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ORIGINAL

Level of active break practices among fire department personnel, Santo Domingo, 2024

Nivel de prácticas de las pausas activas en el personal del Cuerpo de Bomberos, Santo Domingo, 2024

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ABSTRACT

Active breaks are short periods of physical activities that are carried out during work days, to reduce the negative effects of work. Carrying out these activities does not require stopping activities in the company, it is enough to take a few minutes every two hours for the worker to do the various types of exercises. This research aims to measure the level of active practices in the personnel of the Santo Domingo Fire Department, 2024. Methodologically, it was developed under the quantitative approach as a descriptive level field research, with a basic purpose and with a non-experimental cross-sectional design. The sample consisted of 95 active workers of the fire department to whom a questionnaire was applied that, through a scale, allowed measuring the level of active breaks. As main results, the majority of firefighters are between 18 and 30 years old (48,4 %), with a predominance of the male gender (57,9 %) and working mainly in the operational area (58,9 %). 13,7 % take active breaks regularly, while 83,2 % do so occasionally, indicating an urgent need to promote these breaks. Although 80 % take short breaks occasionally, only 21,1 % perform stretching exercises regularly. Overall, 61,05 % of staff have an adequate level of active breaks in their work routine, while 38,94 % maintain a moderate level of these practices, highlighting the importance of institutionalizing these practices to improve health, reduce stress and increase effectiveness in fulfilling their responsibilities.

Keywords: Ergonomics; Work-Related; Illnesses; Active Breaks; Sedentary Lifestyle.

RESUMEN

Las pausas activas son cortos periodos de actividades físicas que se llevan a cabo durante jornadas laborales, para disminuir los efectos negativos del trabajo. Realizar esas actividades no requiere parar las actividades en la empresa, basta con tomar unos minutos cada dos horas para que el trabajador realice los diversos tipos de ejercicios. Esta investigación tiene el objetivo de medir el nivel de prácticas activas en el personal del Cuerpo de Bomberos de Santo Domingo, 2024. Metodológicamente se desarrolló bajo el enfoque cuantitativo como una investigación de campo de nivel descriptivo, con finalidad básica y con un diseño no experimental de corte transversal. La muestra estuvo conformada por 95 trabajadores activos del cuerpo de bomberos a las que se les aplicó un cuestionario que mediante una escala permitió medir el nivel de pausas activas, como principales resultados la mayoría de los bomberos tienen entre 18 y 30 años (48,4 %), predominando el género masculino (57,9 %) y trabajando principalmente en el área operativa (58,9 %). El 13,7 % realiza pausas activas regularmente, mientras que el 83,2 % lo hace ocasionalmente, indicando una necesidad urgente de promover estas pausas. Aunque el 80 % toma descansos breves ocasionalmente, solo el 21,1 % realiza ejercicios de estiramiento regularmente. En general, el 61,05 % del personal posee un nivel adecuado de pausas activas en su rutina laboral, mientras que un 38,94 % mantiene un moderado nivel de estas prácticas, destacando la importancia de institucionalizar estas prácticas para mejorar la salud, reducir el estrés y aumentar la eficacia en el cumplimiento de sus responsabilidades.

Palabras clave: Ergonomía; Estrés Laboral; Enfermedades Laborales; Pausas Activas; Sedentarismo.

INTRODUCTION

Problem statement

The Pan American Health Organization indicated that "worldwide 1,4 billion people did not engage in the moderate physical activity recommended by the World Health Organization (WHO), meaning that 23 % of men and 32 % of women were not meeting the guidelines". According to a study, in Latin America, almost three-quarters of the population had a sedentary lifestyle. The country with the highest tendency toward physical inactivity was Brazil (47 %), followed by Costa Rica (46 %), Colombia (44 %), Argentina (41 %), the Dominican Republic (39 %), Paraguay, Guatemala, and Cuba (37 %), Venezuela (31 %), Mexico (29 %), Chile (26 %), and Uruguay (22 %). The National Institute of Statistics and Census found that in Ecuador, 3,4 million children and 1,7 million adults were sedentary. These results were obtained through a National Survey of Employment, Unemployment, and Underemployment (ENEMDU).

