

The Mediating Role of Psychosocial Working Conditions on Physical Work Environment and Workplace Stress in Higher Education: Empirical Evidence from Selected HEIs in Southern Philippines

Jishanis M. G. Becaro, Allan V. Beliganio, Liza M. A. Maganding, and Rosemarie E. Dingding

ABSTRACT

Many factors, including workload, student-related issues, research and job development, interpersonal relationships, and administrative-related issues, have been linked to workplace stress, with higher academic institutions (HEIs) seeing the most of it. While several studies have looked into various aspects of work stress in HEIs, very few studies have investigated how psychosocial factors mediate the effect of the physical environment to work stress. Thus, this study is conducted to empirically test how psychosocial working conditions significantly mediate the influence of Physical work Environment on workplace stress in Higher Education Institutions in the Philippines. Involving 265 teaching faculty in selected HEIs in Southern Philippines, the study utilized structural equation modeling to analyze the interest constructs. The results showed that Physical Work Environment significantly influences Psychosocial Work Environment while Psychosocial Work Environment significantly influences work stress. In contrast, the path from Physical Work Environment to work stress was not statistically significant. Thus, Psychosocial Work Environment fully mediates the influence of the Physical Work Environment on an individual's work stress level. Put differently, physical work environment could only result in work stress if Psychosocial Work Environment mediates it.

Keywords: higher educational institutions, physical work environment, psychosocial work environment, work stress.

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J. M. G. Becaro*

Bukidnon State University–
Cabanglasan, Philippines

(e-mail: jmgbecaro@gmail.com)

A. V. Beliganio

Bukidnon State University–Cabanglasan,
Philippines

(e-mail: allbeliganio@gmail.com)

L. M. A. Maganding

Bukidnon State University–Cabanglasan,
Philippines.

(magandinglizamae@gmail.com)

R. E. Dingding

Bukidnon State University–Cabanglasan,
Philippines

(rmedinding@gmail.com)

**Corresponding Author*

I. INTRODUCTION

In the last few decades, stress has become a more significant issue in businesses. According to Kakada and Dashpende (2018), stress is a strong state in which a person encounters a possibility, demand, or resource related to the individual's desires. The outcome is perceived to be ambiguous and crucial. According to Townley (2006), work stress is the inability to get motivated to work and a sense of ongoing strain coupled with the general signs of physiological, psychological, and behavioral stress. Additionally, stress is a negative response to significant demands or other constraints placed on a person. When people are afraid, they cannot handle the demands placed upon them.

While some tension is beneficial, most stresses that arise when not adequately managed are negative. Most illnesses are partially attributed to workplace stress, resulting in billions of dollars in annual healthcare expenses, employee turnover, and absenteeism (Clark, 2011). It is well known that there is a connection between workplace stressors, employee effectiveness, and psychological effects. In reality, Paul

(2009) observed that work stress is one of the biggest health risks for workers in both developed and developing nations. Higher Educational Institutions are top of the institutions that experience this (Besser *et al.*, 2022).

While many factors contribute to Work stress, it is well known that it is essential to foster a positive work environment that promotes performance and advances organizational objectives while advancing the individual objectives of both owners and employees (Syed & Farah 2015). Social aspects of the workplace influence employee conduct and performance, but it is essential to consider the social contexts in which these elements first emerged. According to Noble (2015), workers sometimes experience chronic stress when they negatively view their workplace. So, paying more attention to identifying and managing the working environment is essential.

According to Opperman (2007), a working environment is any set of procedures, rules, structures, equipment, or working circumstances that affect how well an individual performs. The working environment also includes the policies, procedures, culture, tools, coworkers, workplace setting, and internal and external environmental factors that impact how well employees execute their duties. However,

Taouk *et al.* (2020) argued that the physical work environment could only result in stress if an employee is not supported mentally and socially. The observation led to several studies, like those of Teo *et al.*, (2020), to posit that a psychosocial work environment significantly mediates the influence of the work environment on overall stress. While several studies have empirically examined the direct influence of physical and psychosocial environments on workplace stress, very few studies have taken a mediated construct to examine the interactions (McLinton *et al.*, 2018).

Therefore, this research aims to ascertain how the workplace environment's psychosocial aspects mediate the influence of the physical environment on work stress among educators in Higher Educational Institutions (HEIs). The study's findings will help clarify ongoing discussions on how HEIs and other organizations could design work environments conducive to achieving organizational goals and objectives by minimizing stress among critical employees.

