

Assessment of psychosocial risks among the workers of the Regional Directorate of Production – Houd Berkaoui - Ouargla in light of certain classification variables

Belfedhal Radhia^{1,*}, Gharbi Sabrina²

¹ Belfedhal Radhia, Kasdi Merbah University, Ouargla. (Algeria)

² Gharbi Sabrina, Kasdi Merbah University, Ouargla. (Algeria)

Laboratory of Psychology and Quality of Life

Received: 2024-11-06; **Revised:** 2026-01-29; **Accepted:** 31-03-2026

Summary:

The accelerated digital transformation and the growing integration of automation and artificial intelligence have intensified the complexity of organizational environments. This shift has reshaped occupational risks, introducing new risks and amplifying existing ones. A systematic and rigorous analysis of these risks is essential to protect employees and sustain institutional performance in an evolving professional landscape. The study aims to determine the level of psychosocial risks among workers of the Regional Directorate of Production – Houd Berkaoui, Ouargla, in the workplace according to the following classification variables: (gender, age, and seniority). To address the research hypotheses, the descriptive-analytical method was employed. The study sample consisted of (71) workers from the Regional Directorate of Production in the Houd Berkaoui, Ouargla, selected through simple random sampling. A questionnaire developed by the researcher was used as a tool to measure psychosocial risks. Data were statistically processed using mean, standard deviation, (t-test) for differences, and one-way (ANOVA), utilizing the SPSS program. The results revealed an average level of psychosocial risks, with statistically significant differences in psychosocial risk levels in the workplace based on the variables of (age and seniority). No statistically significant differences were found in psychosocial risk levels based on gender.

Keywords: Psychological risks; social risks; hydrocarbons sector.

I- Introduction :

The work environment constitutes a complex area where multiple dimensions intersect, all of which can directly influence the health and safety of workers. Alongside traditional risks associated with physical injuries during the execution of work tasks, there has been increasing recognition in recent years of the importance of understanding the psychological and social impacts inherent in the work environment. Studies have underscored that psychological factors such as work-related stress, moral and sexual harassment, and difficulties with adjustment are central determinants of worker performance, job satisfaction, and the feeling of professional security.

Despite growing interest in these aspects, many organizations still primarily concentrate on immediate physical hazards, largely neglecting the psychological effects which may be less apparent but more profound in their impact on the worker. Furthermore, the extent to which individual workers are affected by these risks varies according to multiple personal and professional characteristics, an aspect that has not always received sufficient analysis in the previous literature concerning the work environment.

Stemming from this gap the current research aims to investigate the forms of psychosocial risks in the work environment, evaluate their levels according to a set of classification variables, and explore possible avenues for their mitigation. This study aspires to provide a deeper understanding of these risks in a manner that contributes to building a safer and healthier environment for the worker on both professional and psychological levels.

I.1. Problem Statement:

Work plays a central and influential role in individuals' lives, functioning as a primary source of personal fulfillment, financial independence, and overall professional development. In recent decades, the workplace has undergone profound transformations driven by rapid technological advancements, globalization, and widespread digitization. These developments have reshaped organizational structures and work expectations, creating increasingly complex environments that place substantial demands on employees.

Despite the growing body of literature addressing workplace dynamics and employee well-being, there remains limited empirical understanding of how emerging work-related pressures specifically affect individuals' physical and psychological resources. Existing studies often overlook the cumulative impact of continuous organizational changes, technological acceleration, and misalignment between organizational systems and employees' needs. This gap limits the ability of organizations to design effective strategies that mitigate burnout, maintain motivation, and support adaptive capacity.

Therefore, the present study seeks to examine the mechanisms through which modern workplace transformations influence employees' motivation, self-worth, and perceived ability to cope with evolving professional challenges. By addressing this gap, the study aims to provide a deeper understanding of the factors that exacerbate work-related strain and to offer evidence-based insights that can guide organizations in creating supportive and sustainable work environments.

I. 2. Research Questions:

- a. What is the level of psychosocial risks in the workplace among workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla?
- b. Are there statistically significant differences in the level of psychosocial risks in the workplace among workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla, attributable to the variable of gender?
- c. Are there statistically significant differences in the level of psychosocial risks in the workplace among workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla, attributable to the variable of age?
- d. Are there statistically significant differences in the level of psychosocial risks in the workplace among workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla, attributable to the variable of seniority?

I .3. Hypotheses:

- a. There is a high level of psychosocial risks in the workplace among workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla.
- b. There are no statistically significant differences in the level of psychosocial risks in the workplace among workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla, attributable to the variable of gender.
- c. There are no statistically significant differences in the level of psychosocial risks in the workplace among workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla, attributable to the variable of age.
- d. There are no statistically significant differences in the level of psychosocial risks in the workplace among workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla, attributable to the variable of seniority.

