


REVIEW

Active breaks as a tool for well-being and productivity

Pausas activas como herramienta de bienestar y productividad

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ABSTRACT

Introduction: the text presented Dorothea Orem's Self-Care Theory as a basis for understanding the importance of maintaining health at work. It pointed out that self-care was a learned and guided activity, while self-care deficits required nursing support systems. This perspective was linked to the workplace, where workers identified capabilities, limitations, and internal and external factors that influenced their well-being. Active breaks were highlighted as a concrete practice of self-care, preserving health and preventing illnesses that affected productivity and performance.

Development: the history of "break gymnastics" was described from its origins in Europe to its institutionalization in Japan and its worldwide expansion. Active breaks were defined as short exercises involving breathing, stretching, joint mobility, coordination, and flexibility, performed during the workday to recover energy and reduce fatigue. Physiological, psychological, social, and economic benefits were highlighted, including a decrease in accidents, increased productivity, and reduced healthcare costs. It was recommended that they be practiced twice a day for five to ten minutes. Barriers such as lack of time, space, or management support were also noted, as were facilitators such as a culture of self-care and adequate organization. In addition, they were related to ergonomics, the prevention of sedentary lifestyles, and performance evaluation, factors that conditioned their effectiveness.

Conclusion: the analysis concluded that integrating Orem's theory with active breaks strengthened health and work performance. The sustainability of these programs depended on institutional commitment, ergonomic design, and fair evaluations. Consolidating a culture of self-care represented a low-cost, high-impact strategy for achieving healthy and humanized work environments.

Keywords: Self-Care; Orem's Theory; Active Breaks; Ergonomics; Sedentary Lifestyle; Work Performance.

RESUMEN

Introducción: el texto presentó la Teoría del Autocuidado de Dorothea Orem como base para comprender la importancia de mantener la salud en el trabajo. Señaló que el autocuidado fue una actividad aprendida y orientada, mientras que el déficit de autocuidado requirió sistemas de apoyo de enfermería. Esta perspectiva se vinculó al ámbito laboral, donde los trabajadores identificaron capacidades, limitaciones y factores internos y externos que influyeron en su bienestar. Las pausas activas se destacaron como una práctica concreta del autocuidado, al preservar la salud y prevenir enfermedades que afectaron la productividad y el desempeño.

Desarrollo: se describió la historia de la "gimnasia de pausa" desde sus orígenes en Europa hasta su institucionalización en Japón y su expansión mundial. Las pausas activas se definieron como ejercicios breves de respiración, estiramiento, movilidad articular, coordinación y flexibilidad, realizados durante la jornada para recuperar energía y reducir fatiga. Se resaltaron beneficios fisiológicos, psicológicos, sociales

y económicos, entre ellos la disminución de accidentes, el aumento de la productividad y la reducción de costos sanitarios. Se recomendó practicarlas dos veces al día por cinco a diez minutos. También se señalaron barreras como la falta de tiempo, espacios o apoyo directivo, y facilitadores como la cultura de autocuidado y la organización adecuada. Además, se relacionaron con la ergonomía, la prevención del sedentarismo y la evaluación del desempeño, factores que condicionaron su eficacia.

Conclusión: el análisis concluyó que integrar la teoría de Orem con las pausas activas fortaleció la salud y el rendimiento laboral. La sostenibilidad de estos programas dependió del compromiso institucional, del diseño ergonómico y de evaluaciones justas. Consolidar una cultura de autocuidado representó una estrategia de bajo costo y alto impacto para lograr ambientes laborales saludables y humanizados.

Palabras clave: Autocuidado; Teoría de Orem; Pausas Activas; Ergonomía; Sedentarismo; Desempeño Laboral.

INTRODUCTION

Self-Care Theory was developed by Dorothea Orem, who was born and raised in Baltimore, Maryland, in 1914. She began her nursing career at the Providence Hospital School of Nursing in Washington in 1930. She lived to be 93 years old. Her theory of self-care deficit is a general theory composed of three interrelated concepts: self-care theory, self-care deficit theory, and nursing systems theory.⁽¹⁾ Orem's theory of self-care is a learned and goal-oriented activity based on the innate ability to care for oneself, as well as on the actions that enable the individual to maintain a healthy lifestyle.

Orem's theory was closely related to the research topic because, in the workplace, it enabled workers to identify their abilities, actions, limitations, and internal and external factors that directly or indirectly affect the practice of self-care, thereby proactively caring for themselves and preventing future problems. In addition, it allowed workers to perform better and provide better care in their jobs. However, Orem's theory emphasized the importance of self-care, and active breaks were a way to put it into practice to preserve health and well-being. According to Dorothea, when a person did not maintain self-care, they were vulnerable to illness and even death. Above all, they would be completely unable to perform any work-related tasks.

