Employee Insights on Ergonomic Interventions: Assessing Understanding of Its Impact on Workplace Environment

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ABSTRACT

Workplace ergonomics is proven to help employees on their daily work routines. This research focuses on assessing the insights on the impact of ergonomic interventions as understood by the private school employees and be able to formulate strategies for improvement leading to workplace productivity and well-being. The use of descriptive quantitative method through survey questionnaire helps on how employees in selected private schools in Albay understood the impact of ergonomic interventions towards day-to-day activities and their participation supports its success. This research highlights the strong influence of school culture in determining ergonomic insights among employees. With a prominent focus on health and well-being, it is evident that when a school deeply cares about the well-being of its employees, they are automatically inclined to adopt ergonomic interventions as well as practices. Such collective cultural attitude serves as a driving force for long-term positive change within educational institutions. Yet, the presence of ergonomic equipment and allocated break areas indicates a moderate effect between availability and utilization. The responses indicate that while there are employees who enjoy using these physical resources, others do not use them or don't recognize the benefits hinting at issues such as accessibility, comfort, or deeply ingrained behavior. Thus, culture sparks the commitment, but to turn that commitment into actual physical comfort and health gains, it requires well-designed, transparent, and accessible ergonomic interventions. For private schools with a desire to create a successful, ergonomic-friendly work environment, the combination of a strong well-being culture and focused support such as training and habit-forming programs are some of the solutions. This approach can generate healthier, happier, and more productive space for all on campus with the strategies as guide.

Keywords – Ergonomics, Ergonomic Interventions, Workplace Environment, Productivity, Well-being, Private Schools

INTRODUCTION

In the hustle and bustle of work life, where the majority of employees at private schools are sitting in front of their workstation or standing for most of the day, the principles of ergonomics are more important now than ever before. Ergonomic solutions aren't fancy chairs and height-adjustable desks; they're about designing a healthier, more comfortable place to work that can improve productivity, decrease fatigue, and help prevent workers from getting hurt. But to what extent do workers actually have a conception of the impact of these interventions within their daily work life? The current study examines the employees' understanding with the aim of finding out their awareness towards ergonomic interventions within their own workplace. Through what individuals who perform the daily grind day in and day out have experienced, the authors' aim to discover how perception, knowledge, and response to ergonomic interventions impact the overall understanding of work climate within private schools.

Office ergonomics is the way to enhance health and productivity (Sarker & Khan, 2020), particularly for staff in private schools. A program adapted to age, gender, and occupation guarantees genuine comfort and well-being. Incorporating ongoing physical activity prevents work injuries such as musculoskeletal disorders (Abdollahi, et al., (2020); Rhen, 2023) through movement and elimination of repeated strain. A considerate, personalized and bespoke ergonomics plan is not only an intelligent and appropriate decision for employee

well- being but a necessary intervention to ensure employees remain safe, healthy, and productive at work daily.

Despite, ergonomics has been proven to assist individuals on health, employees continue to look for what interventions suit them in the aspect of personal and work lives. Since the dynamic nature of work as well as life makes much of everyday routine ignored, which may hinder improved work performance. Therefore, this research gives insights that inform and motivate private staff to perform daily work activities in the context of adopting ergonomic intervention programs. In addition, the necessity of applying ergonomic interventions is apparent taking into account how understanding the effects of repetitive action, environmental factors, and posture on the health and well-being is appropriate for productive workplace.

The Philippine Constitution specifically enumerates that the government must promote and secure each individual's right to health, which requires action and awareness. To validate this, laws such as Republic Act No. 11058 require the workplaces, including private schools, to follow strict health and safety protocols. This would mean that employers need to construct healthy, safe work environments at work, advocating ergonomics and physical fitness programs (Chen, et al, 2023; Boonsem, et al, 2022; Centers for Disease Control and Prevention, 2019) to foster well-being and productivity. Therefore, for private school employees, working hard is not just about it, but being healthy and energized in the workplace with the added safety of good legal protection that has your health as its top priority at every step of the way.