II. THEORETICAL FRAMEWORK

A. Final Stage

This analysis of how the work environment impact work stress is anchored on the Person-Environment Fit Theory. Yu (2013) explains that this theory assumes people have an instinctual need to adapt and search for environments that complement their properties. People strive to fit in because they usually prefer consistency, want to control their lives, and reduce uncertainty, and want happiness and satisfaction.

In addition, Hogg (2006) asserts that people strive for certainty and predictability that can be achieved by converging their own beliefs, attitudes, and behaviors with those of others. In an earlier study, Kristof (1996) asserts that the Person-Environment Fit Model is based on the emphasis on the interaction between person and environment focuses on fitness. The model shows that work stress arises from different values between employees and organizations. Stress occurs when performance is taken as its own value and group performance as an organizational value.

Sonnentag and Frese (2009) argued that for healthy environments, employees' attitudes, skills, skills, and resources must meet the demands of their jobs, and work environments must meet their employees' needs, knowledge, and skills. The absence of fit in either of these domains can cause problems. The more significant the gap or disadvantage between the person and the environment, the greater the strain, as requirements exceed capacity and supplies.

Cox and colleagues (2006) stressed that this model differentiates between objective reality and subjective perceptions of reality, between the objective person (basic skills and needs) and the objective environment (actual demands and rewards), and between any combinations of these factors.

Thus, the Person-Environment Fit Theory is a plausible explanation for explaining the hypothesis. The theory explains how the existing environment and the absence of desirable economic conditions can trigger work stress among employees in the organization.

III. LITERATURE REVIEW

A. Work Stress

Stress, according to Steve (2011), results in an employee's reaction when specific demands, pressures, and professional aspects have to be faced in the workplace that does not match their level of knowledge by posing a challenge and a threat to the employee's abilities, which would, in turn, create a struggle for existence in terms of being employed in one place.

In addition, Jaffe and colleagues (2013) state that various professional contexts also create stressful conditions for workplace employees. When the employee feels that he/she is not backed by their managers/leaders or colleagues when they do not influence the work they do or because they do not know how to compete with a task that meets the requirements of the given task and the constraints they will have to face.

Le Fevre *et al.* (2012) argue that some stress is good and improves performance in favor of more valuable and precise concepts that should be rejected. The authors strongly reject the idea that a recognized "acceptable" stress level can be placed on a group of workers. This suggests that "positive stress results" may not be positive for everyone and that "positive stress" for one individual may be negative stress' for another person.

Cox and others (2006) pointed out that the question has always been whether stress affects one's health. The standard inference seems to be that stress has unwanted consequences and can affect health. Nevertheless, evidence shows that stress does not necessarily have pathological effects. Although a person may find it challenging to deal with a particular environment, it is doubtful that future health problems. The researchers also explored the impact of stress on a person already in a state of ill health. The authors conclude that a state of illness can reduce one's ability to cope with stress.

As observed by Cox and Griffiths (2010), the theory of contemporary stress is psychological in its approach in that it recognizes the role of psychological processes such as perception and emotion either implicitly or explicitly. This mindset is constructive because it considers individual differences in response to stress. Two very different variations of this psychological approach can be identified interactional and transactional theory Interaction focuses on the structural characteristics of interaction with the work environment. In contrast, transactional theory refers to the psychological mechanisms underlying this interaction.

On the other hand, Singh (2006) noted that ambiguity in the role of the frontline social service staff is the perception of uncertainty about the tasks involved in carrying out their work. There appears to be adequate evidence to endorse the contention that the ambiguity of roles is an inherent feature of many jobs, including frontline staff. Some studies suggest, however, that this relation does not exist for other types of jobs, such as clerical workers, police, and university professors.

In a recent study by Lait & Wallace (2008) involving 514 human service workers, the relationship between role conflict and work stress is analyzed using ordinary- most minor square regression analysis. A crucial positive relationship is found at $p < 0.001$.

Gruskin (2009) also conducted a study but this time about work overload and stress. The overload of roles is believed to be a significant concern for frontline staff in social service organizations. The social service staff at the Children's and Family Services Department in Miami, Florida, would be an example. These staff have been depicted as victims of an overloaded workforce. According to his study, "despite overtime, the backlog is just under 1,700 cases—13 percent higher than two years ago when the backlog unit was set up." In turn, "some social workers in South Florida—responsible for making life and death decisions for the abused and neglected children of the state—routinely take 20 to 40 hours of overtime a week."