Up-to-date information was found for the province of Santo Domingo de los Tsáchilas. According to the latest figures, which were applied at the Santiago Clinic in 2020, these results show a low rate of active breaks among nursing staff working in that health institution. The sample consisted of 23 nurses divided into three areas: hospitalization, operating room, and emergency room, where 56,5 % were unaware of the benefits and 43,5 % were aware of the issue. We interpret that the purpose of this research was to raise awareness of the low level of knowledge about these practices among healthcare personnel, this being one of the main issues that should be addressed in the field of occupational safety to improve worker performance.

Given these figures, it was important to promote active breaks, according to the study [1], entitled "Importance of active breaks: a literature review," which aimed to demonstrate the importance and effectiveness of active work breaks on the performance of workers within an organization, based on a bibliographic database and other valuable tools. Within the establishment where the research was carried out, there was doubt as to whether this type of public security institution complied with a basic standard of caring for and ensuring the well-being of citizens, including its active workers, since previous studies in other institutions had shown that these important practices, which improve worker performance, were not being implemented.

In 1950, the workplace was recognized as one of the most suitable environments for health promotion. This concept was ratified in 1995 by the World Health Organization (WHO) and the International Labor Organization (ILO). Since then, various physical activity programs have been developed for incorporation into the workplace, currently known as active breaks. They are among the most recommended today, thus highlighting the health, safety, and well-being of workers as priorities. In this regard, the WHO recommends stopping work every two hours and taking a five-minute active break to promote health in the workplace.[2,3,4,5,6,7]

Active breaks are based on moderate and intense movements performed during the workday after a long period of activity, to exercise the body, relax muscles, increase energy levels and performance, and relieve tension caused by stress. Additionally, they provided a way to change a sedentary lifestyle at work. Therefore, it was considered important for both public and private institutions to foster a healthy work environment, promoting stations dedicated to improving ergonomics and encouraging workers to spend their break time stretching. There are various types of active breaks, such as flexibility, stretching, muscle activation, joint mobility, and playful movements,[2] sedentary lifestyles at work are accompanied by noncommunicable diseases (NCDs).[8,9,10,11,12]

However, due to the high levels of stress caused by physical workloads, active breaks help the body to recover and also generate benefits in terms of improving health and work efficiency, breaking work routines, reactivating moods, improving interpersonal relationships, and promoting social integration. It was specified that all activities must be tailored to each person's job. However, lack of physical activity, along with injuries and illnesses, could hinder performance in both daily tasks and the workplace.[3,13,14,15,16,17]

Researching active breaks at the theoretical, economic, and social levels is essential, as it provides a solid foundation of scientific knowledge about physiological and psychological effects. Promoting a culture of well-being and self-care improves the quality of life of employees.[18,19,20,21,22] In addition, active breaks increase productivity and reduce the costs associated with occupational illnesses, which represents significant savings for companies by reducing absenteeism. Given the above, Advanced Nursing Technician students needed to conduct these studies and apply occupational health concepts. Therefore, this research poses the following question: What is the level of active break practices among the staff of the Santo Domingo Fire Department in 2024?

METHOD

Type and Design of the Research

For this research, a quantitative approach was employed, which enabled the collection and analysis of numerical data through surveys on habits related to the study variable. The results obtained were then analyzed

using statistical techniques.[4] The study was conducted as field research, collecting accurate and contextual data within the fire department's work environment, thereby providing a deep and authentic understanding of the phenomenon being studied, which enriched the validity of the results. A descriptive level was used, which was essential for describing the data provided by the survey on the sample's knowledge and practice of active breaks, in order to analyze and present the results clearly and accurately. The basic purpose was used fundamental purpose, as it focused on obtaining specific answers to expand theoretical knowledge about active breaks among firefighters.

