds to increased employee performance.

**Keywords:** human resources management, HRM practices, motivation, performance, hygienic and motivating factors, university

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## INTRODUCTION

There has been an increased emphasis in recent years on the importance of people. The labor market has undergone significant changes due to globalization over the past few years. Organizations are now evaluated based on international standards and best practices. In this era of intense competition, organizations are placing greater emphasis on managing their human resources. To prove their effectiveness, organizations should demonstrate their outcomes through their employees, focusing on motivating and nurturing their workforce through evaluations, regular feedback, continuous support, and experiential programs (Kuswati, 2020). Motivation holds great significance due to its role as a determining factor and its intangible nature. Motivation is of utmost importance because motivated employees can significantly enhance an organization's competitiveness. Therefore, motivated employees represent a valuable competitive advantage for any organization, as their productivity enables the accomplishment of assigned tasks. Many contemporary HRM systems have been developed based on motivation theories. Friedrich Herzberg's two-factor theory of motivation has remained relevant even after half a century. This theory, which symbolizes progressiveness in the realm of HR management, has continued to captivate the interest of scholars in sociology, psychology, and management (Alshmemri et al., 2017).

This study's importance lies in examining motivational factors using the two-factor theory and assessing motivation's influence on employee performance. The enthusiasm and willingness of an employee to carry out their responsibilities are pivotal for an organization's effective functioning. Consequently, an individual excels in any role they undertake. When managers precisely understand what motivates an employee and the outcomes they aspire to achieve, it becomes feasible to manage tasks most effectively and efficiently to attain organizational goals (Van Der Kolk et al., 2019).

This research examines the motivation system within Akhmet Yassawi University in Turkistan (University) and the Ferroalloy Plant in Aktobe (Industry), classifying it into two categories based on Herzberg's theory: hygienic and motivating factors. Understanding the origins of specific motivations, the causes behind

employees' actions, and the transformation of motives into actions is essential for creating an efficient management system. In the current context, all organization members must function as a cohesive team, possessing a clear vision of the future, a well-defined sense of purpose, and the motivation to independently pursue the attainment of established objectives (Guzhina & Ezhkova, 2021). Well-trained, motivated, and organized employees are instrumental in charting the organization's course.

Motivation stands out as the paramount element in HRM practices. In the contemporary landscape, the proper implementation of motivation systems is imperative. Moreover, it serves as a critical prerequisite for an organization's successful sustenance and indicates its sound operational health. Unfortunately, many organizations often opt for the wrong motivational strategies, which can result in employee turnover as they seek improved working conditions elsewhere (Mládková et al., 2015). Accurate and effective guidance through encouraging and evaluating employee performance is indispensable for an organization's effective and profitable operation.

This paper aims to examine the relations between respondents' descriptive attributes and hygienic/motivating factors and to assess the influence of these factors on employees' performance. Herzberg's motivation theory is the methodological framework for studying and establishing an organization's motivation system.

Hygienic and motivating factors are pivotal and immediate in determining organizational effectiveness. As a result, we have endeavored to substantiate the following hypotheses:

- H1: Gender of the employees impacts on hygienic/motivating factors.
- H2: Age of the employees impacts on hygienic/motivating factors.
- H3: Job position impact on hygienic/motivating factors.
- H4: Work experience impacts on hygienic/motivating factors.
- H5: Hygienic/motivating factors impact on the performance of employees

## LITERATURE REVIEW

### Herzberg's Two-factor theory

In recent decades, numerous theories of motivation have been developed by researchers to explore human motivation and the factors that influence it. These theories primarily focus on dissecting needs' role and impact on motivation, delineating their structure and content. Their ultimate goal is to understand the driving forces behind people's work motivation. One notable theory in this realm is Herzberg's two-factor theory of motivation, which was introduced in 1959 by Frederick Herzberg and his associates. They aimed to uncover the sources of job satisfaction and dissatisfaction and identify the factors contributing to increased or decreased labor productivity (Alshmemri et al., 2017). According to Herzberg's theory, job satisfaction is determined by internal job-related characteristics and content, while dissatisfaction is influenced by external aspects of the job and its context. Consequently, all factors impacting human engagement in work environments are categorized into two groups: hygienic and motivating factors (Ozsoy, 2019).

ShaemiBarzoki et al. (2012) have asserted, in line with the two-factor theory, that wages are not the primary motivator. Instead, safety, wages, a favorable working climate, working conditions, and positive interpersonal relations fall into the "hygienic factors" category. These factors are prerequisites that managers must meet. Ozsoy (2019) further described hygienic factors as fundamental innate human desires, including being well-nourished and discomfort-free, representing basic biological needs. Their fulfillment ensures that people do not feel dissatisfied (Sanjeev & Surya, 2016). However, simply meeting these conditions cannot inspire people to work with unwavering commitment.

