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Research Paper

# Integrating Physical and Non-Physical Work Environment to Enhance Employee Productivity: An Ergonomics and JD–R-Based Study at the Moro'o Sub-District Office, West Nias

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**Abstract**

The work environment plays a crucial role in determining employee productivity, particularly in the public sector, which is focused on community service. A conducive work environment—both physically and non-physically, can increase enthusiasm, concentration, and performance, while unsupportive conditions have the potential to reduce productivity and increase stress. This study aims to: (1) describe the working environment conditions at the Moro'o Subdistrict Office in West Nias Regency, (2) identify factors that affect employee productivity, and (3) analyse the relationship between the physical and non-physical working environment and employee productivity. The study used a descriptive qualitative approach with data collection techniques through observation, in-depth interviews, and documentation. The results showed that the physical work environment still faced several obstacles, particularly related to uneven lighting, suboptimal air quality and ventilation, cramped and disorderly room layout, and noise during busy service hours. In contrast, the non-physical work environment is relatively strong, characterised by supportive leader-subordinate relationships, open communication, and harmonious cooperation among colleagues. The interaction between physical limitations and non-physical strengths simultaneously affects the comfort, efficiency, and productivity of employees in providing services to the community.

***Keywords:*** *Physical Work Environment, Non-Physical Work Environment, Employee Productivity, Public Sector, Sub-District Office*

## INTRODUCTION

Employee productivity is one of the main factors determining the effectiveness of organisational performance, especially in the government sector, which plays a direct role in the provision of public services. The phenomenon of low productivity is often associated with an unsupportive work environment. An uncomfortable work environment, both physically and non-physically, can reduce work enthusiasm, cause stress, and ultimately affect the quality of service to the community (Agbozo et al., 2017). From a human resource management perspective, the work environment is not just a place where employees work, but a system that combines physical aspects (space, facilities, physical comfort) with socio-psychological aspects (relationships, communication, work climate) that together shape the daily work experience. Therefore, the urgency of this study lies in the need to understand in an integrated manner how the combination of physical and non-physical conditions in the work environment affects employee productivity, especially in sub-district government offices that are at the forefront of public service.

The selection of the Moro'o Sub-district Office in West Nias Regency as the object of research was based on preliminary observations made by the principal investigator during the pre-research stage through several field visits and informal observations during working hours. Through these visits, the researcher identified various problems in the workplace, ranging from uneven lighting


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between the front and back rooms, suboptimal ventilation at certain hours, limited office equipment, to the absence of a special rest room for employees and a lactation room. When compared to the general description of sub-district offices in urban areas, which in various government reports and previous studies tend to have more adequate facilities, these conditions reflect an imbalance in facility capacity between regions. This comparison is not based on quantitative measurements between offices, but rather on descriptive information from official documents and secondary sources that better illustrate the office infrastructure in more urban areas. These differences not only reflect physical inequality but also have the potential to influence non-physical dynamics such as workload, communication patterns, and organisational climate. Therefore, the Moro'o Sub-District Office is a relevant and important empirical context for research because it describes the reality of government offices in areas that often face resource constraints, both in terms of infrastructure and management.

In the context of this study, the work environment variable (physical and non-physical) is viewed as a single independent factor that affects employee productivity as a dependent variable. The physical work environment includes lighting, temperature, layout, cleanliness, and availability of work facilities (Afandi, 2016; Darmadi, 2020). Meanwhile, the non-physical work environment includes employee relationships, communication patterns, work culture, organisational justice, and leadership support (Herlinda et al., 2021; Budiarti, 2020). Conceptually, in this article, the work environment is positioned as a single latent construct that has two interrelated dimensions, namely the physical dimension and the non-physical dimension; these two dimensions are analytically distinguished for the purpose of presenting findings, but are not treated as two separate independent variables in the research framework. Theoretically, these two dimensions do not stand alone but interact with each other: uncomfortable physical conditions can worsen the psychosocial atmosphere (e.g., triggering tension and complaints), while supportive work relationships can reduce the negative impact of physical limitations. In other words, a conducive work environment is the result of synergy between physical design that allows employees to work comfortably and safely, and a social-organisational climate that encourages motivation, commitment, and job satisfaction, which ultimately contributes directly to employee productivity.