A non-experimental design was used, the objective of which is to collect information regarding habits related to active breaks among staff through observations and surveys, without intervening or altering them. Once the data has been obtained, training can be implemented to improve the situation. The research was prospective because it analyzed current data obtained through the application of the instrument, whose objective was to verify the knowledge and practice of active breaks among workers in various institutions. The study was cross-sectional because it was conducted over a short period of time. Likewise, our surveys were short, brief, and uncomplicated in order to analyze the conditions of active personnel.

Population and sample

Population

The population refers to the group of people or objects that share similar characteristics in the study, as well as a set of defined, limited, and accessible cases to be studied. For this reason, we took into account the workers of the Santo Domingo de los Tsáchilas Fire Department, Ecuador, during the year 2024, which has 100 workers of both genders, aged 18 to 60 years of age, holding various job positions.

Sample

This refers to the group of individuals selected to represent a population, especially when it is too large to be studied. It must also be representative so that the results can be generalized, preferably using random or probabilistic procedures to obtain an adequate number of study components. A sample of 95 active workers in the institutions responsible for public safety in Santo Domingo was established through non-probabilistic convenience sampling.

Sampling method

These are techniques used to select a representative sample of the population in order to obtain reliable and specific data. They can be random, systematic, stratified, non-probabilistic, or convenience sampling.[6] The research method employed was non-probabilistic convenience sampling. This method does not involve probability theory in the selection of the sample (in its design) and, therefore, it is impossible to assess the sampling error. However, this type of sampling generally corresponds to opinion polls.[7]

The following inclusion criteria were taken into account for the research: Contracted personnel of both genders who are actively working at the institution. Ages between 18 and 60. Personnel who work at least 24 hours per week. Personnel who participate in operational and rescue activities, as well as those in administrative roles, are exposed to the need for active breaks. Personnel who have no medical restrictions that prevent them from taking active breaks. In addition, they must accept informed consent to be part of the study.

The following were considered exclusion criteria: Staff on leave or on sick leave. Outsourced staff or staff who do not belong to the institution. Workers who, due to their age and health status, are unable to perform the activities. Workers who refuse to participate in the study voluntarily. Staff who do not complete the data collection instruments. Staff with severe medical conditions that limit their ability to perform physical exercises or activities. Personnel who cannot participate in the study due to work or personal commitments that interfere with the study activities. Personnel who do not perform operational and administrative activities related to the fire department. Personnel who do not give their informed consent to participate in the study.

Operationalization of variables

For this research, the dependent variable is Active Breaks, which is measured on an ordinal scale with three categories: always, Sometimes, and Never. Meanwhile, the Likert scale measures, the level of manner, categorized as Adequate, Moderate, and Inadequate, whose operationalization is described.

Data collection techniques

The appropriate technique for our research is a survey, which consists of asking a series of predefined questions. This will be done online, as it consists of obtaining information about people's expectations, attitudes, and behaviors, and tabulate it more effectively through self-administered questionnaires where the person completes the questionnaire themselves.[8]

Data collection instruments

The instrument used in this research was created by Álvarez et al.[9] and validated by professionals who classified this questionnaire as suitable for implementation, called Active Breaks. According to Niño[10], questionnaires are a set of technically structured and ordered questions presented in written and printed form to be answered either in writing or, sometimes, orally. Of the instruments used to collect information, they are the most widely used and are applied in both interviews and surveys.

In this case, it was extracted from the research of Álvarez et al.[9], who designed it to measure the level of active breaks, the time, and frequency with which they are taken in the workplace. It is structured in 19 questions and four dimensions: the first corresponds to sociodemographic data, from questions 1 to 4; the second dimension focuses on initial active breaks, from questions 5 to 8; the third dimension focuses on compensatory active breaks, from questions 9 to 15; and the fourth dimension focuses on relaxation active breaks, from questions 16 to 19. Starting with question number 5, a score is assigned to each answer option, as described in the following figure:

Indicador	Puntos
Nunca	1
A veces	2
Siempre	3

Figure 1. Scoring of response options

Question 7 also explains that the score is reversed in the response options, as shown in figure 2.

