

Preventive Culture as an Approach to Enhancing the Performance of Service Institutions: A Case Study of the National Social Insurance Fund for Salaried Workers (CNAS) – Batna,

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Abstract: This study highlights the importance of preventive culture as a strategic mechanism for improving the performance of service institutions, through a case study of the National Social Insurance Fund for Salaried Workers (CNAS) – Batna Agency. Using a deductive and qualitative approach based on interviews, observation, and document analysis, the research explores the level of preventive awareness and organizational practices. Findings show that preventive culture enhances institutional performance by reducing workplace accidents and absenteeism, improving service quality, and increasing satisfaction among employees and beneficiaries. The study concludes that prevention is not limited to compliance with regulations but represents an integrated institutional culture that reflects administrative maturity, responsibility, and operational effectiveness, thereby contributing to sustainable service performance in public organizations

Keywords: Preventive culture, Service performance, Public institutions, Occupational health and safety, Preventive organizational awareness.

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Introduction:

Preventive culture is one of the fundamental pillars in building modern organizations, particularly those operating in the service sector, where the human factor constitutes the core of performance and the quality of services provided. With the increasing organizational challenges and occupational as well as administrative risks, it has become essential to establish an institutional culture based on risk awareness, proactive behavior, and collective responsibility in preventing errors and mitigating their consequences.

Recent studies indicate that adopting preventive culture principles contributes significantly to improving performance indicators by enhancing discipline, reducing absenteeism rates, and increasing service efficiency and quality.

In this context, public institutions of a social nature-such as the *National Social Insurance Fund for Salaried Workers (CNAS)*-play a crucial role in ensuring the stability of Algeria's health and social systems. Given the sensitive nature of its mission related to citizen services and the continuity of administrative and service performance, fostering a preventive culture within such an institution becomes a decisive factor in ensuring organizational effectiveness and service sustainability.

Accordingly, this study aims to shed light on preventive culture as a strategic approach to improving institutional performance in service organizations, focusing on the experience of CNAS Batna as an applied model. The objective is to understand the level of employee awareness regarding preventive practices and their impact on the quality of service performance.

Research Problem

How does preventive culture contribute to improving the performance of the National Social Insurance Fund for Salaried Workers (CNAS) – Batna as a service institution ?

To address this research question, the study was structured around three main components :

- The conceptual and theoretical framework

- The field framework of the study
- The analysis and discussion of the empirical findings

I- The Conceptual and Theoretical Framework:

I.1. The Concept of Preventive Culture

1- The Nature of Preventive Culture

1-1 The Concept of Culture

Culture is one of the most significant topics that has long attracted the attention of researchers, as it determines the general approach individuals follow and allows for predicting their behavior. Every society is distinguished from others by its own characteristics, customs, and traditions, which make it unique. The more positive the culture, the more developed the society becomes, following sound norms and systems. In this sense, culture defines the framework within which people act and from which they rarely deviate.

Etymologically, the term “*culture*” (from the Latin *cultura*) was originally used to denote the care of land and livestock. In ancient Rome, it came to mean the cultivation of the soil. Up until the seventeenth century, the term referred primarily to agriculture. However, in the eighteenth century, it evolved to express intellectual development, referring to an individual’s mental cultivation and progress as a result of learning and practice.

Culture has been defined as “that complex whole which includes knowledge, beliefs, art, morals, law, customs, and any other capabilities and habits acquired by man as a member of society” (Edward B. Tylor, 1871) ; Malinowski, on his part, defined culture as comprising inherited skills, artifacts, techniques, ideas, customs, and values. (Malinowski, 1944)

From these definitions, culture can be understood as an integrated whole that encompasses the values, traditions, customs, beliefs, and ideas that shape and guide the life of societies. It governs individual behavior, aligning it with the collective norms of the group to which the person belongs. Hence, individual conduct is derived

from the broader social context, and the more positive and dynamic a culture is, the more it reflects the progress and refinement of that society.