I .4.Importance of the Study:

- II This study derives its significance from the critical role that psychosocial risks play in the workplace and their detrimental effects on both employees and organizations, ultimately hindering the achievement of organizational objectives. These risks may lead to considerable financial and human losses, particularly in the hydrocarbons sector, which constitutes a vital pillar of Algeria's

economy and employs a substantial portion of its workforce. Accordingly, the significance of this study lies in identifying and analyzing psychosocial risks among workers at the Regional Directorate of Production in Hassi Berkaoui, Ouargla. Moreover, the study aims to emphasize the importance of promoting employees' psychological well-being as a means to reduce psychological and social problems and to provide a comprehensive understanding of all dimensions of psychosocial risks.

I.5. Objectives of the Study:

- To identify the level of psychosocial risks in the workplace among workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla.
- To explore the differences in psychosocial risks in the workplace among workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla, in light of classification variables (gender, age, seniority).

I .6. Scope of the Study:

The scope of the study is defined as follows:

- Temporal Scope: From May to August 2024.
- Spatial Scope: Regional Directorate of Production, Houd Berkaoui, Ouargla.
- Human Scope: Workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla.

I .7. Concepts of the Study:

a) Psychosocial Risks Terminologically:

- b) Psychosocial risks refer to a set of work-related factors that may adversely affect employees' mental health and physical well-being. These risks stem from diverse sources within the work environment, including workload, working conditions, management practices, and social interactions (Kreenai, 2018). Furthermore, psychosocial risks are defined as the various pressures that individuals may experience and that influence their functioning at work. Several scholars argue that these risks encompass all circumstances that negatively affect an employee's mental health or overall well-being in the workplace, such as discomfort, reduced self-esteem, stress, addiction, burnout, suicide, harassment, violence, and discrimination (Skil, 2023).

c) Procedural Definitions:

- **Psychosocial Risks:** Psychosocial Risks refer to the set of hazards that workers encounter in their work environment, manifested in negative factors arising from the workplace that affect the mental and physical health of the employee. These risks are measured by the responses of workers at the Regional Directorate of Production in the Houd Berkaoui, Ouargla, to the items on the psychosocial risks scale, encompassing dimensions such as sexual and moral harassment, work stress, tribal discrimination, and social relationships.
- **Work Stress:** Work Stress is the sum of factors affecting an individual within their work environment, represented by organizational, social, or physical factors that lead to psychological or physiological disturbances affecting the employee's performance.
- **Moral and Sexual Harassment:** Moral and Sexual Harassment refers to inappropriate behavior of a sexual nature, which is unacceptable, whether it is verbal suggestions, gestures, or physical contact directed from one person to another, regardless of their gender.
- **Tribal Discrimination:** Tribal Discrimination is an unhealthy behavior directed toward individuals or groups within an organization aimed at tribal discrimination, intended to achieve

personal interests for members of a particular tribe, or to demean and differentiate against others who do not belong to the same tribe or lineage.

- **Work Relationships:** Work Relationships encompass the totality of formal and informal relationships that have either a positive or negative impact on individuals' psychology and their performance within the organization.

I .8. Theoretical Framework of the Study:

Psychosocial risks are among the most significant topics in the field of occupational health and safety due to their substantial impact on the physical and mental health of workers, as well as on the stability of the organization and its ability to achieve its objectives. This necessitates highlighting their concept, the most prevalent types, and the key factors contributing to their occurrence.

A. Definition of Psychosocial Risks:

The global standard (2021) ISO 45003 defines psychosocial risks as "a combination of the probability of exposure to work-related risks of a psychosocial nature, the severity of harm, and health issues that may arise from these risks. Psychosocial risks in the workplace encompass risks associated with the work environment, equipment, and hazardous tasks" (Ibrahim, 2024).

Kreenai (2018) also views psychosocial risks as "a set of risks faced in the professional field, which may affect employees' mental health as well as their physical safety. These risks have multiple causes and can arise from various dimensions of work (workload, working conditions, management, social relationships, etc.)" (Kreenai, 2018).

According to the European Agency for Safety and Health at Work, psychosocial risks are among the most difficult risks to control compared to other occupational hazards and negatively affect both worker health and the organization (Oubrahem and Bouzrifa, 2020).

"It is clear that psychosocial risks represent a genuine threat to the mental and physical health of individuals, significantly impacting their job performance and posing a challenge for human resource management within the organization. These risks contribute to increased levels of stress, anxiety, and depression among employees, leading to a decline in job satisfaction and reduced productivity. Furthermore, these conditions exert pressure on the work environment and result in higher employee turnover rates, causing material and human losses that are difficult to quantify or mitigate."