To foster effective engagement and encourage individuals to put forth high-quality efforts, it is imperative to address motivational needs, such as recognition, opportunities for personal and professional growth, respect, career advancement, increased responsibilities, and self-realization (Serra, 2019). According to Wan Yusoff et al. (2013), this satisfaction can be achieved by offering engaging and challenging tasks, opportunities for personal and professional development, moral support, new assignments, delegation of authority, expanded roles, involvement in decision-making processes,

and effective communication.

The core tenet of the two-factor theory posits that the processes of satisfaction and dissatisfaction are distinct. As outlined by Mitsakis & Galanakis (2022), these two categories of factors in the perception of the work process are not opposites, although it is natural for people to equate the absence of satisfaction with dissatisfaction and the presence of satisfaction with contentment. However, this misperception does not align with the essence of the two-factor theory. Motivation can stem from motivating or hygiene factors, depending on an individual's specific needs. A deficiency in motivating factors can lead to dissatisfaction with a task, while well-addressed hygiene factors can result in a state of satisfaction contingent on the circumstances involved (Lalwani & Lalwani, 2017).

### Performance appraisal

Performance is the assessment of both the quantitative and qualitative execution of all planned endeavors and their outcomes aimed at achieving objectives. Kampkötter (2017) provides an alternative definition, describing performance as the capacity to attain results in a specified timeframe in accordance with established goals and priorities. Kowshik & Mahesh (2019) stated that performance also serves as an economic gauge that reflects the efficiency of employees' work. The pursuit of optimizing productivity remains an enduring and significant concern. Analyzing the factors that impact the professional activities of specialists and the results they achieve concerning their compensation is a complex undertaking. Evaluating productivity dynamics involves appraising the level of effectiveness exhibited by an employee in accomplishing a task. This assessment may involve quantifying the implementation of a production technology component or a specific Key Performance Indicator (KPI), among other factors.

The evaluation of an organization's success and sustainability hinges on performance appraisal. Performance appraisal enhances the realization of fundamental strategic objectives more efficiently and cost-effectively (Herachwati, 2013). Shafiee et al. (2016) noted that organizations looking to gain a competitive edge over their rivals emphasize efforts to enhance and advance their performance in an

increasingly competitive landscape. Performance essentially reflects the outcomes of endeavors aimed at achieving specific goals. Improved productivity benefits employees by allowing them to work fewer hours while earning higher incomes and grants organizations a competitive advantage. This underscores the crucial role of organizations' positive performance as a driving force behind economic growth. Performance measures how well an organization has achieved its goals; in other words, its success (Fajar, 2022). As highlighted by Abdrasilov et al. (2021), the effectiveness of an organization is significantly dependent on its training and development practices, especially when assessing the link between employee performance levels and factors such as job satisfaction and motivation.

## METHODOLOGY

### Limitation

The data for our research was collected through the use of questionnaires. It is important to note that this research is limited to the managers, lecturers, and staff exclusively within Akhmet Yassawi University (University) and the Aktobe Ferroalloy Plant (Industry). Consequently, this research's findings apply solely to the surveyed sample and the responses provided in the questionnaires.

### Sample

Two hundred fifty print-out questionnaires were distributed to university employees, and 153 were collected back, for a return rate of 61.2%. Regarding the industry, 108 out of 195 questionnaires were returned, a response rate of 55.4%. At the same time, survey questions were sent through Google Forms. We received 74 responses from the university and 87 from industry. Employees had difficulties answering the questionnaire due to technical problems such

as poor internet, lack of time, and the inability of older employees to use the computer correctly. The sample was applied to all employees, but only 227 questionnaires from the university and 156 questionnaires from the industry were answered and accepted as valid.

### Questionnaire

The questionnaire included 25 questions in total. First, we decided to determine the descriptive characteristics of the respondents (Table 1). Within the framework of the two-factor theory, a scale consisting of 16 questions was used to measure the factors that motivate employees to work. According to the two-factor theory, a distinction is made between the "hygienic" and "motivating" factors of the job. Employees are primarily motivated by factors associated with the content of their jobs. The presence of hygienic factors in the workplace does not directly increase employees' motivation but instead establishes a conducive environment for their motivation to thrive.

In this survey, we made 8 hygienic factors and 8 motivating factors that motivate employees to work in their work lives (Table 2). We then prepared 5 questions on performance appraisal, which are presented in Table 3. Employees were asked to mark on a 5-point Likert scale how much each factor was provided for them by their employer. To gauge the extent of provision of these factors, we employed a 5-point scale, ranging from 1, representing "completely not provided", to 5, signifying "completely provided". This allowed us to assess each employee's perception of the level to which hygienic and motivating factors were available to them. Subsequently, we encoded and analyzed the collected data using the SPSS 20.0 Statistics program. With the help of this program, we applied the factor analysis, T-test, ANOVA test, and regression analysis.