1-2 The Definition of Preventive Culture

Preventive culture can be defined as a system of values, knowledge, and behaviors adopted by employees within an organization to anticipate and avoid risks before they occur, ensuring a safe work environment and improving overall performance.

This culture represents a shift from a reactive perspective-focused on dealing with consequences-to a proactive one centered on prevention and anticipation.

According to Cooper, preventive culture is part of organizational culture, as it reflects the awareness and responsibility of both individuals and management toward safety. (Cooper, 2000)

Likewise, the International Labour Organization (ILO) asserts that fostering an effective preventive culture can reduce occupational accidents by up to 40%. ((ILO), 2015)

In essence, preventive culture is a component of the broader organizational culture, representing the collective beliefs, values, and behaviors shared among members of the same organization regarding the importance of occupational health and safety. It also reflects their understanding of the role these practices play in protecting them from workplace hazards.

Preventive culture is shaped through interaction among employees within a specific organizational framework that must adapt to their characteristics. It reflects the importance an organization assigns to workplace safety across all levels of decision-making and operational activity. (Guldenmund, 2000)

Within institutions, preventive culture encompasses all organizational efforts dedicated to safety—such as maintaining machinery, applying safety standards, and ensuring equipment reliability. Defective machines or neglected safety procedures are

perceived by employees as signs of managerial disregard for safety, which in turn weakens their motivation to adopt preventive behaviors. Thus, changing or developing a preventive culture is impossible without tangible organizational efforts to embody safety principles in practice.

Indicators of a positive preventive culture in the workplace include:

- A very low rate of unsafe behaviors, even under high production levels;
- Transparency in reporting problems and errors, along with an active search for solutions;
- The utilization of institutional experience and learning from past incidents.

Another indicator is the organization's attention to analyzing minor occupational incidents. Many institutions ignore small accidents, which later accumulate and lead to major events. In contrast, organizations with a strong preventive culture analyze every minor incident, identify its causes, and implement appropriate preventive measures. (Hale, 1998)

1-3 The Importance of Preventive Culture

Preventive culture is one of the pillars of successful organizational performance. It enables institutions to move from merely responding to crises toward managing them proactively, ensuring the continuity of services and the sustainability of resources.

It also helps reduce professional errors and occupational risks while enhancing both employee and beneficiary satisfaction. In Algeria, preventive culture has strengthened citizens' trust in public service institutions by improving service quality and reducing service delivery time. ((ILO), Building a Preventive Safety and Health Culture: A Guide for Employers, 2015)

1-4 The Objectives of Preventive Culture

The main objectives of preventive culture are to:

- Raise preventive awareness among employees through continuous training;
- Ensure a safe and accident-free working environment;
- Improve performance and service quality by reducing errors and waste;
- Instill values of responsibility and discipline within the organization.

Hence, prevention becomes a strategic tool for achieving efficiency and sustainability in service institutions. (Fernández-Muñiz, 2009)

1-5 The Characteristics of Preventive Culture

Preventive culture is characterized by:

- Proactivity: addressing causes before consequences arise;
- Comprehensiveness: involving all organizational levels;
- Continuity: built on continuous learning and improvement;
- Collective responsibility: shared commitment among all employees. (Guldenmund, The nature of safety culture: A review of theory and research., 2000)

2- Components of Preventive Culture

Preventive culture consists of a set of interrelated dimensions that together form the structural framework of this culture within institutions. Each dimension reflects a specific area of application and serves a distinct strategic purpose, as shown below

Table (1) : The Main Dimensions and Objectives of Preventive Culture in Service Institution

Dimension	Practical Field	Main objective	Example
Professional Dimension	Occupational health and safety	Protecting employees from physical and psychological risks	Wearing protective equipment, monitoring the work environment
Administrative and Organizational Dimension	Management and planning procedures	Reducing errors and delays, improving workflow efficiency	Digitizing files, clarifying procedures
Service Dimension	Relationship with beneficiaries	Improving service quality and ensuring fairness in treatment	Enhancing reception, reducing customer complaints
Informational and Technical Dimension	Data and technology management	Protecting systems and information, ensuring continuity	Information security, regular data backup

The source: Prepared by the researcher based on : Cooper, M. D. (2000). *Towards a model of safety culture*. Safety Science, 36(2), 111–136. and International Labour Organization (ILO). (2015). *Building a Preventive Safety and Health Culture at Work*. Geneva: ILO Publications

The balance among these four dimensions is what ensures the effectiveness and sustainability of the institutional preventive system. When all dimensions operate coherently, the organization achieves both operational safety and service efficiency.