Research Objectives

The main objective of this study is assessing the private school employees' insights on ergonomic interventions based on their understanding of its impact in their workplace setting. Specifically, the main research questions for this paper includes; (1) What are the insights on the impact of ergonomic interventions as understood by the employees; and (2) What strategies can be formulated to improve ergonomic interventions leading to workplace productivity and well-being?

LITERATURE REVIEW

The important literature and studies are discussed as follows according to impact and strategies formulation for ergonomic interventions

Impact of Ergonomic Interventions

Having an effective ergonomics program generates a healthier, more productive workplace (Davies, et al, 2023). Minor changes like adjustable desks, ergonomic chairs, improved lighting can significantly cut injuries and increase job satisfaction (Rhen, 2023; US Department of Labor, 2024). Although most are familiar with the value of good posture, many hours and poor discipline get in the way. In general, the need to incorporate employees into planning for ergonomics and invest in supportive equipment, even when it means costs are an issue. Encouraging mobility and good posture keeps private school staff healthy, productive, and injury-free.

Ergonomics in the workplace (Duffy & Shaw, 2019) redefines the meaning of safety culture by reducing tasks, motivating employees, and enlisting common goals that yield tangible outcomes (Middlesworth, 2024). For private school staff exposed to heavy lifting, poor postures, and repetitive motions, ergonomic practices reduce fatigue on muscles, enhance productivity, and eliminate stress. These not only protects health but also designs a strong and affirmative safety culture. Good ergonomics is ongoing risk assessment, process refinement, and continuous monitoring that keeps all employees safe and well cared for. Adopting these philosophies builds an environment where all employees can succeed, where safety is expected, not regulated.

Ergonomic practices are pivotal in enhancing the performance and well-being of employees (Tersa-Miralles, et al, 2022; Wulzerbacher, S., et al, 2020). Scientific findings show that age, sex, and demands of the work influence the expression of stress and illness of a physical nature attributed to heavy lifting and strain postures to musculoskeletal disorder pain, particularly in shoulders and the back (Nygaard, et al, 2022; Abdul Latip, et al, 2025). Consciousness of these risks will ensure that the ergonomic programs established are more effective

to meet specific employee profiles. Ergonomics will, as a final resort, rid the school employees of pain, comfort, and general workplace health (Jensen, et al, 2022).

Musculoskeletal discomfort among older private school workers is impacted by significant individual factors such as age, gender, job, body condition, and extrinsic-work. Men acquire back and knee pain but unable to report it, compromising long-term diseases. It is necessary to treat individual as well as ergonomic risk factors (Bazaluk, et al., 2023) to improve workability, disablement prevention, and improve quality of life among older workers (McNamara & Pitt-Catsouphes, 2020). This paper illustrates the ways in which interventions such as wellness programs should be designed based on such factors as physical health, job type, gender, and age in an attempt to meaningfully engage employees and develop supportive and healthier workplaces.

Hosseini et al. (2023) note the significance of education and healthy living in promoting ergonomic behaviors among female to prevent musculoskeletal disorders. In order to better outfit office environments in the Philippines with private employees, improved office ergonomics by training and better office configurations enhances health, effectiveness, and satisfaction based on the valuable lessons in creating educational environments. Barrieau (2024) highlights the need for person-centered ergonomic assessment to maximize the staff's health and productivity. This study is best aligned with such insights, placing emphasis on bodily work and ergonomic measures unique to private school staff and thus timely and of prime importance.

Ergonomics exert very significant control over the office work of employees specifically in the Philippines. The Philippine Human Factors and Ergonomics Society (HFESP) is the organization tasked with fostering professional human factors and ergonomics practice in the Philippines (International Ergonomics and Human Factors Association, 2024). The organization's aim is to improve ergonomics education and training as well as facilitate interorganizational cooperation between organizations concerned with ergonomics and human factors. Educational sector also has the potential to learn coordination mechanisms with other organizations having similar undertakings regarding ergonomics, employees' health, and educational workplace.