Indicador	Puntos
Nunca	3
A veces	2
Siempre	1

Figure 2. Scoring of response options for question 7

This in turn generates a measurement scale described in figure 3 to determine the level of active breaks.

Indicador	Puntos
Adecuado nivel de pausas activas	35 - 45
Moderado nivel de pausas activas	25 - 34
Inadecuado nivel de pausas activas	15 - 24

Figure 3. Levels of Active Breaks

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To facilitate its application, in this case, it was transferred to a Google Form.

Data processing and analysis plan

Descriptive statistics were used for data processing and analysis, as data were collected through the application of the instrument via Google Forms, then exported and organized in an Excel file, facilitating the numerical coding of responses and, in turn, statistical processing and analysis, deriving quantitative data which were presented in percentage tables and descriptive statistical analysis, facilitating the interpretation of the data and drawing conclusions about the level of active breaks taken by participants to respond to the research objectives.[11]

Ethical aspects

In the Constitution of the Republic of Ecuador:

Article 32.- Health is a right guaranteed by the State, the realization of which is linked to the exercise of other rights, including the right to water, food, education, physical culture, work, social security, healthy environments, and others that support good living.

Article 33.- Work is a social right and duty, and an economic right, a source of personal fulfillment, and the basis of the economy. The State guarantees workers full respect for their dignity, a decent life, fair wages and remuneration, and the performance of healthy work that is freely chosen or accepted. Article 326, paragraph Every person shall have the right to perform their work in an adequate and conducive environment that guarantees their health, integrity, safety, hygiene, and well-being.

Note: in the Ecuadorian legal context, there is no specific law stating that workers have the right to perform physical exercise as an obligation. This will depend on the internal regulations of each public or private institution, if they wish to promote activities that encourage better performance. International Labor Organization: Convention on Occupational Safety and Health, 1981.

Art. 4: 2. The purpose of this policy shall be to prevent accidents and damage to health resulting from work, related to work activities, or occurring during work, by minimizing, as far as is reasonable and feasible, the causes of risks inherent in the working environment.

Art. 6: the formulation of the policy referred to in Article 4 of this Convention should specify the respective roles and responsibilities of public authorities, employers, workers, and other interested persons in relation to the safety and health of workers and the working environment, taking into account the complementary nature of such responsibilities and national conditions and practices.

Art. 7: the situation about the safety and health of workers and the working environment shall be reviewed at appropriate intervals, either comprehensively or in relation to specific sectors, in order to identify the main problems, develop effective means of solving them, define the order of priority of the measures to be taken, and evaluate the results.

Personal data is protected in the research, which is why an informed consent process was carried out in order to protect the confidentiality of the active personnel who participated in the research and to ensure that the information obtained remains anonymous. The Constitution of the Republic of Ecuador, in Article 66, Numeral 19, recognizes and guarantees individuals “the right to the protection of personal data, which includes access to and decision-making regarding information and data of this nature, as well as its corresponding protection. The collection, storage, processing, distribution, or dissemination of such data or information shall require the authorization of the owner or the mandate of the law”.

RESULTS

For the presentation of the results of this research, data were collected based on the proposed objectives. In this regard, a total of 95 workers from the Santo Domingo de los Tsáchilas fire department. The data obtained was classified and separated according to its importance in relation to the established objective. To interpret the collected information, the results and discussion are presented below.