**Table 1.** Descriptive characteristics of the respondents

№	Descriptive characteristics	Indicators			
		Male		Female	
1	Gender				
2	Age	20-30	31-40	41-50	50 and above
3	Job position	Manager	Lecturer	Staff	
4	Work experience	Less than 1 year	1-5 years	6-10 years	11 and above

**Table 2.** Hygienic and motivating factors

№	Hygienic factors	Completely disagree	Disagree	Neutral	Agree	Completely agree
		1	2	3	4	5
1	Decent salary					
2	Relationship with the managers and with colleagues					
3	Organization policy					
4	Normal working conditions					
5	Status of organization					
6	Control over the work					
7	The impact of work on personal life					
8	Safety and guarantee of work					
	<b>Motivating factors</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
9	Recognition and approval of work results					
10	The content of the work					
11	Achievement of results / success					
12	Responsibility for the performed business					
13	Career opportunities					
14	Interesting tasks					
15	Professional growth					
16	Participation in decision making					

**Table 3.** Performance appraisal

№	Performance appraisal	Completely disagree	Disagree	Neutral	Agree	Completely agree
		1	2	3	4	5
1	My record shows consistently low rates of being late and absenteeism.					
2	I'm consistently upbeat and in high spirits at work.					
3	I complete my assigned tasks promptly and within the specified timeframe.					
4	I perform my job duties with a surplus of effort and dedication.					
5	I'm adept at swiftly identifying and implementing effective solutions when issues arise at work.					

**RESULTS****Frequency statistics**

The following frequency statistics analysis provides an overview of the overall situation.

**Table 4:** Frequency statistics of gender

		University		Industry	
		Frequency	Percent	Frequency	Percent
Valid	Male	91	40.1	106	67.9
	Female	136	59.9	50	32.1
	Total	227	100.0	156	100.0

Source: Authors' own calculations in SPSS using the data from the questionnaire

Table 4 shows that the distribution of respondents in the university by gender is 59.9% female and 40.1% male, indicating that there are 1.5 times more women than men. In contrast, there is a higher representation of male than

female employees within the industry, 67.9% and 32.1%, respectively. This implies that women tend to pursue employment at the university, while men typically find work in the factory.

**Table 5:** Frequency statistics of age

		University		Industry	
		Frequency	Percent	Frequency	Percent
Valid	20-30	87	38.3	15	9.6
	31-40	40	17.6	28	17.9
	41-50	50	22.0	44	28.2
	above 50	50	22.0	69	44.2
	Total	227	100.0	156	100.0

Source: Authors' own calculations in SPSS using the data from the questionnaire

When categorizing the respondents from the university by age groups, the group between the ages of 20-30 took first place with a share of 38.3%, followed by the group between the ages of 41-50 and over 50 with a share of 22% each, and the group between the ages of 31-40 with a 17.6% share. In industry, the highest proportion, accounting for 44.2%, falls within the above 50 age range. Following this, the groups aged 41-50 and 31-40 make up 28.2% and 17.9%, respectively, of the respondents, and the 20-30 age group comprises 9.6% of the total (Table 5). This suggests that the younger generation prefers employment in clean and safe environments instead of factories. On the other

hand, the older generation, who are historically associated with the working class in the Soviet Union, continue to be employed in factories. Due to their long-standing tenure in factory roles, they are often reluctant to change their workplace.

**Table 6:** Frequency statistics of job position

		University		Industry	
		Frequency	Percent	Frequency	Percent
Valid	Manager	50	22.0	16	10.3
	Lecturer	106	46.7	-	-
	Staff/Worker	71	31.3	140	89.7
	Total	227	100.0	156	100.0

Source: Authors' own calculations in SPSS using the data from the questionnaire

The distribution by job position in the university is as follows: 22.0% of the respondents are managers; 46.7% are lecturers and 31.3% are staff. Within the industry, 10.3% consists of managers, while the remaining 89.7% represents

workers (Table 6). No lecturers are present at the plant; most of those surveyed belong to the labor force. The distinctions lie specifically in these subtleties between the industry and the university.

**Table 7:** Frequency statistics of work experience

		University		Industry	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	6	2.6	2	1.3
	1-5 years	55	24.2	15	9.6
	6-10 years	76	33.5	43	27.6
	11 and above	90	39.6	96	61.5
	Total	227	100.0	156	100.0

Source: Authors' own calculations in SPSS using the data from the questionnaire

Considering the distribution according to work experience at the university, 39.6% of the respondents have 11 years or more, 33.5% have 6-10 years, 24.2% have 1-5 years, and 2.6% have 1 year of experience. Examining the breakdown based on work experience in industry, it can be observed that 61.5% of the participants possess 11 years or more, 27.6% have 6-10 years, 9.6% have 1-5 years, and 1.3% have only one year of experience. As depicted in Table 7, the increase in work experience distribution at the university is noticeable, yet it doesn't match the growth observed in the industry. At the factory, approximately two-thirds of the surveyed employees have over a decade of experience, indicating a majority of seasoned workers.

### Reliability analysis

Reliability analysis is a methodology that exposes the coherence among all questions within a measurement tool and their uniformity in gauging the targeted construct. In evaluating the reliability of the questionnaire, we analyzed the internal consistency of items using Cronbach's Alpha. The threshold for statistical significance was set at  $p < 0.05$ . The reliability coefficient assumes values as in Table 8.