A number of previous studies have examined the relationship between the work environment and productivity in various organisational contexts. Agbozo et al. (2017), for example, studied the banking sector in Ghana and found that the quality of the work environment—including physical, social, and psychological aspects had a significant effect on job satisfaction and, indirectly, on performance. Darmadi (2020), in the context of organisations in Indonesia, highlighted the role of physical aspects such as lighting and air conditioning systems in supporting employee performance. Herlinda et al. (2021) examined the contribution of social and work culture aspects in organisations in Indonesia, showing that positive employee relationships and work culture play an important role in improving human resource performance. Budiarti (2020) also emphasised that although the work environment is not a direct part of the production process, it has a significant influence on employee performance in various types of organisations. Similar findings were also revealed by Kurniawan and Kusumaputri (2016), who researched manufacturing companies in Indonesia and showed that an ergonomic physical work environment, with adequate lighting, appropriate temperature, and controlled noise, correlates positively with employee productivity.

However, most of these studies were conducted in the private sector or in urban environments with relatively better work facilities, and many of them examined physical and non-physical dimensions separately, rather than as a single interconnected construct. In addition, the approaches used are generally quantitative with standardised survey instruments, so that the subjective experiences of employees in navigating physical limitations and utilising non-physical

resources in the context of rural sub-district offices with limited resources are still relatively unexplored. The research gap arises due to the limited number of empirical studies that integratively analyse the physical and non-physical dimensions of the work environment as a single latent construct in sub-district level government institutions in remote areas or districts, particularly in regions such as West Nias, which have different geographical characteristics and resource limitations compared to urban areas.

Based on this description, this study offers a new approach to analysing the work environment and employee productivity in the context of sub-district level government in areas facing facility and resource constraints, by placing the physical and non-physical work environment as an integrated construct. Theoretically, this study is expected to enrich the literature on the relationship between the work environment and employee productivity in the regional public sector through an approach that combines physical and non-physical dimensions simultaneously. In practical terms, this study provides concrete recommendations for the management of the Moro'o Sub-district Office to improve the work environment, both in physical aspects (lighting, ventilation, layout, facilities) and non-physical aspects (communication patterns, leadership style, work climate), so that employee productivity can be increased and services to the community can be optimised. In line with this, the main objectives of this study are: (1) to analyse the working environment conditions at the Moro'o Sub-District Office, (2) to identify aspects of the work environment that employees perceive as most influential on productivity, and (3) to examine how the physical and non-physical dimensions that form the work environment construct interact and are collectively experienced by employees in relation to productivity at the Moro'o Sub-District Office, West Nias Regency.

To clarify the focus of the analysis, these objectives are further elaborated into three research questions, namely how employees perceive the physical and non-physical dimensions of the work environment at the Moro'o Subdistrict Office, which aspects of the work environment are considered to have the greatest impact on their productivity in providing public services, and how the physical and non-physical dimensions, treated as an integrated latent construct, interact in shaping employee productivity within the resource-limited context of the Moro'o Sub-District Office.

## LITERATURE REVIEW

### Work Environment

The work environment is a key factor that influences the activities, behaviour, and performance of employees in an organisation. Nitisemito (2015) defines the work environment as everything around workers that can influence them in carrying out their duties, ranging from cleanliness, lighting, spatial layout, to social conditions. This definition emphasises that the work environment is not only physical but also includes psychosocial dimensions that can support or hinder productivity. In line with this, Smith and Bititci (2017) explain that the work environment is closely related to productivity because a conducive work environment allows for the optimisation of individual skills, technology application, and management methods.

Sedarmayanti (2015) distinguishes the work environment into two main categories, namely the physical and non-physical work environment. The physical work environment includes tangible conditions that can be directly felt by employees, such as the availability of work facilities (desks, chairs, computers, printers), room temperature and humidity, ventilation, lighting, noise, room layout, and room colour. The non-physical work environment relates to social and organisational dimensions, such as employee relationships, leadership style, communication patterns, organisational culture, information systems, and the work climate that is formed. These two dimensions are complementary: a comfortable physical environment increases concentration and

work comfort, while a healthy non-physical environment encourages employee motivation, engagement, and job satisfaction.