Research results

Figure 4 describes the demographic data of the participants, where the age range with the highest percentage was 18 to 30 years old, with 48,4 %, followed by 31 to 41 years old with 41,1 %, while the 42 to 60 age group was represented by 10,5 % and those over 60 years old were 0 %. In terms of gender, males were the most represented, with 57,9 %, while females represented 42,1 %. Most of the respondents are from the operational area with 58,9 %, followed by the administrative area with 36,8 %, and others (drivers) with 4,3 %. In terms of length of service, the highest percentage was 1 to 3 years with 46,3 %, followed by 4 to 6 years with 29 %, more than 7 years with 16,8 %, and less than 1 year with 7,4 %.

Indicador		N°	%
Edad	18-30 años	46	48,4
	31-41 años	39	41,1
	42-60 años	10	10,5
	>60 años		
	Total	95	100
Género	Masculino	55	57,9
	Femenino	40	42,1
	Total	95	100
Departamento/Área	Operativo	56	58,9
	Administrativo	35	36,8
	Total	95	100
Antigüedad en la empresa o institución	< de 1 año	7	7,4
	1- 3 años	44	46,3
	4-6 años	28	29,5
	>de 7 años	16	16,8
	Total	95	100

Figure 4. Demographic data

Figure 5 describes the items corresponding to the dimension of active breaks at the start. Based on the results in question 5, it was determined that 83,2 % of respondents sometimes performed relaxation and recreation activities at their station, 13,7 % always did so within the institution, and 3,1 % never did so. In item 6, 83,2 % acknowledged that they sometimes took active breaks at their workstation at some time of the day, while 12,6 % always did so, and 4,2 % did not. 69,5 % of participants revealed that they always experience physical discomfort due to forced positions, 28,4 % sometimes feel this discomfort, and 2,1 % do not experience it. 77,9 % of participants, for health reasons, sometimes performed stretching, breathing, muscle flexing, and relaxation exercises at the start of their workday. In contrast, 16,8 % were more diligent, always performing these exercises at the start of their workday, and 5,3 % never performed these activities.

		Siempre		A veces		Nunca		Total	
N°	**Pregunta**	**N°**	**%**	**N°**	**%**	**N°**	**%**	**N°**	**%**
5	¿En su centro de labores realizan actividades de relajación y recreación?	13	13,7	79	83,2	3	3,1	95	100
6	¿En su centro de labores realizan actividades de pausas activas en algún momento del día?	12	12,6	79	83,2	4	4,2	95	100
7	manos debido a los movimientos repetitivos y las posiciones forzadas en la ejecución de sus actividades?		66	69,5	27	28,4	2	2,1	
8	¿Realiza ejercicios de estiramiento, respiración, flexiones musculares y movimientos de relajación al inicio de su jornada laboral?	16	16,8	74	77,9	5	5,3		

Figure 5. Dimension 1 Active Breaks at the Start of the Day

		Siempre Total		A veces		Nunca	
N°	**Pregunta**	**N°**	**%**	**N°**	**%**	**N°**	**%**
9	Durante el desempeño de sus labores, realiza descansos o jornadas de relajación muscular de por lo menos 5 minutos	16	16,8	76	80	3	3,2
10	¿Cree usted que los movimientos articulares ayudan a mejorar la salud, eliminando el cansancio físico y mental?	70	73,7	25	26,3	0	0
11	¿Cree usted que mantener una buena postura ayuda a sobrellevar el exceso de carga laboral?	78	82,1	17	17,9	0	0
12	¿Le agrada realizar actividades recreativas para distraerse por un momento de su labor?	65	68,4	30	31,6	0	0
13	¿Cree usted que los movimientos articulares ayudan a mejorar la sobrecarga de trabajo?	70	73,7	25	26,3	0	0
14	¿Realiza ejercicios de estiramiento, respiración, flexiones musculares y movimientos de relajación durante la jornada?	20	21,1	75	78,9	0	0
15	¿Despeja su mente y se relaja mientras realiza ejercicios de pausas activas?	56	58,9	38	40	1	1,1

Figure 6. Dimension 2: Active Compensatory Breaks

Figure 7 corresponds to the items in the dimension of active relaxation breaks. The results showed that 58,9 % managed to recover their energy and improve their mood, while 41,1 % experienced some improvement in their mood. 54,7 % of staff believed that active breaks always motivated and encouraged interpersonal relationships, while 44,2 % believed that they sometimes helped, and 1,1 % believed that they never helped. It was observed that 60 % always relaxed after a session of active breaks, and 40 % did not. Workers showed that 80 % sometimes did exercises at the end of their working day, 14,7 % always did them, and 5,3 % never did them.