Strategies to Improve Ergonomic Interventions towards Workplace Productivity and Well-being

Low-cost wellness activities are adaptable and staff-centered and enhance employee morale along with well-being without a high cost. Effective wellness programs may incorporate health risk appraisals, medical screening health fairs, nutrition, stress reduction, fitness challenges, and smoking cessation (El-Sherbeeny, et al., 2023). These multi-component initiatives have been demonstrated to enhance morale, decrease absenteeism, and generate cost savings among schools. Encouraging mental health through provision of "wellness days," recognition of wellness, creation of spaces of calm, exercise classes, and limiting after-hours work and communication can establish trust, decrease stress, and sustain staff motivation. Wellness programs have proven to have positive effects on employee health outcomes, lower healthcare spending, and enhanced job satisfaction, indirectly supporting student outcomes through the promotion of healthy behavior. Schools may engage in offering policies for advancing physical fitness workout.

To be pain-free, healthy, and strong in a state of well-being, ergonomic fitness is a revolution by minimizing soft-tissue injury, relieves chronic pain, and battles on-the-job fatigue through good body mechanics (Kraemer, et al, 2020). For private school employees, embracing ergonomics means a healthier, more enjoyable work life with better productivity and mental well-being. Simple adjustments in equipment use and neutral position through arm rests or ergonomic mice can be a major game-changer. Educational institutions aim to be pro-ergonomic by offering specialized programs and valuing input, so everyone is able to perform at an optimal level within a healthy and injury-free environment.

Fitness requires ergonomic examination to prevent soft-tissue injuries, alleviates chronic pain, and prevents workplace fatigue. It is necessary that the private schools take into consideration how ergonomics, safety, productivity, and well-being relate with each other. This will improve the physical wellness of the employees through sound body mechanics as it minimizes the risk of musculoskeletal disorders and injuries and maximizes productivity and improving mental health (Monera, et al, 2024). Some of the ergonomic measures in the field of fitness includes enhancing the working conditions as well as wearing an arm support or a mouse with neutral posture.

Physical activity during working days have been observed to boost performance and mood levels through proper ergonomic methods like healthy body mechanics, providing ergonomic supplies, and planning regular breaks, can reverse burnout and enhance overall fitness, leading to a healthier and more effective workplace. A positive ergonomics culture is extremely crucial in the workplace because it corresponds directly with increased employee well-being, lower self-reported pain, and better organizational performance (Faez, et al., 2021). Studies show that organizations in which productivity and employee health are both of equal value experience less musculoskeletal pain and better overall performance (Silva, et al., 2024). Ergonomic risk assessments help identify risks like improper workstation design, lighting, and placement of equipment, thereby preventing injuries (Occupational Safety and Health Administration of United States, 2024). Schools can encourage safer workplaces through managing these ergonomic hazards, which further benefits employee health and organizational performance. Ergonomic interventions are an essential step towards creating a positive, productive, and healthy work environment.

Ergonomic action and exercise of the body are crucial for the health and safety of private school non-teaching staff in changing working environments. Ergonomics is concerned with the design of workplaces and tools to meet employees' requirements (Edwards, et al., 2022). Active work improves physical and mental well-being, as opposed to sedentary-associated illness (Tersa-Miralles, et al., 2022). Thus, incorporating exercise-based activities can comprehensively protect and enhance the general well-being of private school non-teaching staff.