3- Types of Preventive Culture

Preventive culture can be classified into several types, depending on the degree of awareness, involvement, and shared responsibility within the organization: (Antonsen, 2009)

a. Fatalistic Preventive Culture:

This type reflects an environment where workers believe they have little or no control over safety levels, attributing incidents and risks to fate or destiny.

b. Technical (Craft-Based) Preventive Culture:

In this form, workers may not play a formal role in safety management but develop their own informal, experience-based preventive methods to avoid risks inherent in their specific crafts or trades.

c. Worker–Management Preventive Culture:

This type emerges when both workers and employers share responsibility for safety. It is characterized by reliance on safety experts, the inclusion of safety in development and investment projects, and the establishment of formal safety systems and procedures.

d. Programmed Preventive Culture:

In this advanced form, employees recognize their active role in promoting safety in cooperation with colleagues. Safety is achieved through skill development, continuous training, and effective information flow across all organizational levels.

I.2 Performance of the Service System

1- Definition of Service System Performance :

The performance of the service system is considered a true reflection of an institution's ability to fulfill its mission of meeting beneficiaries' needs and improving the quality of services provided to them. The *service system* is defined as an interconnected set of human, material, and organizational resources that operate harmoniously to deliver a public or private service of social or economic value. Service performance is usually measured by the degree to which operational goals are achieved, beneficiary satisfaction, efficiency in resource utilization, and the institution's ability to innovate and continuously improve. (Johnston, 2008)

2. Dimensions of Service System Performance:

From an administrative perspective, the performance of the service system consists of three main dimensions : (Pollitt, 2017)

- **Efficiency:** the ability to use financial, human, and technical resources at the lowest possible cost to achieve predetermined goals.
- **Effectiveness:** measures the extent to which the institution succeeds in achieving tangible results that meet beneficiaries' needs and align with its overall strategy.
- **Quality:** reflects the level of service excellence, beneficiary satisfaction, and continuity of improvement.

According to Saidi, service systems in the public sector face complex challenges related to bureaucracy, weak internal coordination, and insufficient quality culture, all of which negatively affect overall performance. Therefore, service performance management increasingly relies on modern tools such as Key Performance Indicators (KPIs), the Balanced Scorecard (BSC), and ISO 9001 Quality Management Systems to monitor and enhance institutional efficiency.

Moreover, performance in service institutions cannot be separated from the prevailing organizational culture, as professional values and behaviors form the true foundation for the success of performance systems—particularly in institutions providing sensitive citizen services such as social insurance and healthcare. In such institutions, performance is measured not only by quantitative outputs but also by adherence to fairness, transparency, service speed, and prevention of administrative errors. (Saidi, 2021)

I.3 The Relationship Between Preventive Culture and the Performance of Service Systems

Preventive culture is a cornerstone of sustainable service performance, linking proactive organizational behavior with institutional effectiveness. It goes beyond procedures to embody shared values that ensure safety, efficiency, and discipline. A strong preventive culture fosters trust, reduces occupational risks, and enhances both employee satisfaction and service quality. According to the ILO and Cooper, organizations integrating prevention into strategic management achieve better safety outcomes and operational

efficiency. Therefore, investing in preventive culture through training, strategic planning, and accountability systems constitutes a key pathway toward sustainable institutional performance, particularly in social service organizations such as CNAS.

II– Methods and Materials:

II-1 Field of Study

1- Definition of the Field of Study – CNAS Batna Agency

The National Social Insurance Fund for Salaried Workers (CNAS) is a public institution with a social mission and specific management system, endowed with legal personality and financial autonomy, in accordance with the provisions of Law No. 88-01 of January 1988.