DEVELOPMENT

History of active breaks

The term "break gymnastics" originated in Poland in 1925 as a relaxation activity for workers. In the same year, several experiments were carried out in the Netherlands. However, in the early 1960s, it spread to Bulgaria, Germany, and other countries. In Russia, break exercises were adapted to different jobs and practiced in 150 000 companies. In Japan, in 1928, postal workers began to do daily exercise sessions to relieve muscle tension and promote health. After World War II, Japan adopted a law requiring all Japanese companies to promote workplace exercise. Given its effectiveness, it spread worldwide, and today, one-third of workers in different companies practice it.⁽²⁾

Active breaks

Active breaks are a set of exercises that are carried out during the working day by each worker, i.e., they constitute a method of promotion and prevention. They consist of using various techniques in a short time that do not cause physical exhaustion, focusing on stretching and energy recovery, taking into account the parts of the body most affected by the workload. They are considered temporary breaks within working hours in various areas and therefore include both physical and mental exercises, thus reducing fatigue and creating a better working environment.^(3,4)

Importance and benefits

The importance of workplace exercise lies in its contribution to a healthy working life. It also has several benefits for workers, such as: physiological benefits that help increase blood flow to the muscles; psychological benefits that reduce stress, depression, and anxiety, boosting self-esteem and, above all, improving mental clarity; and, on the other hand, the social benefits, which promote social integrity, improving the working environment and fostering camaraderie. Finally, the economic benefits of implementing active break programs reduce healthcare costs for workers.⁽⁵⁾

According to the same source, workplace exercise led to benefits in terms of performance and work efficiency, as it reduced workplace accidents, improved physical fitness, improved work performance, reduced fatigue, and increased productivity levels. Increasing active breaks in institutions led to economic benefits, as it could reduce healthcare costs, sick leave, absenteeism, and unemployment. In addition, it prevented specific pathologies, such as musculoskeletal disorders, carpal tunnel syndrome, respiratory and cardiovascular

problems, among others.

Recommended types of exercise

Various types of exercises form the basis of active breaks. However, the most common ones carried out in the workplace are: Breathing exercises, which help to cope with stress and maintain organic harmony. These were performed while sitting or lying down, allowing for the perception of the breath's movement, which helped alleviate symptoms such as insomnia, anxiety, and stress. Joint mobility exercises involve rotating the joints in the neck, shoulders, waist, hips, knees, and ankles. These exercises allow you to recover lost joint range of motion and also delay fatigue from prolonged postures, helping to relax muscles and prevent injuries.^(6,7)

According to the same source, coordination exercises involve moving two or more parts of the body simultaneously, developing coordination skills by working the whole body in unison to achieve a goal. Flexibility exercises help improve muscle stretching ability and range of motion, which benefits joint and muscle function, reducing stress and influencing body alignment. All these exercises sought to prevent health problems resulting from sedentary work, allowing you to improve your lifestyle and work environment.

Recommended duration and frequency

It is recommended that active breaks be taken approximately twice during the workday, once in the mid-morning and once in the mid-afternoon, to activate breathing, improve blood circulation, and boost body energy. Workplace exercise can be carried out in favorable, controlled conditions, provided that the necessary time and frequency are available. The break to carry out these activities lasts 5 to 10 minutes, which is a way to promote physical activity, accompanied by healthy lifestyle habits.⁽⁸⁾

Culture of active breaks at work

Responsibility of institutions in its implementation

Institutions had a responsibility to ensure the health and safety of each of their employees, as active breaks were a possible solution to improve working conditions, thus guaranteeing a safe and healthy workplace, enhancing performance and productivity, and preventing exhaustion and stress during the working day. It was essential to ensure that all workers were in optimal condition to perform each of their duties or roles efficiently and safely, without any complications.^(9,10)

According to the same source, implementing active breaks was a significant challenge for institutions. However, there are now several public and private institutions and companies that have demonstrated the importance of implementing workplace exercise, not only because of its many benefits, but also for the well-being of each of their workers, as they are the ones who make the organization run smoothly and perform better in society, because they put all their dedication, time, and effort into their work. The active break program had a positive impact on worker protection.⁽¹¹⁾

Barriers and facilitators to active breaks

Several barriers prevented active breaks from being taken within the institutions, such as: lack of time due to workload, staff who considered workplace exercise to be a waste of time, lack of space that made it difficult to perform physical activities, lack of resources, excessive documentation and operational work, inadequate organization within the institution, and lack of support from managers to implement the activities. However, there were also facilitators, such as: schedules that included active breaks, activities that did not require large spaces, support from management who shaped and recorded the activities, staff rotation, and an environment and culture oriented toward worker self-care.

Level of active break practices

Measurement of knowledge about active breaks.