B. Key Causes of Psychosocial Risks:

Several factors contribute to the occurrence of psychosocial risks in the work environment, impacting individuals' mental health and creating negative psychological and professional consequences. The most significant factors include:

- Individual Factors: such as workload perception, role conflict, personal circumstances, etc.
- Organizational Factors: including job design, organizational policies, work organization, etc.
- Social Factors: such as social relationships, professional conflicts, value conflicts, etc. (Kreenai, 2018).

C. Types of Psychosocial Risks:

The types of psychosocial risks in the workplace are varied, with the most common being work stress, moral and sexual harassment, tribal discrimination, and work relationships.

1. Work Stress:

No individual is exempt from experiencing psychological stress to some degree. A simple example is the stress that students feel during exams, not to mention the stress that their parents experience as well.

We also encounter psychological stress resulting from alarm and fear when a speeding car driven recklessly approaches us (Shahat Rabie, 2010).

Selye defines stress as "adaptation diseases, with stress being experiences that individuals strive to prevent and try to forget about over time" (Jilda, 2009).

Additionally, French, Rogers, and Cobb define stress as "a mismatch or lack of compatibility between an individual's skills and abilities and the demands of their job" (Nouira and Sweib, 2020).

2. Sexual and Moral Harassment:

The International Labour Organization defines it as "unwelcome conduct of a sexual nature or behavior based on gender that affects the dignity of both men and women in the workplace" (Kreenai, 2018).

Sexual harassment is further defined as "harassment experienced by working women within professional relationships, originating from a colleague or superior towards a female colleague or subordinate on a recurring basis, involving verbal harassment with obscene language, offensive remarks violating decency, or even physical insinuations. It may include persistent requests for meetings, inappropriate sexual questions, suggestive looks, and escalate to touching, groping, and, in some cases, the use of force through exploitation" (Haj Ali and Hamash, 2022).

3. Tribal Discrimination:

Discrimination is defined as treating others in a biased manner characterized by harshness and behaviors marked by arrogance and inequality. When this discrimination is coupled with tribal favoritism, it results in biased treatment against individuals outside of the tribe, sect, or clan (Kreenai, 2018).

4. Work Relationships:

Work relationships are among the most crucial tools for ensuring the success of an organization, achieving its objectives, meeting workers' needs, and fulfilling their goals. In this regard, "Mohammed bin Abdullah Al-Masaad" points out that "an employee's future job stability depends on the extent to which they build positive relationships in the work environment or their personal life" (Kheladi, 2013).

Elton Mayo describes work relationships by stating that "individuals who make up a work department are not merely individuals; rather, they form a group whose members are connected by stable, patterned relationships—between the worker and their colleagues, the worker and their superiors, and the worker and the organization's policies."

"Abdel Ghani" suggests that work relationships may sometimes reflect social maladjustment, defined as "an individual's inability to establish satisfying social relationships—relationships that one finds personally fulfilling and that are acceptable to others. Such relationships are characterized by tolerance, cooperation, and altruism, and are free from aggression, suspicion, dependence, superiority, or a need for sympathy" (Abdel Ghani, n.d.).

D. Stages of Psychosocial Risks:

According to Canadian physician Hans Selye, a person's response to stress, in all its forms, goes through three stages:

- 1) **Alarm Stage:** This is the initial stage, where an individual's resistance to stress is weak. The psychological pressure triggers a counter-response in the control center, activating their defense mechanisms.
- 2) **Resistance Stage:** At this stage, the individual reaches their maximum capacity for adaptation. Ideally, they return to a state of balance, but if stressors persist, they move to the next stage.
- 3) **Exhaustion Stage:** This stage occurs when an individual fails to regain balance, and the stress factor continues to exert influence or is particularly intense. The body's energy is depleted, and

adaptation mechanisms collapse again, leading, if prolonged, to physical or emotional breakdown, or even death.

This is the pathological stage of stress, during which stress-related or adaptation diseases may develop, such as gastric ulcers, asthma, and neurological disorders, among others (Oumeria and Ben Abou, 2017).

E. Manifestations of Psychosocial Risks:

- Decline in production rates and decreased efficiency and productivity of employees.
- Increase in complaints and grievances from employees.
- Desire to leave the job and rise in absenteeism rates.
- Increase in work errors and financial losses.
- Emergence of aggressive behavior among employees.
- Fragmentation of groups and significant emergence of tribalism and prejudice.