Social security bodies in Algeria are characterized by their solidarity-based and participatory nature, being self-managed by their members and beneficiaries through administrative councils that include social partners, thereby embodying the principles of self-governance and public service autonomy.

The CNAS Batna Agency was established in 1996 as part of the decentralization policy initiated by the Ministry of Labor, Employment, and Social Security. Initially, it operated under the supervision of the regional agency in Algiers, but later became an independent provincial agency following Ministerial Decree No. 96-208 of January 5, 1996, which defined the internal organization of the fund.

The agency's primary mission is to implement social protection for salaried workers through various social insurance systems, such as retirement, compensation, health insurance, and other social services. The Batna agency includes a payment center and several branches distributed throughout the province, with the aim of bringing services closer to citizens, insured workers, and employers.

Its organizational structure includes the following sub-directorates:

- Sub-Directorate of Collection and Dispute Management

- Sub-Directorate of Benefits
- Sub-Directorate of Information Technology
- Sub-Directorate of Medical Control
- Sub-Directorate of Human Resources and General Affairs
- Sub-Directorate of Finance and Accounting

2- Main Functions of the CNAS Batna Agency

The National Social Insurance Fund for Salaried Workers (CNAS) – Batna Agency performs a set of vital functions aimed at ensuring the social protection of salaried employees and maintaining the sustainability of the social security system.

Its main tasks include:

- Protecting the rights of salaried workers in both public and private sectors, provided they are duly declared by employers.
- Managing various benefits, both in kind and in cash, related to social insurance such as sickness, maternity, disability, death, occupational accidents, and occupational diseases.
- Administering family benefits for insured individuals.
- Collecting and controlling social contributions, ensuring proper funding of social benefits, and handling related disputes.
- Implementing international conventions and agreements in the field of social security for the benefit of recipients.
- Assigning national registration numbers to insured persons and employers.
- Promoting preventive measures against occupational accidents and diseases, and fostering a preventive culture within workplaces.
- Organizing and coordinating medical control activities for beneficiaries of the fund's services.
- Managing the Assistance and Relief Fund, and settling expenses related to committees and bodies responsible for handling disputes.

- Establishing partnership agreements with various healthcare providers such as doctors, pharmacies, and clinics, to ensure the continuity and efficiency of healthcare services.

II-2 Methodological Framework of the Study

1- Research Method and Data Collection Tools

The study adopted a deductive approach, supported by a qualitative methodology and a descriptive-analytical method, with the aim of analyzing the reality of preventive culture within the *National Social Insurance Fund for Salaried Workers (CNAS) – Batna Agency*, moving from theoretical frameworks to field application.

To collect data, three main tools were employed in line with the nature of the study:

- **Interviews:** Conducted with employees, occupational health and safety officers, and institutional physicians to assess the level of preventive awareness, actual practices, and the extent of administrative commitment to training and awareness programs.

- **Observation:** Used to monitor preventive behaviors in the workplace, such as the use of protective equipment, availability of safety devices, and the nature of professional relationships influencing collective commitment to prevention.

- **Documents and Records:** Included occupational accident reports, safety committee minutes, training session reports, and administrative files, in order to support field data with objective and reliable sources.

Collectively, these tools allowed for a comprehensive and accurate understanding of the preventive culture reality and its impact on the performance of the service system within the institution.

2- Analysis of Preventive Culture at CNAS Batna Agency

• Level of Awareness of Preventive Culture within the Institution

Preventive culture represents one of the fundamental pillars of a safe work environment, reflecting employees' awareness of potential risks and their understanding of the importance of prevention.

Based on interviews and field observations, the following findings emerged:

- **Understanding of the concept of prevention:** A significant portion of employees demonstrated a general understanding of prevention as a set of measures aimed at ensuring workers' safety during their duties. However, the level of understanding varied by category, being more pronounced among doctors and occupational safety agents.