The studies mentioned earlier reveal that stress, to a greater extent, causes more harm than good. In addition, the previous work also provides the idea that there are factors that cater to the development of stress in the workplace. The following section will look into the work environment leading to previous studies that relate work stress and work environment.

B. Work Environment

An older yet very prominent definition of work environment was asserted by Kohun (1992), who defines the work environment as a whole that comprises all the forces, actions, and other influential factors currently and potentially related to the activities and overall performance of the employee. The working environment, in this context, is the sum of the interrelation between the employees and the workplace environment.

On an entirely different note, Brenner (2010) believed that "the ability to share knowledge across organizations depends on how the working environment is designed to allow organizations to use the working environment as an asset. This helps companies improve efficiency and enables collective knowledge to benefit employees." Furthermore, he asserted that the working environment tailored to meet the satisfaction of employees and the free flow of ideas is a better medium to motivate employees towards greater productivity.

In addition, Opperman (2008) defines the working environment as a composite of two vital sub-environments: technical and human. Technical environment refers to tools, equipment, technology, and other physical or technical elements. The technical environment generates elements that allow employees to carry out their respective tasks and activities. In this study, the technical element is represented by the Physical Element of the Work Environment. The human environment relates to peers, other employees, teams and working groups, interactive issues, management, and leadership. This environment is intended to promote informal workplace interaction to improve the opportunity to share knowledge and ideas. This aspect is akin to the Psychosocial Working Conditions of the work environment.

1) Physical work environment

Cooper and Dewe (2010) noted that the physical working environment could result in a person fitting or misfitting into the workplace environment. An ergonomic workplace can also be called a physical working environment. Research on the working environment must be conducted to obtain an ergonomic workplace for each worker. With this ergonomic physical workplace, employees will not get nerve injury.

In addition, McCoy and Evans (2011) indicated that the elements of the working environment must be correct so that employees are not stressed during their work. They also stated in their article that the physical element plays a significant role in developing the network and relationship at work.

Moreover, Amir (2010) discusses work environment-related elements. Two key elements are the office layout plan and the office's comfort. He also indicated that a physical workplace is an area in an organization that is being organized in order to achieve the objective of the organization.

Raffaello and Maass (2008) described that a wide range of material objects and stimuli aspects or sources could heavily influence the physical working environment. Environmental properties such as noise can be caused at work by telephones, conversations with employees, or noises generated by industrial equipment. The stimulus includes the working conditions of employees, such as lighting and temperature. In the physical working environment, salient factors affecting employees can be subdivided into several broad areas: environmental properties, spatial arrangements, and interior design. Environmental properties refer to noise, temperature, air quality, and vibration; spatial arrangements refer to office layout, enclosure level, and proximity.

C. Psychosocial Work Environment

Nijman (2010) noted that a supervisor is also recognized as an experienced leader who can solve problems and is a role model at the first management level. As experienced managers, the supervisors always participated in the conduct of a training program. The training program being conducted includes the setting of objectives, the selection of the trainer, the development of lesson plans, the selection of the program method and techniques used, the preparation of materials, the program planning, and the analysis of training needs. However, the same study noted that supervisors could sometimes inflict unnecessary pressure on employees by providing impossible tasks making him/her a work stressor.

Chandrasekar (2011) also noted the role of incentive systems in the psychosocial aspect of the workplace. The organization influences what motivates its employees and establishes formal and informal structures to enhance the behavior of the employees. Rewards may combine internal rewards, such as complex tasks, and external rewards, such as higher compensation and peer recognition. Stress is developed not only because of work environment factors but also because of a lack of human resource management, such as the recognition of well-performing employees, poor working conditions, a lack of a performance assessment system, and poor feedback on performance results.

Moreover, the main factors affecting work behavior and personal behavior, according to Maslach and Leiter (2011), are workload, control, rewards, common good, impartiality, and values. The social aspects present in the working environment also affect the behavior and performance of employees; however, consideration must be given to the social contexts in which these elements developed. Therefore, the analysis of attitudinal, emotional, and behavioral responses concerning the working environment in which these reactions occurred.

In addition, organizational justice refers to employees' conception of justice or injustice in the company. As noted by Omar (2012), interference with dominant cultural patterns, i.e., the values of each individual, affects his or her perception of justice and the attitude and behavioral variables embedded in each organization's context and, eventually, stress.