F. Prevention of Psychosocial Risks:

According to Al-Rasheedi (2021), the main methods for preventing psychosocial risks are as follows:

- Providing special care for new employees to give them the opportunity to adapt to the new work environment through continuous training.
- Avoiding monotony in work by introducing as much variety as possible, involving employees in decision-making, giving them a sense of importance and responsibility, and utilizing their creative abilities.
- Applying sound management practices to prevent conflicts and friction among employees.
- Creating a suitable social environment through clubs, outings, and solving employees' social issues such as housing, transportation, education, recreation, and health.
- Proper selection of employees through psychological assessments to place each worker in the role best suited to them psychologically.
- Psychological monitoring of employees by tracking absenteeism and accident rates for early detection of psychological disturbances (Niqbil et al., 2023).

II – Field Study Procedures:

II .1. Study Methodology:

The study relied on the descriptive-analytical method, which aligns well with the nature of this topic, as this method is widely used in psychological and educational research.

II .2. Exploratory Study:

An exploratory study was conducted with a sample of 30 workers from the Regional Directorate of Production - Houd Berkaoui - Ouargla, selected through simple random sampling, over the period from May 5 to May 20, 2024.

II .3. Description of the Study Tool:

After reviewing the theoretical literature as an essential stage of the research process, a questionnaire was developed. The first part of the questionnaire included demographic data (gender, age, seniority), while the second part contained 26 items divided into four dimensions: work stress, sexual and moral harassment, tribal discrimination, and social relationships. Responses were rated on a five-point scale (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree), with scores of (1, 2, 3, 4, 5) for positive items and (5, 4, 3, 2, 1) for negative items.

The questionnaire was administered to a sample of 30 individuals, randomly selected from the main study sample. After verifying the psychometric properties of the tool using internal consistency validity, intrinsic validity, and reliability through Cronbach's Alpha method, as well as consulting expert opinions for validation, modifications and deletions were made. The final questionnaire contained 23 items distributed across four unevenly balanced dimensions.

Table (1): It clarifies the division of items across dimensions.

Dimensions	Paragraphs	Number
Sexual and mental harassment	4, 5, 17, 7	4
Working under pressure	11, 12, 13, 2, 14, 3, 16	7
Tribal discrimination	8, 22, 15, 1, 9, 20, 10	7
labor relations	18, 19, 21, 6, 23	5

The Statistical Package for the Social Sciences (SPSS) program was used for statistical analyses.

II .4.Psychometric Properties of the Instrument:

4.1 .Validity:

4.1.1 . Judges' Validity: To ensure the quality of the tool designed to measure the trait, the instrument was presented to a group of specialized judges, consisting of four professors from the fields of psychology and educational sciences at the University of Ouargla and the University of Tamanghasset. This was done to gather their opinions and leverage their expertise in the field of scientific research regarding the items of the scale, the clarity of the statements, the appropriateness of the alternatives, and the personal data collected. Additionally, the judges were invited to provide any comments or suggestions regarding the instrument. All recommendations and suggestions based on the professors' feedback were incorporated, making the questionnaire ready for implementation.

4.1.2 . Internal Consistency Validity:

Table (2): illustrates the correlation coefficient of the total score for each dimension of the scale with the total score of the overall scale.

Dimensions of the Questionnaire	Correlation Coefficient
Sexual and mental harassment	0.66
Work Stress	0.77
Tribal Discrimination	0.85
Work Relationships	0.39

The table indicates that the correlation coefficients between the total score for each dimension and the total score for the overall scale are statistically significant at the 0.01 level. Thus, we can conclude that the scale is valid for its intended measurement and is suitable for use in the primary study.

4.2. Reliability:

To further ensure the reliability of the instrument, we utilized Cronbach's alpha coefficient. The Cronbach's alpha coefficient was calculated for each of the four dimensions individually, and certain items that did not belong to the dimensions were removed to increase the value of the alpha coefficient.

Table (3): illustrates the reliability of the dimensions of the psychosocial risk scale using Cronbach's alpha coefficient.

Dimensions	Number of Items	Cronbach's Alpha Coefficient
Moral and Sexual Harassment	4	0.73
Work Stress	7	0.70
Tribal discrimination	7	0.71
Work Relationships	5	0.66

The results in the table indicate that the Cronbach's alpha coefficient for most dimensions is greater than or equal to 0.70, which is considered an acceptable level of reliability, except for the dimension of

Work Relationships, which has a moderate value of 0.66. This indicates that the instrument possesses a high degree of reliability.

5. Basic Study:

The basic study was conducted at the Regional Directorate of Production in the Houd Berkaoui, Ouargla, during the period from May to July 2024. The total research population consisted of 1,339 employees from the Regional Directorate of Production in the Houd Berkaoui, Ouargla. A sample of 100 individuals was randomly selected, and 78 responses were retrieved. After verification, 7 responses were excluded, resulting in an actual sample size of 71 individuals. The questionnaire contained 23 items divided into 4 dimensions and included categorical variables represented by 1) gender, 2) age, and 3) seniority.