- **Awareness of workplace risks:** Many employees were aware of occupational hazards in reception and processing departments, particularly those related to professional stress, prolonged computer use, public interaction, and handling heavy files.

- **Adoption of preventive behaviors:** Some employees showed adherence to preventive rules such as taking regular breaks, organizing workspaces, and maintaining office cleanliness. However, collective preventive behaviors (such as reporting hazards or participating in awareness campaigns) remained limited, indicating the need to strengthen collective preventive awareness across the institution.

Overall, the level of preventive awareness at CNAS Batna Agency can be considered moderate—there is a general understanding of basic safety concepts, but it has not yet evolved into a structured and institutionalized preventive behavior.

• Preventive Procedures and Policies Implemented

The CNAS Batna Agency is committed to implementing several organizational and preventive measures to protect employees and ensure continuity of service delivery under safe and healthy conditions. The most notable include:

- **Training and Awareness Programs:** The agency organizes training sessions for new employees on the use of office equipment, prevention of workplace accidents, and first aid. It also participates in national awareness campaigns such as the “National Week for the Prevention of Work Accidents.”

- **Implementation of Safety Rules:** All employees are required to adhere to preventive procedures, including avoiding smoking in offices, respecting emergency exits, and reporting any malfunction or potential hazard.

- **Preventive Equipment and Tools:** The agency provides essential safety devices such as fire extinguishers, alarms, and first-aid kits. However, some departments still lack proper ergonomic office equipment and lighting conditions.

- **Administrative Role in Promoting Preventive Culture:** Management plays a key role by appointing an officer responsible for occupational health and safety, ensuring the application of preventive measures, and preparing periodic reports. The administration also strives to integrate prevention as an institutional value through communication and motivation initiatives.

Despite these efforts, the preventive policy still requires further organization and formalization to become an integral part of the institution's overall strategy rather than occasional or individual initiatives.

• **Factors Influencing the Adoption of Preventive Culture and Its Impact on Service Performance**

- **Organizational Factors:** The nature of administrative management and internal communication strongly influences the adoption of preventive culture. The absence of an official preventive plan and weak coordination between departments reduce the effectiveness of safety efforts. Moreover, irregular field follow-up limits the proper implementation of preventive measures.

- **Human Factors:** The human element is the most decisive factor in adopting preventive behaviors. The results showed that employees who previously received training on prevention are more committed to safety standards. Likewise, motivation and a sense of belonging to the institution positively influence preventive behavior.

- **Material and Environmental Factors:** Working conditions—such as ventilation, lighting, workspace, and equipment—play a crucial role in reinforcing prevention. Some offices suffer from

limited space or poor lighting, which affects employees' physical and psychological comfort.

- Impact of Preventive Culture on Service Performance:

- Preventive practices have contributed to reducing minor incidents (such as falls or muscular fatigue) and improving professional discipline.
- Employees more committed to preventive behaviors show higher concentration and more stable performance.
- A healthy and stable work environment has positively influenced the quality and speed of services provided to citizens, demonstrating the direct link between preventive culture and institutional performance.

In conclusion, the preventive culture at CNAS Batna Agency can be described as having established preliminary foundations for an institutional preventive framework. However, it still requires stronger administrative support, as well as continuous training and motivation programs, to consolidate it as a sustainable organizational behavior that enhances both institutional performance and service quality.

III- Results and discussion :

This section aims to provide a comprehensive analysis of the results obtained from the field study on preventive culture within the National Social Insurance Fund for Salaried Workers (CNAS) – Batna Agency

III-1 Presentation and Analytical Discussion of the Key Findings from the Field Study

Through the analysis of interviews, field observations, and official documents, a set of findings was derived that summarize the reality of the preventive culture within the institution. These findings can be presented as follows:

- Most employees demonstrated a general understanding of the concept of prevention and its importance in avoiding occupational hazards. However, this understanding remains rather superficial among non-specialized staff members.