D. Work Environment and Work Stress

Psychosocial Environment factors at work are described according to the theories of stress and the occupational health model (Netterstrom *et al.*, 2014). The two major stress models that deal closely with the effects of psychosocial stressors at work are the demand-control model and the level of control the worker can exercise.

Psychosocial work features involve various risk factors associated with psychological procedures linked to the social aspects at work that could pose a risk in the cause of the disease (Kompier 2011). After a thorough comparative overview of the most crucial work stress models, Kompier found some frequently used work-related features.

Bambra and others (2013) noted that the psychosocial work environment involves risk factors associated with the social work environment that can adversely affect health. Employment-related adverse health outcomes include heart disease and musculoskeletal problems, increasing the emotional effect of psychological stress.

In addition, Kinderman and colleagues (2013) established a relationship between mental health and psychological processes such as behaviors, thoughts, and emotions that determine the causal impact of biological, social, and empirical risk factors on mental health. In general, work stress models aim to find work-life attributes that can cause repeated and long-term stress and therefore predict the endpoint of the disease.

The psychosocial working environment has long been critical in worker health and safety research. Over the years, various concepts of working climate perceptions have been developed. Psychosocial risks at work harm workers' physical, mental, and social health (Leka & Jain, 2010). Then, on the other hand, the psychosocial working environment plays a direct and indirect role in institutional health indicators such as job satisfaction, productivity, absenteeism, absence of sickness, and intention to stop working.

Allebeck and Mastekaasa (2010) argued that various types of physical and psychosocial exposures were associated with work stress in the work environment. Heavy physical workload, ergonomic conditions, and exposure to hazardous substances are linked to a worker's lack of sickness. The psychosocial environment of overtime employees is positive and negative. Overtime is correlated with an increased workload, as workers have reported higher job requirements (like working very fast) and less time for work outside the workplace (difficulty starting the day off).

In addition to the negative stress aspect, Walton (2013) observed that positive work stress can be a significant motivating factor in terms of work performance and can lead people to do their best and sometimes the most productive work. Some stress levels are good for optimum alertness, behavior, and cognitive performance—workers when they search for possibilities to reach higher and do better. The effect of positive stress helps to overcome the challenge.

On the other hand, Dembe and others (2013) noted that the effect of long hours of work and non-standard shift work indicated that overtime and extended hours had a more significant impact on workplace injury than in the night, evening, and evening and other non - standard shift work schedules. Workers returning home from work injury struggle with non-standard work schedules, particularly overtime and long working hours.

Umberson and Montez (2010) proved that the relationship between employees and the support of employees play an essential role in the workplace. Social support for supervisors and colleagues builds the perception that an individual is part of a complex network where affection, assistance, and obligation can be given and received. The supervisor's role in maintaining organizational and employee relations is essential. A good relationship with supervisors and supportive behavior can also enhance the identity of employees with the broader organizational mission.

Andersen and others (2012) showed that more strenuous work could lead to different health outcomes, absenteeism, and low productivity. A study on healthcare workers clarified that moderate and strenuous physical work raises the risk of dose-response long-term absence of sickness.

The studies above show that many constructs prove how devastating stress can be if not properly managed. In addition, the previous works also proved how the work environment, both physical and psychosocial, can cause the development of stress in the workplace.

IV. RESEARCH METHODS

A. Sample and Data Collection

The study was conducted within five (5) Higher Educational Institutions in Northern Mindanao, Philippines. The Philippine Commission on Higher Education (CHED) established three criteria for the selection of HEIs, with the main one being that they must be chartered, licensed, or accredited by the relevant Philippine organization related to higher education and offer at least four-year undergraduate degrees (bachelor's degrees) or postgraduate degrees (master's or doctoral degrees) while primarily delivering their courses in a traditional, face-to-face, non-distance learning format.

A random sampling design was utilized in this study. This study's respondents were full-time and part-time faculty of the selected HEIs in Northern Mindanao, Philippines.

A total of 265 respondents were included in the study. The surveys were distributed to participants during their working hours. They came up with a cover letter outlining the researcher's purpose, the study's goal, and the measures that would be taken with the data in order to encourage a high response rate.