**Table 8:** Reliability coefficient

Cronbach's Alpha Value	Reliability status
[0.9; 1]	Excellent
[0.8; 0.9]	Good
[0.7; 0.8]	Acceptable
[0.6; 0.7]	Questionable
[0.5; 0.6]	Poor
[0; 0.5]	Unacceptable

Table 9 and Table 10 show the reliability coefficients (Cronbach's Alpha) for the questionnaire's hygienic and motivating factors.

Since the reliability coefficients for these factors exceed 0.80, it can be asserted that the questionnaire demonstrates high reliability.

**Table 9:** Factor analysis for hygienic and motivating factors in the university

№	Factor	Questions	Mean	Std. Deviation	Cronbach's Alpha	
					by factors (individually)	by factors (general)
1	Hygienic factor	Q5	3.98	.864	.808	.889
		Q6	3.84	1.179		
		Q7	4.20	1.056		
		Q8	4.18	.926		
		Q9	4.31	.903		
		Q10	4.41	.828		
		Q11	4.34	.778		
2	Motivating factor	Q12	4.18	.999	.873	
		Q13	4.34	.796		
		Q14	4.21	1.000		
		Q15	4.30	.895		
		Q16	4.40	.822		
		Q17	4.07	1.144		
		Q18	4.37	.816		
		Q19	4.02	1.192		
Q20	4.15	1.024				

Source: Authors' own calculations in SPSS using the data from the questionnaire

**Table 10:** Factor analysis for hygienic and motivating factors in the industry

№	Factor	Questions	Mean	Std. Deviation	Cronbach's Alpha	
					by factors (individually)	by factors (general)
1	Hygienic factor	Q5	3.74	.746	.781	.802
		Q6	3.72	1.258		
		Q7	3.93	1.148		
		Q8	4.13	.962		
		Q9	4.16	.926		
		Q10	4.40	.855		
		Q11	4.31	.824		
2	Motivating factor	Q12	4.32	.827	.743	
		Q13	4.43	.683		
		Q14	4.40	.688		
		Q15	4.44	.729		



Table 10: Continued

		Q16	4.38	.815		
		Q17	4.29	.754		
		Q18	4.33	.788		
		Q19	4.44	.797		
		Q20	4.33	.746		

Source: Authors' own calculations in SPSS using the data from the questionnaire

### T-test and One-way ANOVA test

The t-test was employed to investigate differences based on the gender variable. The p-values for hygienic factors (0.725 and 0.149) and motivating factors (0.928 and 0.501) in Table 11 and Table 12 exceed 0.05. In essence, it was

established that there are no discernible differences in hygienic/motivating factors based on gender. Consequently, hypothesis H1 cannot be accepted.

**Table 11:** T-test for gender and hygienic/motivating factors in the university

No	Factor	Gender	N	Mean	Std. Deviation	t	Sig.
1	Hygienic factor	Male	91	4.1978	.60584	.352	.725
		Female	136	4.1682	.63198		
2	Motivating factor	Male	91	4.2266	.68082	.090	.928
		Female	136	4.2353	.72570		

Source: Authors' own calculations in SPSS using the data from the questionnaire

**Table 12:** T-test for gender and hygienic/motivating factors in the industry

No	Factor	Gender	N	Mean	Std. Deviation	t	Sig.
1	Hygienic factor	Male	106	4.0684	.68294	2.100	.149
		Female	50	4.1300	.57196		
2	Motivating factor	Male	106	4.3608	.47444	.456	.501
		Female	50	4.4175	.42077		

Source: Authors' own calculations in SPSS using the data from the questionnaire

A one-way ANOVA test was used to examine the differences according to the age variable. The p-values for both hygienic and motivating factors are found to be less than 0.05 (Table 13, Table 14). Therefore, hypothesis H2 is accepted. In other words, hygienic and motivating factors differ according to age.

The events occurring in employees' lives and the experiences gained with age can contribute to a shift in their perspectives. This shift may emphasize motivational elements in both the workplace and social settings while the importance assigned to hygiene factors such as salary, status, and socialization diminishes. Therefore, in addition to societal influences on

employees' attitudes toward work, aging also plays a role in influencing employee motivation. As a result of the analyses, considering the interplay of age and hygienic/motivating factors, it has been identified that there is a significant difference in hygienic factors (0.012 and 0.011) and motivating factors (0.001 and 0.286) based on age.