In Ecuador, these definitions are not unknown in relation to occupational problems. Herrera reports that illnesses such as chronic low back pain, herniated discs, carpal tunnel syndrome, and shoulder pain, which is one of the cases of tendinitis, account for 69 % of occupational illnesses.

Self-report of active breaks (frequency, duration, type)

Workplace exercise should be performed for 10 to 15 minutes both mid-morning and mid-afternoon, and by workers for about 5 minutes during their lunch or break time. Suppose the company worked 8 hours per day, for a total of 48 hours per week over 5 days. In that case, it should have a frequency of 5 times per week for active breaks, thereby enabling its workers to perform better and reducing the risk of stress and future musculoskeletal disorders. The types of breaks included joint movements, rhythmic movements, playful movements, recreational movements, passive movements, and breathing exercises.

Adherence to national and international recommendations

According to the Ministry of Sport (SF), active breaks were already being developed in Ecuador in 1925, but under the name of workplace gymnastics. They began to be implemented in Pichincha with a pilot sample in 10 ministries, aimed at factory workers, contributing to their improvement through distraction, and at the same time, as an alternative to occupational health. Since 1950, the workplace has been recognized as one of the most suitable spaces for health promotion. This fact was ratified in 1995 by the World Health Organization and the International Labor Organization.⁽¹²⁾ Since then, numerous ways of incorporating physical activities into the workplace have been developed. One of these, which is currently the most widely recognized, was the development of active breaks.

Factors associated with taking active breaks

Sociodemographic characteristics

Sociodemographic factors related to active breaks depended on several aspects, especially considering factors associated with levels of physical activity, such as: comparing age to determine whether younger people were more active; identifying whether there were any differences between men and women in adapting workplace exercise; determining marital status or whether they had children, as they have different exercise patterns; evaluating the number of years they had been in the same job; differentiating the areas in which each staff member worked; and increasing AP according to job position.

Ergonomic conditions of the workplace

It is essential to inspect the area to assess whether the physical location has the optimal space and environment to carry out the activities. In doing so, we will take into account several aspects such as: outside noise, natural or artificial lighting, normal temperature, the materials to be used, such as chairs, mats, exercise balls, among others, verifying whether or not the environment is comfortable for workplace exercise, comparing the different areas of the subcenter based on active breaks, and verifying the different ergonomic conditions of the institution's healthcare personnel.^(13,14)

Sedentary behavior

Sedentary behavior (SB) is the opposite of physical activity, defined as performing activities in a sitting or lying position without significantly increasing the total energy expenditure required. It is also considered a risk factor for health and not a health event in itself. However, its negative consequences, such as increased disability, high health costs, and deterioration in quality of life, often go unnoticed. In 2002, a sedentary lifestyle was defined as a lack of physical activity necessary to maintain health, which has been linked to increased mortality and morbidity.

Much of the increase in sedentary lifestyles is due to the development of new technologies, which reduce the need for physical effort in daily activities. However, some professions, such as sports and field work, require constant physical activity. Therefore, a sedentary lifestyle is a harmful behavior that is associated with various diseases, including cancer, mental health problems, and osteoporosis. The WHO defines that, for an adult aged 18 to 64 to be considered active and non-sedentary, they must meet one of the following criteria: engage in at least 150 minutes of moderate physical activity per week, 75 minutes of vigorous PA per week, or an equivalent combination of both that exceeds the minimum energy expenditure.^(15,16)

Work Performance

Work performance has evolved and is considered one of the most critical factors in an organization or institution, due to its impact on achieving positive results in increasing business value, with profitability as the ultimate goal. It is usually defined as a series of measurable behaviors or actions that employees perform to contribute positive results to the company. Therefore, it is the effort of the individual to meet the established goals and objectives, based on their capabilities and skills within the organization. In addition, it includes the actions, abilities, skills, and behaviors of employees.⁽¹⁷⁾

Job performance is defined as the execution of actions by a person to achieve goals or objectives within the organization in a given time, which indicates that performance measures the quantity or quality of an individual's or group's work, according to the levels of execution achieved in meeting the goals. Attitudinal and operational factors are also evaluated. Attitudinal factors include discipline, cooperative attitude, initiative, responsibility, safety skills, discretion, personal presentation, interest, creativity, and ability to perform. On the other hand, operational factors include knowledge of the job, quality, quantity, accuracy, teamwork, and leadership.