Modern office ergonomics studies reinforce the importance of the quality of the physical work environment. Recent ergonomics studies show that ergonomic workspace and furniture design, including adjustments to desks, chairs, and equipment layout, has a direct impact on reducing musculoskeletal complaints, increasing comfort, and improving office worker productivity (Brown & Johnson, 2022; Li & Zhang, 2023; Smith, Clark, & Roberts, 2021). A systematic review of workplace ergonomics and productivity also confirms that ergonomic interventions, such as workspace redesign, lighting adjustments, and ergonomic training, are consistently associated with increased work effectiveness and employee well-being (Martínez, García, & Santos, 2024; Martínez, Fernández, & Ruiz, 2024). Thus, the quality of the physical work environment is not only related to immediate comfort but also serves as a structural factor influencing long-term performance.

Work environment quality, according to Duffy and Powell (2017), is determined by a combination of physical, psychological, and social factors. Physical factors include lighting, room temperature, air circulation, noise, vibration, and layout; intermediate factors include cleanliness, odour, and room colour; while ergonomic aspects relate to the extent to which work facilities are adapted to user characteristics to ensure comfort, safety, and occupational health. According to Sedarmayanti (2017), indicators of the physical work environment include adequate lighting, good air circulation, effective workspace layout, decoration, and room colours that support comfort, controlled noise, and sufficient work facilities. Meanwhile, non-physical work environment indicators include the quality of superior-subordinate relationships, harmonious relationships between co-workers, and a conducive and cooperative work climate (Sedarmayanti, 2017; Williams, Thompson, & Lee, 2021).

Based on this synthesis, the work environment in this study is understood as an integrated system that combines physical dimensions (ergonomics of space and facilities) and non-physical dimensions (social relations, leadership style, and organisational climate), which simultaneously influence employees' work experience and productivity.

**Work Productivity**

Work productivity essentially describes the effectiveness and efficiency of resource use in producing output. Sutrisno (2011) defines productivity as the ratio between output and the resources (input) used, while Hasibuan (2010) emphasises the mathematical comparison between the number of products produced and the resources used in the work process. Zhang and Liu (2020) add that in the context of modern organisations, productivity is not only measured by the quantity of output, but also by the quality of work, adherence to deadlines, and the ability to meet established performance standards.

Factors that influence work productivity can be grouped into internal and external factors. Internally, productivity is influenced by age, physical condition, motivation, discipline, work ethic, skills, and the suitability of tasks to individual competencies (Sutrisno, 2011). Yuniarsih (2013) highlights the importance of commitment, organisational culture, and internal communication patterns as determinants of productivity. Externally, productivity is influenced by the work environment, organisational policies, government regulations, the intensity of competition, and broader socio-economic dynamics (Green & Henseke, 2016). Research by Kurniawan and Kusumaputri (2016) shows that a comfortable physical work environment, with adequate lighting, appropriate room temperature, and controlled noise, has a significant effect on increasing employee productivity, reaffirming that productivity must be viewed holistically by including the human and work environment dimensions.

Efforts to increase productivity can be made through motivational and managerial approaches. Robbins and Judge (2018) state that an effective motivation system, in the form of incentives, rewards, and recognition, can increase work enthusiasm and reduce counterproductive behaviour. On the other hand, providing an ergonomic and conducive work environment plays an important role in maintaining long-term productivity by reducing fatigue and the risk of health problems (Smith et al., 2021; Brown & Johnson, 2022). Career development programmes, training, and management systems that encourage innovation and collaboration are also important strategies for increasing employee productivity, particularly in public sector organisations facing increasingly high performance and accountability demands (Nguyen & Waring, 2016; Schermerhorn & Bachrach, 2019).

**Work Environment and Productivity in the Public Sector**

In the context of the public sector, the relationship between the work environment and productivity has its own characteristics. This sector generally faces high public service demands, resource constraints, and complex regulations. Recent international studies show that the quality of the work environment, both physical and non-physical, has a significant influence on work engagement, performance, and innovative behaviour of public employees (Williams et al., 2021; Kim & Park, 2022; García, Torres, & Delgado, 2024).

Several Job Demands–Resources (JD-R) Model-based studies in the public sector show that job resources (e.g., supervisor support, autonomy, and positive work climate) can increase work engagement and performance, as well as reduce the negative impact of job demands such as high workload and bureaucratic barriers (Williams et al., 2021; Singh & Verma, 2023; Zhang & Liu, 2020). These studies place non-physical work environments, particularly organisational support, role clarity, and the quality of social relationships, as key "resources" that maintain employee energy and motivation amid heavy work demands.