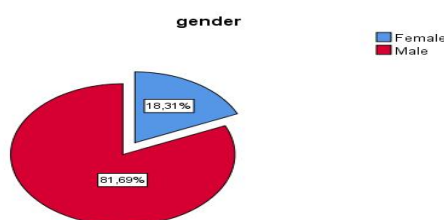
5.1 .According to Gender Variable:

Table (4): shows the distribution of sample members by gender.

Gender	Frequencies	Percentage
Female	13	18.31%
Male	58	81.69%
Total	71	100%

It is evident from (Table 4) that the frequency of male workers is higher than that of females, with 58 male workers from the Regional Directorate of Production in the Houd Berkaoui, Ouargla, representing 81.69% of the total compared to 13 female workers, accounting for 18.31%.

Figure (1): illustrates the distribution of sample members according to the gender variable.



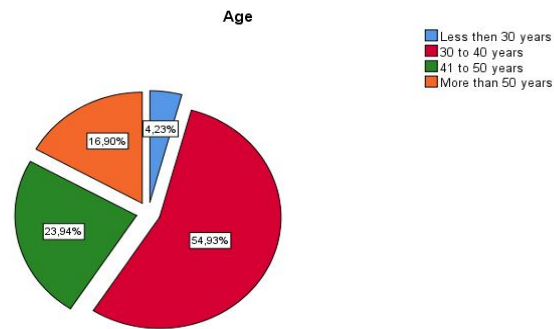
5.2 .According to Age Variable:

Table (5): presents the distribution of sample members by age.

Percentage	Frequencies	Age
4.23%	3	Less than 30 years
54.93%	39	30 to 40 years
23.94%	17	41 to 50 years
16.90%	12	More than 50 years
100%	71	Total

From (Table 5), it is clear that the highest percentage for the age variable is 54.93%, which is in favor of the age group from 30 to 40 years, with 39 workers. This is followed by the age group of 41 to 50 years, with 23.94% and 17 workers. The third rank goes to the age group of more than 50 years, with 16.90%, amounting to 12 workers, while the least represented group is less than 30 years, accounting for 4.23% with only 3 workers from the Regional Directorate of Production in the Houd Berkaoui, Ouargla.

Figure (2):illustrates the distribution of sample members according to the age variable.



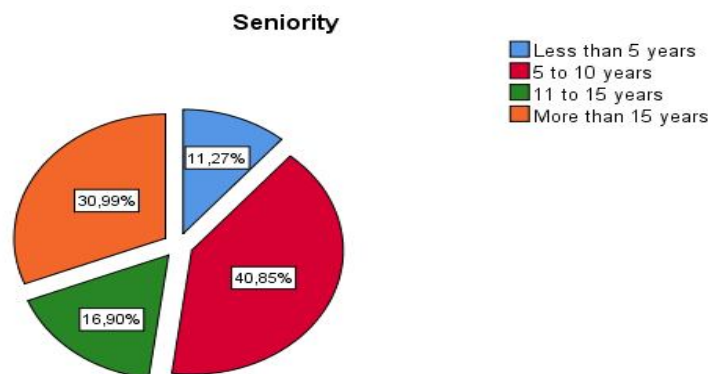
5.3 According to Seniority Variable:

Table (6): presents the distribution of sample members by seniority.

Seniority	Frequencies	Percentages
Less than 5 years	8	11.27%
5 to 10 years	29	40.85%
11 to 15 years	12	16.90%
More than 15 years	22	30.99%
Total	71	100%

From (Table 6), it is evident that the largest percentage is 40.85%, which belongs to the group of 5 to 10 years, with 29 workers. This is followed by the group of more than 15 years, totaling 22 workers. The third rank is for the group of 11 to 15 years, with a percentage of 16.90% and 12 workers, and finally, the group of less than 5 years is estimated at 11.27%, consisting of 8 workers.

Figure (2):illustrates the distribution of sample members according to the seniority variable.



6. Statistical Methods Used in Data Processing:

The Statistical Package for the Social Sciences (SPSS) software was used to measure the psychometric properties (validity and reliability). After verifying data normality, the parametric statistical method was employed in the primary study. The statistical methods applied included the following:

- Arithmetic mean,
- Standard deviation,

- Cronbach's alpha coefficient,
- Internal consistency,
- One-sample t-test,
- Independent-samples t-test,
- One-way analysis of variance (ANOVA),
- Frequencies and percentages calculation.