B. Measures

For this study, the researcher adopted and modified two research instruments. In terms of Work Environment, the instrument developed by Arsalani *et al.* (2011) will be utilized, while work stress will be assessed using indicators developed by Sams (2005) in his study "An empirical examination of job stress and management of emotionally based behavior: Frontline social service personnel

perspective.” The researcher made modifications to localize the questionnaire according to the objective of this study.

The final questionnaire, therefore, is composed of three parts. The first part covers the socio-demographic profile of the respondents in terms of age, gender, and highest educational attainment. The second part comprises ten items, all on a 4-point Likert scale. This part of the questionnaire comprises two dimensions: Psychosocial Working Conditions and Physical Aspect of the Work Environment, each having five items. Finally, the last part contains ten items also in the Likert Scale to assess the respondents' level of work stress. No indicators were expressed negatively.

C. Data Analysis

The construct of interest was assessed using Partial Least Square Structural Equation Modelling (PLS-SEM) with SMART PLS. This evaluation was conducted in two steps: the measurement of construct validity, which included convergent and divergent validity, and the goodness-of-fit and path analysis of the structured model. Henseler *et al.* (2014) suggest that Standardized Root Mean Square Residual (SRMR), Bentler-Bonett Index or Normed Fit Index (NFI), and Chi-Square criterion are appropriate in assessing the goodness of the model fit. On the other hand, both indirect and direct paths will be analyzed to test the hypothesized direct and mediating influence as designed in the study.

V. RESULTS

A. Demographic and Profile of the Respondents

TABLE I: SOCIO-DEMOGRAPHIC PROFILE OF THE RESPONDENTS

Measure	Category	Frequency	Percent
Sex	Male	82	30.94%
	Female	183	69.06%
	Below 24	9	3.40%
Age	24 - 40	105	39.62%
	41 - 55	86	32.45%
	above 55	65	24.53%
Marital Status	Married	251	94.72%
	Single	14	5.28%
Years of Teaching Experience	>10 years	111	41.89%
	3–10 years	110	41.51%
	<3 years	44	16.60%

Table I summarizes the socio-demographic profile of the 265 respondents of the study. Regarding sex, 69.06% (n=183) are female, while 82 respondents are male (30.94%). On the other hand, most respondents are between the ages of 21-40 and 41-55 at 39.62% (n=105) and 32.45% (n=86), respectively. Finally, most of the respondents are married (n=251, 94.72%) and have worked for more than ten years (n=111, 41.89%) or three to ten years (n=110, 41.51%).

B. Measurement Model

The analyzed model involved three latent variables – physical work environment, psychosocial work environment, and workplace stress. Physical work environment and psychosocial work environment both have five observable variables. As seen in Fig. 1, the physical work environment has a factor loading above 0.60, except for one with a factor loading of 0.549. The same observation can be said for the psychosocial work environment, with most loading factors

above 0.60, except one (0.565). Also, Workplace stress has loading factors above 0.60 except for one at 0.551. Typically, factor loading greater than 0.60 is advised. However, social science studies should not emit an item if the loading is lower than .60 (Vinzi, Chin, Henseler, & Wang, 2010) as it would not guarantee an improvement in both Cronbach alpha value and Average Variance Extracted (AVE).

Consequently, Table II shows the latent variables Cronbach alpha and AVE. As can be observed, all constructs have an alpha value greater than 0.70. In addition, all AVEs are also above 0.50. This observation would suggest that the measurement in the analyzed model is internally consistent. In addition, the results also showed that all constructs statistically converge to represent the underlying construct with all AVE values greater than 0.50.

TABLE II: CONSTRUCT VALIDITY AND RELIABILITY

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Physical	0.763	0.780	0.841	0.518
Psychosocial	0.744	0.763	0.830	0.596
Work Stress	0.882	0.890	0.904	0.587

The HTMT results in the table above proved that all measurements statically exhibit discriminant validity (all values are less than 0.90). In other words, the measurement constructs do not correlate with tests meant to evaluate other constructs. Henseler *et al.* (2015) argued that an HTMT greater than 0.90 exhibits a lack of discriminant validity which is not the case across all measurements in the model.