On the other hand, research on organisational climate in public agencies also shows that a supportive, open, and development-oriented climate is positively associated with creativity, innovative behaviour, and public sector employee performance (Nguyen & Waring, 2016; Kim & Park, 2022; Martínez et al., 2024). These findings reinforce the argument that the non-physical work environment not only affects job satisfaction but also performance and productivity through psychological mechanisms such as a sense of appreciation, trust, and commitment to the organisation.

In parallel, post-2018 workplace ergonomics studies confirm that workspace layout, lighting quality, air circulation, and work equipment design have direct implications for the comfort, cognitive load, and productivity of office employees (Smith et al., 2021; Li & Zhang, 2023; Martínez et al., 2024). Although most of these studies were conducted in the context of private companies or offices in urban areas, the same principles are relevant to sub-district government agencies that face physical facility limitations but are required to provide optimal public services.

Thus, both international and national literature indicate that increasing productivity in the public sector requires a comprehensive approach to the work environment—combining interventions in physical (ergonomics and facilities) and non-physical (organisational climate, leadership, and work relationships) aspects in an integrated manner.

**Theoretical Framework**

Based on the above literature review, this study relies on several main theoretical foundations that integrate the physical and non-physical dimensions of the work environment with employee productivity, namely Ergonomics Theory, the Job Demands–Resources (JD-R) Model,

Organisational Climate Theory, and Productivity Theory.

**Ergonomics Theory**

Ergonomic theory explains that work systems, including workspaces, equipment, and layout—must be adapted to human characteristics to achieve comfort, safety, and efficiency. The application of ergonomic principles in the workplace includes the regulation of lighting, ventilation, temperature, work positions, and furniture design to reduce fatigue and the risk of injury and increase productivity. Recent empirical findings confirm that ergonomic interventions, both physical and cognitive, can improve working conditions, workflows, and the work output of office employees (Smith et al., 2021; Brown & Johnson, 2022; Martínez et al., 2024). In this study, " Ergonomic Theory is used to explain how lighting, air quality, spatial arrangement, and facilities at the Moro'o Subdistrict Office influence employee comfort and work effectiveness.

**Job Demands–Resources (JD-R) Model**

The JD-R model views that every job has demands (job demands) and resources (job resources) that together influence work engagement, stress, and performance. Job demands include workload, time pressure, task complexity, and bureaucratic barriers, while job resources include supervisor support, autonomy, role clarity, and a positive work climate. In the context of the public sector, a number of studies show that job resources, including public service motivation, can increase work engagement and performance, while moderating the negative impact of job demands (Williams et al., 2021; Singh & Verma, 2023; Zhang & Liu, 2020). This study uses JD-R to understand how non-physical work environments (supervisor-subordinate relationships, peer relationships, organisational support) act as resources in dealing with various service demands in sub-district offices.

**Organisational Climate Theory**

Organisational climate theory explains how employees' perceptions of organisational policies, practices, and procedures shape the climate, which ultimately influences work attitudes and behaviour. A supportive, fair, and participatory climate will encourage creativity, innovative behaviour, and employee performance, including in the public sector (Nguyen & Waring, 2016; Kim & Park, 2022; Williams et al., 2021). In this study, the organisational climate is reflected in the quality of leader-subordinate relationships, harmony among co-workers, conflict resolution mechanisms, and a sense of togetherness at the Moro'o Sub-District Office, which is hypothesised to contribute to employee motivation and productivity.

**Productivity Theory**

Productivity theory views productivity as the ratio between output and input, as well as a reflection of the effectiveness and efficiency of work processes. In the context of modern organisations, productivity is not only related to the quantity of output but also to the quality of service, timeliness, and user satisfaction (Green & Henseke, 2016; Zhang & Liu, 2020). In the public sector, productivity is linked to an organisation's ability to provide better services with limited resources, making productivity improvement an important mandate of public policy. In this study, employee productivity is operationalised through the effectiveness and efficiency of employees in completing tasks, as well as the quality of services provided to the community at the Moro'o Sub-District Office.

These four theoretical foundations complement each other: Ergonomics Theory explains the physical dimensions of the work environment; the JD-R Model and Organisational Climate Theory explain the non-physical dimensions and psychosocial mechanisms; while Productivity Theory provides a framework for understanding the ultimate impact on employee performance and public

services.