		Siempre		A veces		Nunca		Total	
N°	Pregunta	N°	%	N°	%	N°	%	N°	%
16	¿Cuándo usted recupera sus energías, mejora su estado de ánimo?	56	58,9	39	41,1	0	0	95	100
17	¿Al realizar ejercicios de pausas activas motiva e incentiva las relaciones interpersonales con sus compañeros?	52	54,7	42	44,2	1	1,1	95	100
18	¿Después de realizar una sesión de pausas activas se siente relajado?	57	60	38	40	0	0	95	100
19	¿Realiza ejercicios de estiramiento, respiración, flexiones musculares y movimientos de relajación al final de su jornada laboral?	14	14,7	76	80	5	5,3	95	100

Figure 7. Dimension 3 Active Relaxation Breaks

Figure 8 describes a comprehensive assessment of the level of active break practices among firefighters in Santo Domingo. The results reveal a significant distribution in terms of the levels of implementation of these breaks among active personnel. As a result, a higher percentage of 61,05 % of respondents demonstrated that they have an adequate level of active breaks, showing that active breaks are effectively integrated into their work routine. On the other hand, the study also identified that 38,94 % of participants maintain a moderate level of active breaks.

Indicador	*N°*	*%*
Adecuado Nivel de Pausas Activas (35 - 45)	58	61,05
Moderado nivel de Pausas Activas (25 -34)	37	38,94
Inadecuado Nivel de Pausas Activas (15 - 24)		
Total	95	100

Figure 8. Level of Active Breaks

DISCUSSION

Currently, work-related stress has become very common in the workplace. In most cases, overload has led to non-communicable diseases, which is why engaging in recreational activities or recommended exercises can be beneficial in relieving tension.[23,24,25,26,27] The objective of the research was to measure the level of active breaks in the Santo Domingo de los Tsáchilas Fire Department and its corresponding areas in this district. Knowledge of these practices is adequate, as 61,05 % perform these activities. Based on these results, it was interpreted that this public safety institution keeps its workers in good physical and mental condition, complying with basic regulations for the care and well-being of personnel.[28,29,30,31,32]

This shows that this public safety institution is aware of these activities. It was determined that the majority (77,9 %) perform activities at the beginning of their workday, as it is an entity that must be physically and mentally fit to provide its services to citizens when required. Therefore, the results are satisfactory, as this establishment demonstrates its commitment to general well-being.[33,34,35,36]

However, in another study by Costa et al.[12], it was determined that nursing staff at the Santiago Clinic had low awareness of active breaks, with 56,5 % unaware of their benefits and 43,5 % aware of the issue. The respondents stated that, despite not being aware of these activities,[37] they would like to see them implemented for 15 minutes a day, as they believe this would improve productivity, mood, and, therefore, their work performance. These results show that it is up to each establishment to seek to improve the working conditions and comfort of its employees. Although it is a healthcare facility, it is not fulfilling its primary mission of caring for human beings, as its employees are under constant pressure and are not provided with support in the form of activities that allow them to take recreational breaks.[38]

These practices must be carried out, as we can prevent non-communicable diseases, improve ergonomic posture, reduce stress, improve interpersonal skills, and prevent muscle injuries. We found that staff can relax, whether through physical exercise or recreational activities. Respondents stated that recreational activities relieve them of stress and improve their mood, as educational games were implemented in which they participated with colleagues, generating empathy and greater communication between them.[39]