Workplace ergonomics is crucial in influencing individual health behavior by good posture, alleviating strain, and limiting musculoskeletal risk (Jasmine, et al., 2020). If employees work in ergonomically conducive environments, they can be likely to take breaks at work, change workplaces, and avoid hazardous lifting on some occasions driven by sport and exercise. Incorporating sports in such programs is, however, not straightforward. For private school non-teaching personnel, education and adopting ergonomic principles can help ensure better well-being and the development of a health-oriented work culture. This research tries to reveal how engaged such employees are and accents the necessity for individually designed ergonomic programs in order to overcome their specific needs and habits.

As evidenced, the pandemic worsened less movement, cramped spaces, and long sitting hours, leading to increased discomfort. Integrating sports and regular physical activity alongside strong ergonomics awareness is key to boosting health, morale, and engagement in a post pandemic era. Raising ergonomic knowledge covering posture, body mechanics, and more through sports-inspired programs can close existing gaps and improve performance. This research highlights the urgent need to develop practical strategies that encourage employees to prioritize both ergonomics and active lifestyles for a healthier, and happier workplace (Mairaj, et al., 2024).

Non-teaching staff are vital for the maintenance of academic institutions, whereas workplace well-being schemes are of vital importance to help a healthy work culture, enhance job satisfaction, mental well-being, and productivity. Ergonomics is very crucial to help augment safety and comfort by reducing physical effort, whereas sports-inspired ergonomic regulations enhance posture and movement. Care, nonetheless, needs to be exercised prior to the pursuance of ergonomic-oriented physical exercises. Such generalized wellness programs must cover physical exercises, mental health care, preventive health care, and work-life balance measures. Regular employee interviews and surveys will flag issues and prompt periodic participation, and this can boost the feeling of belonging and well-being among non-teaching staff if adequately customized to their cohorts.

Research Paradigm

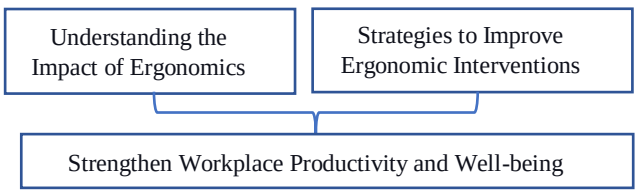

Figure No. 1 Research Paradigm

Employees have typically found ergonomic interventions to be key factor in their physical well-being and work effectiveness. Ergonomic interventions such as redesigning the workplace to reduce physical strain, ergonomically designed furniture and equipment, and best practice training all serve to reduce discomfort and injury like musculoskeletal disorders in the workplace. Staff have long recognized that these interventions do not only augment comfort but also reduce fatigue and physical stress, resulting in better health and job satisfaction. Appreciation of positive effects on productivity as ergonomic arrangements facilitate more efficient and less fatiguing working processes. Furthermore, feedback mechanisms which give ongoing support to enable customization of workstations to the individual needs of each staff, showing a sign that the recognition of ergonomic design having to be dynamic in order to be effective has been reached.

RESEARCH METHODOLOGY

The study is informative about ergonomic interventions among private school non-teaching employees but is not without some limitations. Its findings are limited to a sample of private schools in Albay. Being derived from self-reported data, there is the potential risk for some bias or inaccuracies to creep into the results. Time and funding limited the study's depth, and even efforts at keeping within employee insights as to the ergonomics interventions. But these deficiencies do not shadow the invaluable contribution this study makes to the understanding of workplace productivity and well-being. This research used descriptive quantitative method through validated and tested survey questionnaires using 5-point Likert Scale. The information was gathered, identified, assess, measured, described, and analyzed in relation to the understanding of the employees on the impact of ergonomics intervention leading to strategies formulation. The computed number of respondents were one hundred thirty-five (135) through purposive sampling among selected private schools in Albay.