**Previous Research**

Previous studies have examined the relationship between the work environment and employee productivity. Kurniawan and Kusumaputri (2016) found that an ergonomic work environment has a significant effect on productivity in manufacturing companies. Robbins and Judge (2018) emphasise that a combination of strong work motivation and a conducive work environment are key factor in increasing productivity. Nguyen and Waring (2016), who studied public sector organisations, showed that a positive organisational culture and a supportive work environment can improve employee efficiency. Green and Henseke (2016) found that job satisfaction, which is influenced by work environment conditions, among other factors, is closely related to increased productivity. Williams and Laing (2018) added that flexible workspace design can encourage performance and job satisfaction, while Schermerhorn and Bachrach (2019) highlighted the importance of training in the use of workspaces and equipment to improve the efficiency of government employees.

Recent international studies in the public sector also show that non-physical work environments, particularly organisational climate and leadership support, are closely related to creativity, innovative behaviour, and the work engagement of public employees (Williams et al., 2021; Kim & Park, 2022; García et al., 2024). However, most of these studies use a quantitative approach and focus on organisations in developed countries or urban areas, with relatively better work facilities compared to agencies in remote areas.

In terms of context, there are still limited empirical studies that integratively examine the physical and non-physical work environments in sub-district level government agencies in areas facing infrastructure and resource constraints, such as West Nias. In addition, most previous studies have focused on quantitative measurements of productivity, while the understanding of employees' subjective experiences of the work environment and its implications for productivity has been relatively under-researched. This study attempts to fill this gap by using a qualitative approach to explore how the physical and non-physical work environments at the Moro'o Sub-district Office are perceived and experienced by employees, and how this affects productivity and the quality of public services.

**Framework**

The research framework is based on the relationship between the independent variable, namely the work environment (physical and non-physical), and the dependent variable, namely employee productivity. The physical work environment includes aspects such as lighting, ventilation and air quality, layout, noise, decoration, and the availability of work facilities. The non-physical work environment includes supervisor-subordinate relationships, relationships between co-workers, work climate, and leadership practices. Based on Ergonomics Theory, the JD-R Model, and Organisational Climate Theory, this study assumes that a conducive work environment, in the sense of being physically comfortable and socially and organisationally supportive, will increase employee motivation, concentration, and engagement, which will ultimately have an impact on increasing work productivity as explained by Productivity Theory.

Conceptually, this framework positions the physical and non-physical work environments as interacting factors: limitations in the physical environment (e.g., poor lighting, poor ventilation, cramped spaces) have the potential to reduce comfort and concentration at work, but their negative impact can be minimised if the non-physical environment (support from leadership, harmonious working relationships, positive work climate) is strong. Conversely, a good physical environment without the support of a healthy organisational climate does not necessarily result in optimal productivity. Thus, the more conducive the physical and non-physical work environment at the

Moro'o Sub-District Office in West Nias Regency, the higher the productivity of employees in providing services to the community. This framework of thinking forms the basis for formulating the focus of analysis and drawing conclusions in this study.

## RESEARCH METHOD

This study uses a qualitative approach with a descriptive type. This approach was chosen because it provides an in-depth and contextual understanding of social phenomena, particularly related to how employees interpret working conditions and their impact on productivity. According to Iskandar (2019), qualitative research focuses on understanding the meaning behind human behaviour and social phenomena studied in their natural context. In this approach, the researcher acts as the main tool that directly collects, interprets, and analyses data. Qualitative descriptive research is considered appropriate for the objectives of this study because it allows researchers to describe in detail the subjective experiences of employees, without testing statistical hypotheses, but emphasising depth of meaning and understanding of the process.

### Research Subjects and Informant Selection Techniques

The subjects in this study were employees and leaders at the Moro'o Sub-District Office, West Nias Regency.

The main informants consist of the Sub-district Head, Sub-district Secretary, Head of General Affairs, and Head of Government Affairs, who were selected because they have strategic responsibilities in managing human resources and working conditions and understand the dynamics of employee performance at the sub-district level. The informant selection technique used was purposive sampling, which is the deliberate selection of informants based on certain criteria (Sugiyono, 2017).

These criteria included: (1) having worked at the Moro'o Sub-district Office for at least two years to have a continuous understanding of the working environment; (2) being directly involved in the process of community service or employee management; and (3) being willing to provide information openly and reflectively. In addition to the four main informants, the researcher also involved six other employees as supporting informants, who came from several departments such as public services, population administration, and government affairs, with varying lengths of service (from less than five years to more than ten years) and different educational backgrounds. The involvement of these supporting informants was intended to capture a more diverse perspective on the working environment and productivity at the Moro'o Subdistrict Office.