III- Presentation and Discussion of Results in Light of the Hypotheses:

III .1.Presentation and Discussion of the First Hypothesis:

The first hypothesis states the following: There is a high level of psychological and social risks among workers in the Regional Production Directorate – Houd Berkaoui - Ouargla.

To verify the validity of this hypothesis, we used the arithmetic mean and standard deviation, applying the one-sample T-test to determine the high and low levels of responses from the sample group on the psychological and social risks scale, comparing it with the calculated hypothetical mean as follows:

- Number of items $\times$ (minimum number of response options + maximum number of response options) / 2

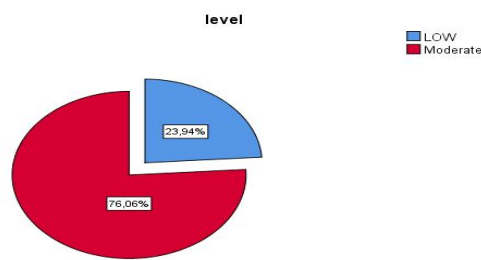
Table (7): illustrates the arithmetic means and standard deviations for the psychological and social risks and their dimensions.

Dimensions	Hypothetical Mean	Arithmetic Mean	Standard Deviation	Level
Moral and Sexual Harassment	12	11.30	3.42	Moderate
Work Pressure	21	19.33	4.25	Moderate
Tribal Discrimination Work Relationships	21	21.47	4.36	Moderate
Overall Score for Psychosocial Risk Levels	15	9.92	2.33	Low
	69	62.05	10.23	Moderate

Table (07) shows that the arithmetic mean for the psychosocial risk level among employees of the Regional Production Directorate in the Barkawi Basin, Ouargla, is 62.05 with a standard deviation of 10.23. This mean is relatively close to the hypothetical mean of 69 and falls within the range of 54-84, indicating a moderate level based on the five-point Likert scale.

The study also reveals that the arithmetic mean for moral and sexual harassment is 11.30, with a standard deviation of 3.42, close to its hypothetical mean of 12 and within the 10-15 range, indicating a moderate level. The mean for work pressure is 19.33 with a standard deviation of 4.25, again moderate when compared to the hypothetical mean of 21 and within the range of 17-26, according to the five-point Likert scale.

The findings further indicate that the mean for tribal discrimination is 21.47 with a standard deviation of 4.36, slightly above the hypothetical mean of 21, and within the range of 17-26, thus classified as moderate. Finally, the mean for work relationships is 9.92 with a standard deviation of 2.33, lower than its hypothetical mean of 15 and within the 5-11 range, indicating a low level according to the Likert classification.

Figure (04): illustrates the level of psychological and social risks among the study sample.

The findings of the current study align with those of Obeiram and Bouzarifa (2020), which revealed that most workers consistently observe behaviors and issues related to psychosocial risks in their workplace. Similarly, Ahmad Qrainey's (2018) study confirmed the presence of psychosocial risks in the work environment, categorized by severity and impact, including: occupational stress, job dissatisfaction, violence, sexual harassment, poor occupational compatibility, job insecurity, and tribal discrimination. These findings suggest that workers at the Regional Directorate of Production in the Hassi Berkane Basin, Ouargla, are exposed to psychosocial risks, partly due to moderate work pressure associated with the challenging tasks and difficult work locations they face, such as oil fields, refining branches, and workshops. This conclusion is corroborated by the study of Intidham Ahmed Jassem, which highlighted a statistically significant link between work stress and workload on functional performance in national banks. Furthermore, moral and sexual harassment was found at a moderate level, indicating that some female workers experience harassment within the institution. This finding is consistent with the study by Amer and Neyrouz (2020), which reported that nearly half of the female university employees experienced harassment. Regarding tribal discrimination, workers faced it at a level above average, aligning with Qrainey's (2018) findings; this may be attributed to the nature of Algerian society, with its cultural diversity and variety of dialects. In contrast, the level of work-related relationships was low, likely due to continuous interactions among workers and their stable, supportive group dynamics, which help mitigate this type of risk.

III .2.Presentation and Analysis of the Second Hypothesis:

The hypothesis states, "There are no statistically significant differences in the level of psychological and social risks at work among employees of the Regional Production Directorate – Houd Berkaoui , Ouargla – attributable to gender." To test the validity of this hypothesis, an independent samples t-test was employed to calculate the differences, with the results shown in the following table:

Table (8): T-test Results for Differences in Psychological and Social Risks by Gender

Gender	Sample Size	Mean	Standard Deviation	T-Value	Significance Level	Statistical Decision
Female	13	67.30	9.75	2.09	0.40	Not Significant
Male	58	60.87	10.5			
Total	71	/	/			

It is clear from Table 8 that the mean score for females (67.30) with a standard deviation of (9.75) in terms of psychological and social risks is higher than the mean score for males (60.87) with a standard deviation of (10.05). The t-value of (2.09) is not statistically significant, as the significance level (sig = 0.40) exceeds 0.05. Thus, there are no statistically significant differences, and we accept the hypothesis stating that "There are no statistically significant differences in the level of psychological and social risks among employees of the Regional Production Directorate – Houd Berkaoui , Ouargla – attributable to gender."