TABLE III: HTML OF ALL THE CONSTRUCTS

	Physical	Psychosocial	Work Stress
Physical	--	--	--
Psychosocial	0.755	--	--
Work Stress	0.310	0.417	--

Finally, the model fit was also assessed using fit indexes using Standardized Root Mean Square Residual (SRMR), Bentler-Bonett Index or Normed Fit Index (NFI), and Chi-Square criterion. Looking at Fig. 1, the model analysis yielded an SRMR of 0.070, X² of 435.832, and NFI equal to 0.938. Henseler *et al.* (2014) offer that the SRMR as a goodness of fit metric for PLS-SEM should be less than 0.10. In addition, Wui *et al.* (2009) suggested that a value between .90 and .95 is now considered marginal, above .95 is good, and below .90 is considered a poorly fitting model. Finally, the model's chi-square value was insignificant (X²=435.832).

However, O'Boyle and Williams (2011) found that when variables have non-normal distributions, particularly distributions with kurtosis and small sample sizes, the chi-square test is too liberal (i.e., there are too many Types 1 errors). For this reason, alternative measures are more reliable in assessing model fit. The results showed that the model exhibited a good fit, having passed two out of three model fit criteria.

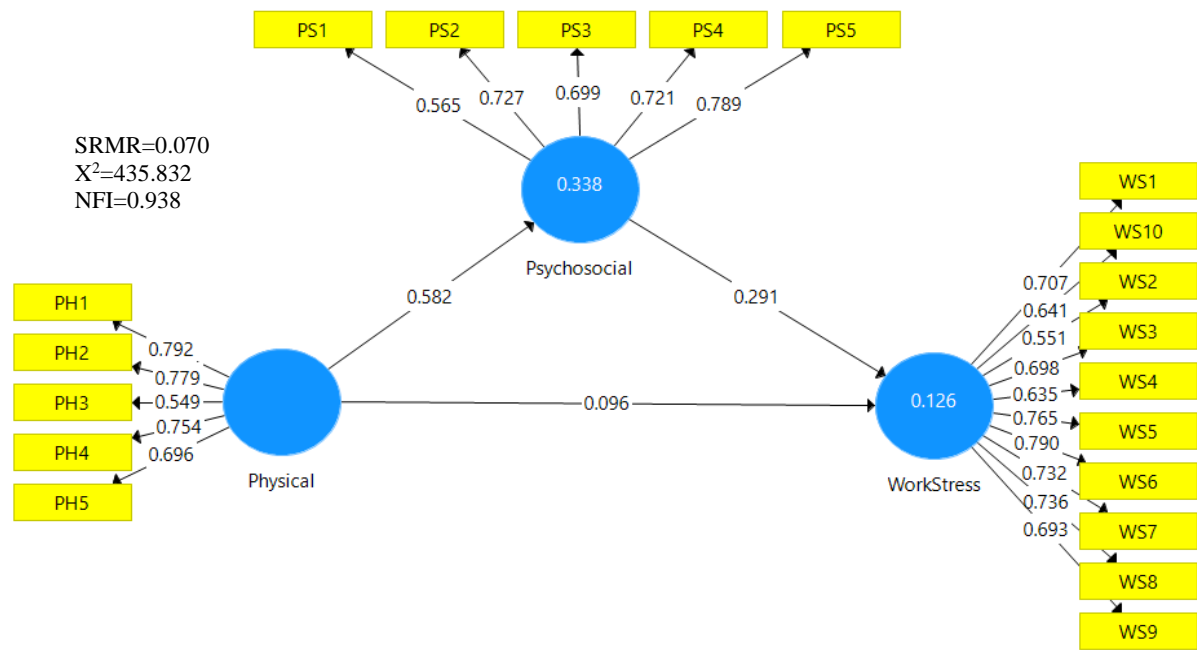


Fig. 1. Measurement and Model Fit Statistics the study.

C. Path Analysis

TABLE IV: DIRECT AND INDIRECT PATH ANALYSIS				
Path	Sample Mean	Standard Deviation	T Statistics	P Values
Direct Effects				
Physical>Psychosocial	0.590	0.044	13.233	0.000
Physical>Work Stress	0.110	0.103	0.926	0.355
Psychosocial>Work Stress	0.301	0.077	3.795	0.000
Indirect Effects				
Physical>Psychosocial>Work Stress	0.177	0.047	3.641	0.000

Table IV summarizes both the direct and indirect path of the model analyzed. As can be seen from the same table, Physical Work Environment significantly influences Psychosocial Work Environment ($t=13.233$, $p<0.01$) while Psychosocial Work Environment significantly influences work stress ($t=3.795$, $p<0.01$). In contrast, the path from Physical Work Environment to work stress was not statistically significant ($t=0.926$, $p=0.355$). Thus, Psychosocial Work Environment fully mediates the influence of the Physical Work Environment on an individual's work stress level. Put differently, and Physical Work Environment could only result in work stress if Psychosocial Work Environment mediates it.