The results of the research, showing a high percentage of workers who implement active breaks in their workday, are consistent with Dorothea Orem's existing theory on self-care, which emphasizes individual responsibility for health. This theory posits that individuals possess the capacity to care for themselves. Therefore, the results show that the firefighters in Santo Domingo, by taking active breaks, are taking action to care for their physical and mental health. They also recognize the importance of these activities in improving their well-being, which is in line with the principles of self-care proposed by Orem.[40]

Implementing active breaks in the workplace is important because it prevents workers from suffering from work-related stress, which can lead to non-communicable diseases. Within the Santo Domingo de los Tsáchilas Fire Department, 77,9 % of workers take active breaks, demonstrating a high commitment to their physical and mental well-being, in line with Dorothea Orem's theory. Based on research conducted at the Santiago de Santo Domingo Clinic, staff knowledge of active breaks is limited. This underscores the importance of each institution promoting self-care to improve the health and work performance of its employees.[41]

CONCLUSIONS

In relation to the objective of determining the demographic data of the Santo Domingo fire department workers, 2024, it is concluded that the majority of participants were in the 18-30 age range (48,4 %), followed by those aged 31-41 (41,1 %). The 42-60 age group is less represented (10,5 %), and there are no firefighters over the age of 60. Males predominate (57,9 %) over females (42,1 %). Most work in the operational area (58,9 %), while 36,8 % work in the administrative area, and 4,3 % are drivers. In terms of seniority, the largest group has between 1 and 3 years of service (46,3 %), followed by those with 4 to 6 years (29 %), more than 7 years (16,8 %), and less than 1 year (7,4 %). These results reflect a predominantly young and operational workforce with a male predominance.

When analyzing the level of active breaks taken by Santo Domingo firefighters in 2024, it was observed that 83,2 % of the Santo Domingo de los Tsáchilas fire department personnel engage in relaxation and recreation activities only occasionally at their station, while 13,7 % always do so, and 3,1 % never do. As for active breaks, 83,2 % take them sometimes, 12,6 % always take them, and 4,2 % never take them. 69,5 % of participants experience physical discomfort due to forced positions, and 16,8 % always perform stretching and relaxation exercises at the start of their shift. These results indicate an urgent need to promote regular active breaks to improve the health and well-being of firefighting personnel at work.

About analyzing the level of compensatory active breaks among firefighters in Santo Domingo, 2024, in conclusion, the results underscore the critical importance of compensatory active breaks for the well-being of firefighters in Santo Domingo de los Tsáchilas. Although 80 % take short breaks occasionally and 16,8 % always do so, 3,2 % never find time to relax. Most recognize the benefits of joint movement and maintaining good posture. However, only 21,1 % perform stretching and breathing exercises regularly. Institutionalizing these breaks is crucial for enhancing the health and job performance of personnel.

Regarding the analysis of the level of active relaxation breaks taken by Santo Domingo firefighters in 2024, the results demonstrate the importance of active relaxation breaks for the well-being of Santo Domingo firefighters.

Tsáchilas Sunday. 58,9 % manage to recharge their batteries and improve their mood, and 54,7 % believe that these breaks foster interpersonal relationships. In addition, 60 % always relax after an active break. However, only 14,7 % exercise regularly at the end of their working day. These findings highlight the need to consistently promoting active relaxation breaks to improve mood and team cohesion.

Referring to the overall objective of this research, aimed at measuring the level of active practices among the personnel of the Santo Domingo Fire Department, 2024, it is concluded that the research reveals that 61,05 % of the personnel of the Santo Domingo Fire Department have an adequate level of active breaks in their work routine, which is crucial for their well-being and performance. However, 38,94 % maintain a moderate level of these practices. These results highlight the importance of consistently promoting active breaks within a fire department to improve health, reduce stress, and increase effectiveness in fulfilling their responsibilities.

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