- There is weak coordination between different departments in promoting preventive awareness, resulting in scattered and often individual efforts.
- The absence of regular internal awareness campaigns reduces the chances of establishing preventive behavior as an institutional value.
- The management adopts several preventive measures, such as organizing training sessions and providing safety equipment, yet these efforts remain insufficient to cover all potential risks.
- There is a noticeable weakness in monitoring the implementation of these measures in the field and a lack of periodic evaluation of their effectiveness.
- A variation exists among departments in terms of employee compliance with preventive measures, reflecting differences in the level of supervision and guidance.
- Organizational factors—such as the absence of a clear prevention plan or weak internal communication—constitute an obstacle to embedding a preventive culture.
- Human factors, particularly motivation and training, have a strong influence on the degree to which individuals adopt preventive behaviors.
- Environmental and material factors—such as the quality of ventilation, lighting, and workspace equipment—also affect the extent of compliance with preventive rules.
- Preventive efforts have contributed to improving employee discipline and reducing minor workplace accidents.
- Positive preventive practices have reflected positively on the quality of services provided to insured persons, the speed of file processing, and overall beneficiary satisfaction.
- However, the absence of a strategic vision for prevention reduces the sustainability of this positive impact in the long term.

III-2 Recommendations

The analysis and discussion reveal that the preventive culture within the CNAS Batna Agency does exist, yet it requires stronger institutional and strategic reinforcement to evolve into an effective organizational culture that positively influences service performance.

Prevention should be viewed as both an administrative and cultural behavior built on awareness, training, and collective motivation to ensure a safe and stable work environment capable of delivering high-quality services. The main recommendations proposed are as follows:

- **Develop an institutional prevention plan** that includes annual objectives and performance indicators to measure progress in occupational safety.

- **Organize periodic training sessions** for all categories of employees, particularly new recruits, focusing on awareness of daily risks.

- **Enhance internal communication** through regular newsletters or awareness meetings dedicated to preventive issues.

- **Motivate employees** who demonstrate commitment to preventive behavior by implementing symbolic or moral reward systems.

- **Improve physical working conditions** (ventilation, lighting, workspace, equipment) to ensure employee comfort and reduce occupational risks.

- **Integrate the preventive culture** within the institution's core values so that it becomes part of CNAS's organizational identity.

Conclusion:

It can be concluded that the preventive culture constitutes a fundamental pillar in building an effective and sustainable institutional performance, particularly in service-oriented organizations that rely heavily on human capital to carry out their missions and ensure service quality.

The field study conducted at the National Social Insurance Fund for Salaried Workers (CNAS) – Batna revealed that fostering

principles of preventive awareness, proactive behavior, and collective responsibility has a positive impact on various indicators of service and administrative performance.

The findings show that the more preventive culture is internalized and disseminated among employees, the greater the levels of professional discipline, the lower the rate of errors and incidents, and the higher the quality of services delivered to beneficiaries. Moreover, organizational leadership plays a key role in supporting this culture — through training and awareness programs, and by embedding preventive values into internal policies and operational procedures.

Analyzing the relationship between preventive culture and institutional performance shows that prevention is not merely a set of technical procedures or regulatory instructions; it is rather a cognitive and behavioral system translated into daily practices that reflect the degree of administrative maturity and institutional commitment. Institutions with a strong preventive culture demonstrate greater resilience in facing crises, achieve higher operational efficiency, and ensure the continuity of public service with consistent quality.

Based on the results obtained, several practical recommendations can be proposed:

- Integrate preventive education into continuous training programs for all categories of staff.
- Strengthen the role of occupational safety and health committees and provide them with effective monitoring and evaluation tools.
- Incorporate preventive awareness and behavior indicators into the institutional performance assessment system.
- Enhance internal communication on safety and prevention issues to promote positive behavior among employees.
- Use the findings of this study as a reference for extending the experience to other CNAS regional offices and public service institutions.

Therefore, investing in preventive culture should not be perceived as an administrative burden, but rather as a strategic investment in performance quality and service sustainability, ensuring a balance between the institution's social objectives and operational efficiency

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