VI. DISCUSSION

This study is conducted to empirically test how psychosocial working conditions significantly mediate the influence of Physical work Environment on workplace stress in Higher Education Institutions in the Philippines. The results showed that Physical Work Environment significantly influences Psychosocial Work Environment. The results

corroborate previous studies that demonstrated how factors such as employee safety, performance evaluation, motivational environments, and fostering good relationships between coworkers and managers could lead to increased psychological demands and poor employee control (Taheri *et al.*, 2020; Wei *et al.*, 2018; Al Sabei *et al.*, 2020). Additionally, increasing employee involvement in corporate affairs may increase their autonomy, a crucial work-related component linked to reduced psychological stress or burnout.

The research also discovered a direct relationship between stress and the psychosocial work environment. Several studies, including those by Li *et al.* (2022) and Goh *et al.*, (2019), discovered that the interaction of common work control brings on job stress and high job demands may result in stress-related illness. Similar research revealed that workplace social support, including but not limited to perceived inequity and workplace injustice, was an additional factor that increased the risk of work stress. (Virtanen *et al.*, 2018).

The research also discovered that the influence of the physical work environment on a person's level of work stress is fully mediated by the psychosocial work environment. Put another way, the psychosocial job Environment must be present for the Physical Work Environment to cause job stress. Khan *et al.* (2018) suggested that work control can fully mediate the effects of environment-related stress on overall employee burnout as the previous (i.e., coworker support, manager encouragement) reduces the emotional exhaustion stemming from low-performance evaluations and other environmental factors in the workplace. A more recent study from Taouk *et al.* (2020) suggests that the belief in one's ability to control the desired outcome of work demands significantly eliminates the environmental factors of stress.

VII. CONCLUSION

The study concludes that the influence of the physical work environment on a person's level of work stress is fully

mediated by the psychosocial work environment. With this, HEIs should consider implementing Organizational-level interventions for managing and responding to workplace stress. These actions should focus on psychosocial healthy work conditions to reduce teachers' stress experience. This could include reciprocal commitment behaviors among employees and management to strengthen the belief of overall organizational support toward achieving both institutional and individual-level goals. The need to encourage employees to take part in the organization's entire decision-making process could increase employees' control over their job outcomes, eventually leading to lesser burnouts and stress in HEIs. A conclusion section is not required. Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions.

It is essential to consider the study's limitations when interpreting the findings. Only the selected HEIs in Northern Mindanao were included in the research, which led to a small sample size, which is one of its limitations. Larger sample sizes, including those from different cities, should be used in future studies because the findings are challenging to generalize. Including additional elements in both the physical and psychosocial aspects of stress may be the subject of future research.

VIII. LIMITATIONS

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CONFLICT OF INTEREST

Authors declare that they do not have any conflict of interest.

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Jishanis Mae Becaro, MBM, is currently an Instructor and the Research Development and Extension Coordinator in Bukidnon State University–Cabanglasan. Her research interests are in Finance, Marketing, and General Management. Her current research projects explore concepts and theories in investment and financial markets. Jishanis is currently enrolled in Doctor of Management at Capitol University.

Allan V. Beliganio, MBM is currently a lecturer who teaches financial management in Bukidnon State University–Cabanglasan Campus. In 2010, he earned a Bachelor of Science in Business Administration with a focus on Banking Finance from Bukidnon State University. In 2020, he also completed his master's degree at Capitol University. At Xavier University-Ateneo de Cagayan, he is now working toward his doctorate in business management. He thinks that engaging in research will encourage you to conceive fresh concepts, new arguments, and fresh possibilities.

Rosemarie Dingding, RL, MLIS is currently a Librarian and an Instructor at Bukidnon State University–Cabanglasan Campus. Her research interests are in Librarianship, Information Management, and Special Library Management which deals with Archives and Museums. Her research involvement focuses on Academic Libraries, the Librarianship profession and General Management.

Liza Mae Acal-Maganding, MPSM is currently an instructor of Bukidnon State University–Cabanglasan Campus. Management, Administration, and Governance are her areas of interest for research. Liza Mae is presently enrolled in Public Administration Doctoral program.