**Table 13:** ANOVA test analysis for age and hygienic/motivating factors in the university

No	Factor	Age	N	Mean	Std. Deviation	t	Sig.
1	Hygienic factor	20-30	87	4.1638	.62596	3.714	.012
		31-40	40	3.9813	.80192		
		41-50	50	4.1450	.55291		
		above 50	50	4.4025	.43101		
2	Motivating factor	20-30	87	4.3549	.52478	5.544	.001
		31-40	40	3.9250	1.00352		
		41-50	50	4.0825	.73610		
		above 50	50	4.4125	.56200		

Source: Authors' own calculations in SPSS using the data from the questionnaire

**Table 14:** ANOVA test analysis for age and hygienic/motivating factors in the industry

No	Factor	Age	N	Mean	Std. Deviation	t	Sig.
1	Hygienic factor	20-30	15	4.2333	.47214	3.866	.011
		31-40	28	3.7723	.95806		
		41-50	44	4.0227	.62429		
		above 50	69	4.2264	.48283		
2	Motivating factor	20-30	15	4.5500	.29047	1.273	.286
		31-40	28	4.3125	.48888		
		41-50	44	4.4290	.35293		
		above 50	69	4.3370	.52349		

Source: Authors' own calculations in SPSS using the data from the questionnaire

The One-way ANOVA test was applied to assess differences based on the job position variable. The p-values for the hygienic factor (0.003 and 0.010) are below 0.05, indicating statistical significance. However, the p-values for the motivating factor (0.090 and 0.067) are higher than 0.05 (Table 15 and Table 16). Consequently, hypothesis H3 concerning hygienic factors is accepted. In other words, there is a significant difference in the hygienic factor relative to job

position.

The employees' roles within their workplaces and the significance of elements related to their jobs vary. When considering the factors influencing employees' expectations from their work, job security needs emerge as more crucial for lower-level employees, while higher-level employees prioritize the need for self-actualization.

**Table 15:** ANOVA test analysis for job positions and hygienic/motivating factors in university

No	Factor	Job position	N	Mean	Std. Deviation	t	Sig.
1	Hygienic factor	Manager	50	4.4125	.26875	5.941	.003
		Lecturer	106	4.1733	.61590		
		Staff	71	4.0264	.74878		
2	Motivating factor	Manager	50	4.4250	.37627	2.439	.090
		Lecturer	106	4.1840	.71156		
		Staff	71	4.1673	.84778		

Source: Authors' own calculations in SPSS using the data from the questionnaire

**Table 16:** ANOVA test analysis for job positions and hygienic/motivating factors in industry

No	Factor	Job position	N	Mean	Std. Deviation	t	Sig.
1	Hygienic factor	Manager	16	4.4219	.26955	6.867	.010
		Staff	140	4.0500	.66817		
2	Motivating factor	Manager	16	4.4766	.21515	3.408	.067
		Staff	140	4.3679	.47646		

Source: Authors' own calculations in SPSS using the data from the questionnaire

The one-way ANOVA test examined the differences according to the work experience variable. As shown in Table 17, the p-value of hygienic and motivating factors is less than 0.05. Therefore, hypothesis H4 is accepted; hygienic and motivating factors differ according to work experience.

The One-way ANOVA test was employed to explore differences based on the work experience variable. As indicated in Table 17, the p-values for both hygienic and motivating factors

are below 0.05. Consequently, hypothesis H4 for the university is accepted, meaning there are significant differences in both hygienic and motivating factors based on work experience. But, in the Industry case, hypothesis H4 is not accepted, as the p-value for both hygienic and motivating factors is higher than 0.05. Therefore, it has been determined that there are no significant differences in hygienic and motivating factors based on work experience in the industry.

**Table 17:** ANOVA test analysis for work experience and hygienic/motivating factors in the university

No	Factor	Work experience	N	Mean	Std. Deviation	t	Sig.
1	Hygienic factor	Less than 1 year	6	3.5833	.43780	4.491	.004
		1-5 years	55	4.1341	.66006		
		6-10 years	76	4.0839	.67032		
		11 and above	90	4.3292	.51775		
2	Motivating factor	Less than 1 year	6	3.3542	.47048	5.366	.001
		1-5 years	55	4.2545	.67613		
		6-10 years	76	4.1135	.84636		
		11 and above	90	4.3764	.53740		

Source: Authors' own calculations in SPSS using the data from the questionnaire

**Table 18:** ANOVA test analysis for work experience and hygienic/motivating factors in industry

No	Factor	Work experience	N	Mean	Std. Deviation	t	Sig.
1	Hygienic factor	Less than 1 year	2	3.3125	.26517	2.151	.096
		1-5 years	15	4.3667	.28919		
		6-10 years	43	4.1308	.56429		
		11 and above	96	4.0417	.70982		
2	Motivating factor	Less than 1 year	2	4.0625	.08839	1.368	.255
		1-5 years	15	4.5667	.22093		
		6-10 years	43	4.4012	.33802		
		11 and above	96	4.3464	.52393		

Source: Authors' own calculations in SPSS using the data from the questionnaire

According to the results of the analysis, reward policies and bonus systems alone may not be sufficient to adequately support employees who have been working in the same institution for an extended period. Despite this, when examining wage levels, the institution seems to offer higher salaries to its senior employees than junior employees. Therefore, it is evident that seniority plays a crucial role in the university in determining salaries, but not in the industry. To ensure qualified employees' retention and success, managers must carefully identify factors that increase motivation. As a result of this study, it has been established that there are significant

differences in both hygienic (0.004) and motivating (0.001) factors based on work experience in the university, with the motivation values being less than 0.05.