RESULTS AND DISCUSSIONS

The results and discussions are as follows;

Table 1 Employee Insights on the Impact of Ergonomic Interventions

INDICATORS	MEAN	SD	INTERPRETATION
1. I recognize the relationship between proper ergonomics and increased work efficiency.	3.53	.625	Great Extent/High Impact
2. I understand how ergonomics can prevent work-related injuries and health issues.	3.53	.505	Great Extent/High Impact
3. I am aware of how ergonomics participation improves comfort and reduces physical strain at work.	3.73	.688	Great Extent/High Impact
4. I apply ergonomic principles to organize my workspace for better posture and movement.	3.87	.625	Great Extent/High Impact
5. I value the role of ergonomics in enhancing my overall job satisfaction and well-being.	3.60	.618	Great Extent/High Impact
6. I actively seek ergonomic solutions or adjustments to improve my work environment.	3.80	.661	Great Extent/High Impact
7. The school culture's emphasis on employee health and well-being positively influences my engagement with ergonomic practices.	4.27	.580	Great Extent/High Impact
8. Arranging my workspace ergonomically has enhanced my posture and movement during work activities.	3.93	.447	Great Extent/High Impact
9. Using designated break areas and ergonomic equipment has increased my frequency of taking movement breaks and	3.27	.863	Moderate Extent/Moderate Impact

reduced physical discomfort.			
10. The school's vision and values related to well-being motivate me to consistently practice ergonomics and self-care at work.	3.93	.447	Great Extent/High Impact
11. Adherence to workplace policies promoting physical activity and ergonomic practices has led to measurable improvements in my overall work comfort and productivity.	3.93	.580	Great Extent/High Impact
12. Ergonomic practices in my workplace help reduce physical discomfort and prevent injuries related to my job tasks.	3.80	.548	Great Extent/High Impact
13. I have enough opportunities during work hours to perform ergonomic exercises or movements that improve my physical health.	3.47	.968	Moderate Extent/Moderate Impact
14. Engaging in ergonomic activities helps me manage work-related stress and mental fatigue more effectively.	3.93	.688	Great Extent/High Impact
15. My workspace is designed ergonomically to enhance my comfort and productivity throughout the workday.	3.60	.889	Great Extent/High Impact
16. I am able to balance my workload in a way that supports regular breaks focused on ergonomic health and physical activity.	3.67	.477	Great Extent/High Impact
17. I contribute to discussions or initiatives that promote ergonomic improvements and physical wellness programs at work.	3.47	.726	Moderate Extent/Moderate Impact
OVERALL	**3.73**	**.643**	Great Extent/High Impact

The results identify significant findings concerning ergonomic intervention in the school environment. The strong employee health and well-being orientation of the school culture is emphasized with a mean value of 4.27 to represent a great level or comprehension of the high ergonomics impact on employees that the positive school culture contributes significantly towards the adherence of employees to ergonomic practices. On the other hand, the use of designated break spaces and ergonomic aids scored lower at a mean score of 3.27 suggesting a moderate but less consistent impact on the frequency with which staff engage in movement breaks and reap the benefits of reduced physical distress. These results suggest underlying culture promotes health and well-being behavior is a strong enabler of ergonomic behavior among employees. Where the school takes deliberate effort in building an environment that focuses on employee well-being, employees are more likely to develop and sustain ergonomic behavior. The results also suggest perceptions are congruent across employees, backing cultural influence as a powerful driver in behavioral change.

On the other hand, the least result of such physical ergonomic interventions as equipment and staff break areas indicates, there is a mismatch between the presence of tools/resources and their use. Greater variation in the responses indicates that although some staff gain great benefits from the usage of such resources, they are used less or not at all by others or such staff do not perceive enough benefit, potentially due to accessibility, familiarity, or habit factors. This suggests that it takes more than just having ergonomic tools without the robust culture and maybe additional involvement programs.

In terms of successful ergonomic intervention, the school will have to further enhance its health-focused culture as the foundation for greater understanding as well as participation and incorporation of ergonomic processes. However, to gain optimum dividend from ergonomic tools and break rooms, targeted efforts are necessary. These can include tailor-made training, increased visibility and availability of ergonomic tools, and

the creation of habits to ensure frequent movement breaks. Ultimately, the findings indicate that culture makes commitment a reality, but well-executed ergonomic interventions close the loop by making that commitment tangible in terms of physical outcomes. The future strategy of the private schools should incorporate culture building with on-site support to establish a healthy, viable, and comfortable working space for all the employees.