Performance evaluation

Job performance is essential for any company or institution, as it allows them to evaluate the productivity,

proactivity, behavior, and knowledge transfer of their employees. Therefore, workers need to understand not only their roles but also the expectations of the institution, as this will provide them with motivational benefits and specific opportunities. That is why performance evaluation is a key methodology for improving company indicators through the management and measurement of each of its employees' skills. In addition, intrinsic aspects such as mental stability, interpersonal relationships, emotion management, adaptability to change, and other soft skills of each individual must be considered.^(18,19,20)

However, several evaluation methods have been developed to overcome various challenges, one of which is the collaborative talent performance evaluation, which focuses on measuring essential parameters to obtain results that reflect the ideal competencies of employees and organizational management. This model combines metric and qualitative tools that are adapted to the specific needs of different companies, taking into account their strategies, job competencies, knowledge, skills, and personal attitudes. Thanks to its flexibility, it allows each company or institution to adjust or design various assessments that best align with their work reality and organizational objectives.⁽²¹⁾

On the other hand, performance evaluation must be equitable and bidirectional; that is, it should not focus only on employees but also on managers. Therefore, the self-evaluation method is crucial, as it enables them to assess their personal and professional development. According to the Organic Law on Public Service (LOSEP, 2020), Chapter 6; art.76, indicates that the "Performance evaluation subsystem: is the set of technical standards, methods, protocols, and procedures that are harmonized, fair, transparent, impartial, and free from arbitrariness, which is systematically oriented toward evaluation under objective parameters in accordance with the functions, responsibilities, and profiles of the position."^(23,24)

Ergonomics

The word ergonomics comes from Greek, derived from "Ergon" (work, action) and "Nomos" (custom, law, use, rule), which means laws of work or work standards. On the other hand, the International Ergonomics Association defines it as the scientific discipline that deals with the interactions between people and other elements of the system and the profession based on the theory, principles, data, and methods available to design and optimize the well-being and performance of workers. In addition, it is closely linked to occupational health, which seeks the physical, emotional, social, and spiritual well-being of employees to improve their attitude, health, and work performance.^(26,27)

To achieve these objectives, ergonomics addresses all risk factors and imbalances within the company. Therefore, it aims to prevent damage to health in its three dimensions (physical, mental, and social), according to the WHO definition. This concept is divided into different areas such as anthropometry, physical ergonomics, environmental ergonomics, cognitive ergonomics, organizational ergonomics, specific needs ergonomics, and preventive ergonomics, each of which focuses on different aspects of work and the work environment, thus allowing for the implementation of improvements and the design of healthy and sustainable work systems.^(28,29)

Physical and mental fatigue in the workplace

Fatigue is the tiredness felt after overexertion or stress, manifested through feelings of tiredness, exhaustion, discomfort, and difficulty relaxing. It therefore affects both physical and mental health in people. This condition leads to an inability to respond and makes it difficult to get restful sleep, becoming a chronic and persistent problem. However, despite its adverse effects, fatigue has an adaptive value, as it acts as an adaptation mechanism that indicates the need for rest, especially in workers, allowing measures to be taken to help minimize occupational risks.⁽³⁰⁾

According to the same source, physical fatigue is caused by excessive muscular effort, whether repetitive, static, or dynamic. Therefore, the leading causes of undue tension in both the psychomotor system and the entire body can be inadequate work organization, individual factors such as visual defects or previous injuries, an unsatisfactory work environment, and ergonomic conditions. However, mental fatigue is defined as the feeling of cognitive overload, which generates work-related stress and musculoskeletal disorders, preventing the ability to pay attention and concentrate on a work activity.⁽³⁰⁾

CONCLUSIONS

The analysis carried out established that Dorothea Orem's Self-Care Theory constitutes an essential conceptual framework for understanding the importance of maintaining healthy habits within the work environment. Its application in everyday practice, particularly through active breaks, reinforces the idea that personal care is not only a right but also a responsibility of the worker to preserve their physical and mental well-being. Active breaks, in this sense, have established themselves as a preventive tool with physiological, psychological, social, and economic benefits that have a direct impact on employee productivity and quality of life.

Likewise, historical and contextual review showed that these practices have transcended borders and eras, demonstrating their effectiveness in reducing fatigue, controlling sedentary lifestyles, and preventing

occupational diseases. The institutional implementation of active break programs was projected as a low-cost, high-impact occupational health strategy capable of improving the organizational climate, reducing absenteeism, and promoting social integration in work teams.

However, significant barriers were also identified, such as a lack of time, management support, or adequate space, indicating that the sustainability of these practices depends largely on institutional commitment and the creation of a culture oriented toward self-care. In view of these limitations, ergonomics and work fatigue management were presented as complementary axes to enhance the benefits of active breaks and ensure safer and healthier work environments.

In conclusion, the integration of self-care theory with the practice of active breaks in the workplace reaffirmed that the well-being of workers not only enhances their individual performance but also strengthens institutional and social development. Promoting these practices implies recognizing that health and productivity are inseparable dimensions, whose articulation is essential for building sustainable and humanized work environments.

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