These results suggest that both male and female employees are exposed to similar levels of psychological and social risks and work under comparable conditions, which explains the lack of significant differences between genders in terms of exposure to these risks. In other words, the hypothesis

indicates no notable difference in the level of exposure to psychological and social risks between men and women in the workplace, and any differences that may appear are minimal and not influenced by gender itself. This implies that gender is not a decisive factor in determining an individual's exposure to these risks, and both genders are equally exposed to such psychological and social risks. However, these findings contrast with those of Qarini (2017), which confirmed statistically significant differences in the level of psychological and social risk severity according to gender.

III .3.Presentation and Discussion of Hypothesis Three:

The hypothesis posits that "there are no statistically significant differences in the level of psychological and social risks among workers in the Regional Production Directorate -Berkawi Basin-Ouargla attributed to the age variable." To verify the hypothesis, a one-way analysis of variance (ANOVA) test was employed to determine the significance of differences in psychological and social risks based on age.

Table (09): presents the ANOVA results on psychological and social risks according to the age variable.

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square	F Value	Significance Level	Statistical Decision
Between Groups	1712.26	3	570.75	6.79	0.004	Significant
Within Groups	5625.50	67	83.96			
Total	7337.77	70	/			

From Table 09, it is evident that the sum of squares between groups is 1712.26, with 3 degrees of freedom and a mean square of 570.75. The sum of squares within groups is 5625.50, with 67 degrees of freedom and a mean square of 83.96. The F-value is 6.79, which is statistically significant since $\text{sig} = 0.004$, which is less than 0.01. Consequently, we reject the hypothesis stating that "there are no statistically significant differences in the level of psychological and social risks among workers in the Regional Production Directorate -Berkawi Basin- Ouargla attributed to the age variable" and accept the alternative hypothesis, which posits that "there are statistically significant differences in the level of psychological and social risks among workers in the Regional Production Directorate -Berkawi Basin-Ouargla attributed to the age variable."

This result indicates that the degree of risk exposure varies across different age groups, suggesting that age plays a significant role in the level of risks workers face and their approach to managing these risks. As workers age, they tend to develop a greater awareness of these risks and learn effective management strategies. On the other hand, the findings also show that employees in various age groups encounter different levels of psychological and social risks in the workplace. This difference may stem from factors such as the ability to handle work stress, past life experiences, adaptability to technological and social changes, or physiological and psychological changes that may influence individuals' responses to work situations and pressures. Thus, age is considered a significant factor in determining exposure to psychological and social risks, with individuals in different age groups facing distinct challenges within the work environment.

III.4 Presentation and Discussion of Hypothesis Four:

The hypothesis posits that "there are no statistically significant differences in the level of psychological and social risks among workers in the Regional Production Directorate -Berkawi Basin-Ouargla attributed to the seniority variable." To test this hypothesis, a one-way analysis of variance (ANOVA) test was used to determine the significance of differences in psychological and social risks based on seniority.

Table (10): presents the ANOVA results on psychological and social risks according to the seniority variable.

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square	F Value	Significance Level	Statistical Decision
Between Groups	1369.14	3	456.38	5.12	0.003	Significant
Within Groups	5968.63	67	89.08			
Total	7337.77	70	/			

As shown in Table 10, the sum of squares between groups is 1369.14, with 3 degrees of freedom and a mean square of 456.38. The sum of squares within groups is 5968.63, with 67 degrees of freedom and a mean square of 89.08. The F-value is 5.12, which is statistically significant as $\text{sig} = 0.003$, which is less than 0.01. Thus, we reject the hypothesis stating that "there are no statistically significant differences in the level of psychological and social risks among workers in the Regional Production Directorate - Berkawi Basin- Ouargla attributed to the seniority variable" and accept the alternative hypothesis, which states that "there are statistically significant differences in the level of psychological and social risks among workers in the Regional Production Directorate -Berkawi Basin- Ouargla attributed to the seniority variable."