#### *Regression analysis*

As a result of the regression analysis between performance and hygienic/motivating factors, performance and constant-coefficient ( $p=0.000$ ), hygienic factor ( $p\leq 0.000$ ) and motivating factor ( $p\leq 0.000$ ) were found to be correlated ( $p < 0.05$ ).

**Table 19:** The relationship between hygienic/motivating factors and employees' performance in the university

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.204	.216		10.221	.000
	Hygienic factor	-.239	.058	-.252	-4.123	.000
	Motivating factor	.643	.051	.771	12.608	.000

a. Dependent Variable: Performance

Source: Authors' own calculations in SPSS using the data from the questionnaire

**Table 20:** The relationship between hygienic/motivating factors and employees' performance in the industry

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.461	.373		6.604	.000
	Hygienic factor	.085	.065	.113	1.318	.009
	Motivating factor	.245	.091	.230	2.678	.008

a. Dependent Variable: Performance

Source: Authors' own calculations in SPSS using the data from the questionnaire

As the p-values for university and industry concerning hygiene and motivation factors are above 0.05, we confirm hypothesis H5, signifying that both elements impact employees' performance.

The regression equation stands as follows: the count of significant factors, as determined by the regression analysis, amounts to two, hence represented as equal to 2 ( $i=2$ ). Hence, the formula of the equation must be as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 \quad (1)$$

When the symbol equivalents and values for university and industry are substituted into the equation, it results in the following expressions:

$$Performance_{University} = 2.204 - 0.239 \text{ Hygienic factor} + 0.643 \text{ Motivating factor};$$

$$Performance_{Industry} = 2.461 + 0.085 \text{ Hygienic factor} + 0.245 \text{ Motivating factor}$$

As a result of the regression equation in the university, we see a negative relationship of 23.9% between the performance and the hygienic factors. When the hygienic factor increases by one unit, the performance level will decrease by 0.239 units. But, a positive correlation of 64.3% exists between the performance and the motivation factors. When the motivation factor increases by one unit, the performance level will also increase by 0.643 units.

Due to the outcomes derived from the regression equation within the industry, performance demonstrates a positive correlation of 8.5% with hygienic factors and 24.5% with motivation factors. This implies that with a one-unit increase in hygienic and motivation factors, the performance level is projected to increase by 0.085 and 0.245 units, respectively. Based on these results, hypothesis H5 is affirmed, indicating that hygiene and motivating factors impact performance.

## DISCUSSION

Our study aimed to explore the connections between respondents' descriptive characteristics and the hygienic/motivating factors. Beyond testing hypotheses within university and industry contexts, we sought to evaluate how these factors affect employees' performance. Consequently, our findings offer empirical evidence supporting the relationships between descriptive attributes, hygienic/motivating factors, and, notably, employees' performance.

Our findings suggest that gender does not significantly influence employee motivation within the university and the industry. The results are not consistent with the study of Lorincová et al. (2019), who implied that employees in some companies display a difference in how men and women perceive the importance of specific factors. Men tended to prioritize basic salary as a stronger motivational factor, while women placed more importance on the workplace atmosphere and a supportive team environment. Unlike earlier research findings, the impact of hygienic/motivating factors on gender in our research appears to be negative, mainly due to a significant number of respondents providing neutral responses in the questionnaire.

The relationship between employees' age and working capacity, performance, and cognitive agility is significant within organizations.

Physical strength typically peaks between the ages of 20 and 30. However, this vigor gradually diminishes as individuals age. Factors such as the passage of time, work intensity, and various life activities contribute to a decline in an individual's power, speed, attention, and reflexes (Mioni et al., 2021). Our results partly align with this empirical study. Indeed, younger individuals often exhibit high levels of productivity in their work. However, the elder generation possesses a wealth of experience acquired over the years, which significantly contributes to their expertise and knowledge in their respective fields. Our results suggest that the younger generation typically pursues work in the university, whereas older generations tend to work in factories. This trend is rooted in the older generation's preference for stability in balancing familial and social responsibilities alongside work commitments, while the younger generation seeks occupations perceived as less physically demanding or more environmentally friendly.

Our research findings indicate a direct correlation between university job positions and hygienic factors, yet they do not significantly impact motivating factors. These results are consistent with the studies of Stankovska et al. (2017), who concluded that employees in university expressed greater satisfaction with aspects such as their salary, colleagues, opportunities for advancement, operational protocols, and managerial oversight. However, they exhibited dissatisfaction concerning fringe benefits, variable rewards, the nature of their tasks, and communication channels within the organization. To navigate evolving market dynamics and secure a competitive edge, managers must adeptly determine the necessary human resources and implement a robust HRM policy to optimize this crucial asset. Facilitating communication among university employees, fostering a harmonious work environment, and cultivating a culture that encourages idea exchange across diverse roles are pivotal. This approach elevates employee commitment and performance, ultimately enhancing university efficiency and facilitating the attainment of shared objectives.