CONCLUSIONS

This research decisively establishes that healthy, good school culture is the dynamic behind ergonomic action. It's clear that if a school actually looks out for employees' well-being, employees just begin adopting ergonomic habits naturally. This collective cultural perspective creates a solid foundation where healthy habits not only accumulate but flourish. Shared understanding among employees also further entrenched culture as an ultimate driver of sustained behavior change. Some employees clearly benefit from this, while others are unable to utilize these to the extent that they can. This uncovers a problem which exhibits ownership doesn't imply use.

Without simplified instruction, easy access, and habituating practices, these interventions will not realize its potential and be plagued by low levels of use. To actually realize the ergonomics, the school must double down on its robust health culture and take a proactive role in increasing the visibility, access, and habitual use of ergonomic aids. Culture ignites the flame, but ideally supported tools and practices transform commitment into real comfort and well-being for all employees. This holistic approach will make the school community healthier, happier, and more productive.

RECOMMENDATIONS

Strategies through the school's culture to create increased participation and higher-order learning with ergonomic interventions for the well-being and health of employees as the driving principle. Find wellness champions by making employees the friendly faces of the school's health culture because everybody admires a role model. Align ergonomics with school values by incorporating ergonomic wellness into the school's mission statements, staff orientation, and professional development workshops. Repeatedly and openly have school leaders and managers demonstrate ergonomic interventions such as chair adjustment, standing desks, and movement breaks. Encourage the building of a healthy and safety-culture within an organization.

Engage the management to lead by example through championing of discomfort and ergonomic requirement, and enabling active participation through the utilization of ergonomic champions or committees. Develop "Ergo Ambassadors or Champions" by forming a group of enthusiastic employees who share the occasional tip, mini ergonomic challenges, or new equipment demo during staff lunches and use peer-to-peer influence fosters an uplifting work environment. Share facts or anecdotes demonstrating how ergonomic practices prevent exhaustion, enhance concentration, and even enhance lesson delivery. Conducting workshops and sessions of awareness among the employees to make them learn about proper posture, equipment handling, and the need for regular breaks. Training employees is empowering them, which leads to the implementation of ergonomic practice. Upgrade break rooms and ergonomic machines for effortless movement and comfort.

Use plants, light, soothing music, or a mini yoga/stretching station. Bridging technology like mechanical lifts, sit-stand desks, anti-glare monitors, and ergonomically augmented add-ons that encourage physical wellbeing and minimize risk at work is also suggested. Turn breaks into a mini-replenishment instead of a break like adding friendly staff challenges or step-counting competitions to encourage staff members to stand up or use ergonomic devices on a regular basis. Breaks are fun with low-key accolades or praise. Use gentle, non-jarring reminders through applications or desktop alerts to prompt employees to stand, stretch, or change position.

Offer quick ergonomic inspections or short counseling sessions so staff are assured that they possess their tools, desks, and chairs adjusted to their body and job. Continually inspecting workplaces for consideration of ergonomic hazards and modifying solutions on a case-by-case basis as regards on body needs. This might involve height-adjustable chairs and desks, correct monitor elevations, ergonomic keyboards, and other gadgets that can be adjusted to mitigate strain. Promote activities such as standing meetings, walk and talk

discussions, or quick stretches during discussions or planning time. Movement is woven into the work process, not something extra. Developing procedures for ongoing monitoring of ergonomic interventions to respond to changing workplace tasks and technologies may be considered as a priority which keeps the ergonomic interventions current and effective. Involvement of staff in developing and implementing ergonomic solutions makes them more acceptable and used, since the interventions are created to fill actual needs and become a part of usual work practices.

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