The findings suggest that workers' seniority and years of experience expose them to higher psychological and social risks compared to new workers, creating differences among them. Additionally, longer work periods involve interaction with a greater number of people and situations, thus increasing risk exposure compared to newcomers. In other words, individuals with varying durations of service (e.g., new employees versus those with long-standing experience) face differing experiences regarding psychological and social risks. This difference may result from factors like adaptability to pressure, experience in managing challenges, or the nature of social relationships that evolve over time within the work environment. Therefore, tenure plays a role in determining workers' exposure to these risks, with both more and less experienced individuals facing varying levels of psychological and social risks. The current study's findings contrast with the study by Ben Boukraine and Ben Aoun (2017), which concluded that there were no statistically significant differences in the three dimensions (psychological demands, decisional autonomy, social support) of the work environment according to the seniority variable.

IV- Proposals:

1. Raising awareness of the importance of psychological and social risks in the workplace.
2. Emphasizing the need for psychologists within organizations to provide awareness and support workers in overcoming these risks.
3. Developing training programs and strategies to prevent psychological and social risks at work.
4. Conducting further studies focused on psychological and social risks and the importance of involving psychologists in these studies.

Referrals and references:

1. **Abdelbaki, B. B., and Al-Tayeb, A. A. (2017). The Impact of the Psychosocial Work Environment on the Mental Health of Human Resources in Institutions for People with Special Needs. *Excellence Journal of Economics and Management Research*, 1(1), 196-209.**
2. **Abdelghani, A. M. (n.d.). Foundations and Applications of Industrial Psychology. In *Foundations and Applications of Industrial Psychology*.**
3. **Ghreni, A. (2018). A Proposed Model for Assessing Psychosocial Risks in the Workplace among Medical Staff.**
<http://dspace.univ-djelfa.dz:8080/xmlui/handle/123456789/1246>
4. **Hadj Ali, H., and Hamash, A. (2022). The Impact of Sexual Harassment on Professional Stability of Working Women: A Field Study at the University Hospital Center in Tizi Ouzou Province. *Journal of the Pillars*, 5(2), 395-414.**
5. **Ibrahim, H. (2024). Strategies for Managing Psychosocial Risks in the Workplace—Towards the Development of a Culture of Occupational Health and Safety. *Journal of Development and Human Resource Management*, 11(1), 140-163.**
6. **Jelda, S. (2009). Organizational Behavior and Modern Management Theories. Osama Publishing House, Jordan.**
7. **Khalij, A., and Besaai, T. (2022). The Peculiarities of Regulating the Hydrocarbon Sector in Algerian Law. *Comparative Legal Studies*, 8(1), 317-335.**
8. **Kheladi, Y. (2013). Professors' Perspectives on the Degree of Contribution of Human Relations to Mitigating Suffering in the Workplace.**
9. **Lasefer, R., and Douar, F. A. (2022). The Relationship Between Psychosocial Risk Factors and Work-Related Stress Among Workers in the Algerian Foundry Industry. *Rawafed Journal for Studies and Research in Social and Human Sciences*, 6(3), 189-206.**
10. **Nweira, I., and Asweib, M. (2020). Professional Pressures and Their Relationship with Job Satisfaction Among Faculty Members at the University of Benghazi: A Survey Study of the Faculty of Education in Benghazi. *Al-Ibrahimi Journal of Social and Human Sciences*, 4(2), 45-66.**
11. **Omara, M., and Ben Abbou. (2017). Management of Psychosocial Risks in the Algerian Institution: A Case Study of Employees at the National Agency for Investment Development in "Mascara."**
12. **Oubrahem, W., and Bouzrifa, H. (2020). Diagnosis of Psychosocial Risks at the National Sonatrach Company—Petroleum Refining Branch—Skikda. *Human Resource Development*, 15(1), 208-232.**
13. **Sekil, R. (2023). The Concept of Psychosocial Risks in the Workplace. *Revue Des Sciences Humaines*, 34(1), 129-139.**
14. **Shahta Rabei, M. (2010). Industrial Psychology. Al-Maisara Publishing and Printing House.**
15. **Revue Des Sciences Humaines, 34(1), 129□139.**
16. **The impact of psychosocial environment factors on mental health of human resources of special education schools.**
17. **<http://dspace.univdjelfa.dz :8080/xmlui/handle/123456789/1246>**
18. **<https://www.eurofound.europa.eu/en/publications/2023/psychosocial-risks-workers-well-being-lessons-covid-19-pandemic>**

How to cite this article by the APA method

Belfedhal Radhia , Gharbi Sabrina , (2026) **Assessment of psychosocial risks among the workers of the Regional Directorate of Production – Houd Berkaoui - Ouargla in light of certain classification variables** . *Journal EL-Bahith in Human's and Social's Sciences* , Vol 18 (1) / 2026 .Alegria : Kasdi Marbah Universit Ouargla ,(P.P.129-142)