Work experience refers to knowledge or familiarity with a particular event or subject, which can be applied to similar situations encountered later. Many workers believe that staying in a specific field for an extended period

and consistently pursuing their career enhances job performance (Wang & Hooi, 2019). Remaining in a single workplace for an extended duration enables an individual to refine their skills and abilities relevant to their job over time. Our findings regarding work experience in the university are consistent with previous studies, but the industry doesn't fully accept these results.

The correlation between hygiene/motivating factors and performance is pivotal in the realm of work. Hygiene and motivation actively shape, guide, and sustain performance levels. Motivation, being inherently unique to each individual, stands out as a key feature. Our findings regarding how motivation significantly affects performance are consistent with previous empirical research (Destianti et al., 2021; Kurniawanto et al., 2022; Riyanto et al., 2021). From a university's and industry's perspective, its primary role involves enhancing employee behavior and positively influencing work performance. When employees anticipate their needs to be fulfilled by the administration and these expectations are not met, it leads to dissatisfaction and a subsequent decline in performance. Skilled personnel hold significant weight in the higher education and industrial sectors, which heavily feel the impact of technological advancements. To thrive in a fiercely competitive landscape, universities and factories must prioritize their human resources, correctly identify tools that boost employee motivation, and effectively respond to their needs. By doing so, universities and factories can increase their employees' performance and successfully accomplish their objectives.

## CONCLUSION AND RECOMMENDATION

In the current situation and considering the organization's specific context, not all theories can be seamlessly applied to university and industry settings. From Herzberg's theory, we have primarily focused on the concept that low wages pose a significant drawback, but contrary to common belief, high wages do not inherently motivate. Hygienic factors, like external elements, play a role in stimulation, while motivators cultivate psychological attitudes geared toward achieving exceptional outcomes. Individuals possess a layered hierarchy of needs; self-actualization, positioned at the apex, can solely be fulfilled through the work process.

This research gathered comprehensive insights into how hygienic and motivating factors impact university and industry employees. Employing the Two-Factor Theory of motivation, we identified the elements influencing employee motivation, measured their motivational levels, and delved into their perspectives and sentiments regarding various motivational aspects. Within this framework, we found that both hygienic and motivating factors hold roughly equal significance for employees, yet there is a greater need to prioritize the provision of motivating factors for employee satisfaction and motivation.

Every employee, irrespective of gender, has the right to determine their performance level. Both universities and industries should prioritize the training and development of their human resources. Considering that job position and work experience do not impact the motivating factors, it becomes crucial to identify motivation factors for all employees thoroughly. This involves offering favorable working conditions, facilitating social engagement, organizing training and developmental activities efficiently, and establishing fair career arrangements. Acknowledging employees regardless of the nature of their tasks, inclusion in social and cultural events, and the opportunity to exchange ideas with superiors bolster their motivation. Particularly in the industry, providing avenues for inexperienced employees to enhance their skills and showcase their potential is mutually beneficial. Employee perspectives and performances are heavily influenced by the responses they receive to their expectations, which often include bonuses, opportunities for advancement, involvement in decision-making processes, and similar motivating factors. Implementing equitable and adequate wage structures increases motivation and consequently enhances employee performance.

## REFERENCES

- Abdrasilov, B., Kudaibergenov, Z., Kelesbayev, D., & Baimaganbetov, S. (2021). Analysis of human resources management practices: The impact of training on performance efficiency of employees of Akhmet Yassawi University. *Bulletin of the Karaganda University. Economy Series*, 101(1), 4–15. <https://doi.org/10.31489/2021Ec1/4-15>
- Alshmemri, M., Shahwan-Akl, L., & Maude, P.

- (2017). Herzberg's Two-Factor Theory. *Life Science Journal*, 14(5), 12–16.
- Destianti, V., Fakhri, M., Madiawati, P. N., Nurnida, I., & Kurnia, B. (2021, March 7). The Effect of Job Stress and Job Motivation Toward Employee Performance in Department of Tourism and Culture Bandung. *Proceedings of the International Conference on Industrial Engineering and Operations Management*. 11th Annual International Conference on Industrial Engineering and Operations Management, Singapore, Singapore. <https://doi.org/10.46254/AN11.20210961>
- Fajar, R. K. (2022). Leadership style and personnel performance: A literature review. *International Research Journal of Management, IT and Social Sciences*, 9(4), 430–440. <https://doi.org/10.21744/irjmis.v9n4.2097>
- Guzhina, G., & Ezhkova, V. (2021). Modern Recruitment Technologies and Methods of Motivation in the Management Process. *Central Russian Journal of Social Sciences*, 16(2), 112–124. <https://doi.org/10.22394/2071-2367-2021-16-2-112-124>
- Herachwati, N. (2013). Performance appraisal. *Jurnal Ekonomi Dan Bisnis*, 23(2), 189–196.
- Kampkötter, P. (2017). Performance appraisals and job satisfaction. *The International Journal of Human Resource Management*, 28(5), 750–774. <https://doi.org/10.1080/09585192.2015.1109538>
- Kowshik, C. N., & Mahesh, Dr. G. (2019). Personnel Performance Appraisal Dimensions For Indian Construction Organizations. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(4), 3404–3410. <https://doi.org/10.35940/ijrte.D6754.118419>
- Kurniawanto, H., Rahmadi, Z. T., Wahyudi, M. A., Yai, U. P., & Gie, I. K. K. (2022). *Effect Of Work Environment And Motivation On Employee Performance With Job Satisfaction As A Mediation*. 3(3).
- Kuswati, Y. (2020). The Effect of Motivation on Employee Performance. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 3(2), 995–1002. <https://doi.org/10.33258/birci.v3i2.928>
- Lalwani, S., & Lalwani, Sushil. J. (2017). Relevance of Herzberg's Hygiene Theory in Today's Context: An Analysis of Motivators and Hygiene Factors in Present Scenario in Indian Context. *Singaporean Journal of Business Economics and Management Studies*, 5(7), 19–25. <https://doi.org/10.12816/0037247>
- Lorincová, S., Štarchoň, P., Weberová, D., Hitka, M., & Lipoldová, M. (2019). Employee Motivation as a Tool to Achieve Sustainability of Business Processes. *Sustainability*, 11(13), 3509. <https://doi.org/10.3390/su11133509>
- Mioni, G., Cardullo, S., Ciavarelli, A., & Stablum, F. (2021). Age-related changes in time discrimination: The involvement of inhibition, working memory and speed of processing. *Current Psychology*, 40(5), 2462–2471. <https://doi.org/10.1007/s12144-019-00170-8>
- Mitsakis, M., & Galanakis, M. (2022). An Empirical Examination of Herzberg's Theory in the 21st Century Workplace. *Organizational Psychology Re-Examined. Psychology*, 13(2), 264–272. <https://doi.org/10.4236/psych.2022.132015>
- Mládková, L., Zouharová, J., & Nový, J. (2015). Motivation and Knowledge Workers. *Procedia - Social and Behavioral Sciences*, 207, 768–776. <https://doi.org/10.1016/j.sbspro.2015.10.163>
- Ozsoy, E. (2019). An Empirical Test of Herzberg's Two-Factor Motivation Theory. *Marketing and Management of Innovations*, 1, 11–20. <https://doi.org/10.21272/mmi.2019.1-01>
- Riyanto, S., Endri, E., & Herlisha, N. (2021). Effect of work motivation and job satisfaction on employee performance: Mediating role of employee engagement. *Problems and Perspectives in Management*, 19(3), 162–174. [https://doi.org/10.21511/ppm.19\(3\).2021.14](https://doi.org/10.21511/ppm.19(3).2021.14)
- Sanjeev, M. A., & Surya, A. V. (2016). Two Factor Theory of Motivation and Satisfaction: An Empirical Verification. *Annals of Data Science*, 3(2), 155–173. <https://doi.org/10.1007/s40745-016-0077-9>
- Serra, D. J. G. (2019). An integrating conception

of human motivation. *Psicologia Em Estudo*, 24, e44183.  
<https://doi.org/10.4025/psicoestud.v24i0.44183>

- ShaemiBarzoki, A., Attafar, A., & RezaJannati, A. (2012). An Analysis of Factors Affecting the Employees Motivation based on Herzberg's Hygiene Factors Theory (The study: Golpayegan City Saipa Corporation Industrial Complex's Staff ). *Australian Journal of Basic and Applied Sciences*, 6(8), 115–123.
- Shafiee, H., Razminia, E., & Zeymaran, N. K. (2016). Investigating the Relationship between Organizational Structure Factors and Personnel Performance. *International Journal of Management, Accounting & Economics*, 3(2), 160–165.
- Stankovska, G., Angelkoska, S., Osmani, F., & Grncarovska, P. (2017). BCES Conference Book. *Higher Education*, 15.
- Van Der Kolk, B., Van Veen-Dirks, P. M. G., & Ter Bogt, H. J. (2019). The Impact of Management Control on Employee Motivation and Performance in the Public Sector. *European Accounting Review*, 28(5), 901–928.  
<https://doi.org/10.1080/09638180.2018.1553728>
- Wan Yusoff, W. F., Kian, T. S., & Idris, M. T. M. (2013). Herzberg's Two Factors Theory on Work Motivation: Does Its Work For Todays Environment? *Global Journal of Commerce and Management Perspective*, 2(5), 18–22.
- Wang, J., & Hooi, R. (2019). The moderation effect of workplace experience on innovation motivation: A study of STEM faculty in Singapore. *Technology Analysis & Strategic Management*, 31(7), 862–874.  
<https://doi.org/10.1080/09537325.2019.1566524>

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