### Research Variables/Focus

In qualitative research, the term ‘variable’ is understood as the main focus or aspect being studied (Sugiyono, 2020). This study focuses on two main aspects. First, the work environment as an independent focus consisting of the physical and non-physical work environment. The physical work environment includes lighting, air circulation, workspace layout, decoration and colour scheme, noise levels, and availability of facilities. The non-physical work environment includes the relationship between superiors and subordinates, harmonious relationships between co-workers, and a conducive and supportive work climate. Second, employee productivity as a dependent focus, which is understood through the effectiveness and efficiency of employees in completing tasks, both in terms of the quantity and quality of work, as well as timeliness and quality of service to the community.

### Research Location and Time

This research was conducted at the Moro'o Subdistrict Office, West Nias Regency. The

location was chosen based on the consideration that the office represents the real conditions of government institutions in areas that face limitations in physical facilities and non-physical support, but are still required to provide optimal public services. Field research was conducted during the period August–November 2024, which included the preparation of instruments, data collection through interviews, observation and documentation, and preliminary analysis of findings in the field.

**Data Sources**

The data sources in this study consist of primary and secondary data. Primary data was obtained directly from informants through in-depth interviews, observation, and field documentation, which reflect the experiences, views, and actual conditions of employees at the research location. Secondary data was obtained from internal office documents, activity reports, regulations, archives, and supporting literature such as books, journals, and scientific articles relevant to the topic of work environment and productivity. Secondary data serves to strengthen the analysis and complement the information obtained from primary data (Sugiyono, 2009).

**Research Instruments**

The main instrument in qualitative research is the researcher themselves. This means that the researcher directly becomes a tool for collecting, analysing, and interpreting data. According to Sugiyono (2016), the researcher is responsible for interacting with participants, asking questions, listening to and recording answers, and reflecting on the meaning of the data collected. In addition to the researcher as the main instrument, this study also uses interview guidelines, observation sheets, and documentation recording formats as supporting instruments compiled based on the focus of the study.

**Data Collection Techniques**

Data collection techniques included observation, in-depth interviews, and documentation.

**Observation**

Observation was conducted directly in the work environment, physical facilities, layout, and employee activities at the Moro'o Subdistrict Office. Observation was conducted non-participatorily, where researchers observed without being involved in employee work activities. Observations were conducted in several sessions over five working days at different service hours (morning and afternoon), focusing on lighting distribution in various rooms, air circulation and thermal comfort, layout patterns and employee movement, noise levels, and employee interactions with colleagues and the community. Through observation, researchers can ensure consistency between the information provided by informants and the facts in the field (Spradley, 1980).

**In-depth Interviews**

Interviews were conducted in a semi-structured manner, using an interview guide containing key themes related to the physical work environment, non-physical work environment, and employee productivity. A semi-structured approach was chosen so that researchers had clear guidelines, while still allowing informants to express their experiences and views freely and in depth. The main questions covered the informants' perceptions of lighting, ventilation, layout, facilities, relationships with superiors and co-workers, and the impact of these conditions on work enthusiasm, concentration, and service quality. Interviews were conducted face-to-face in the office environment, audio-recorded with the informants' consent, and supported by field notes to capture relevant context and non-verbal expressions.

**Documentation**

Documentation was used to supplement interview and observation data, including the collection of photographs of workspace conditions, organisational structures, meeting minutes, activity reports, and other relevant documents. Documentation helped to provide visual and textual evidence that enriched the description of the work environment and work practices at the Moro'o Sub-District Office. By combining these three techniques, the data obtained was more complete and allowed for cross-checking between sources and methods.

**Data Validity**

Data validity in this study is ensured through source triangulation, method triangulation, and time triangulation. Source triangulation is carried out by comparing information from various informants (sub-district head, sub-district secretary, head of general affairs, head of government affairs, and other employees) to see the consistency of views regarding working conditions and productivity. Method triangulation was carried out by comparing the results of interviews, observations, and documentation. Time triangulation was carried out by collecting data at different times (e.g., morning and afternoon) to capture variations in working conditions and service activities. According to Sugiyono (2017), triangulation is an important technique in qualitative research because the validity of the research results must be accountable.

**Data Analysis Techniques**

Data analysis was carried out simultaneously with the data collection process until the research was completed. The analysis model used refers to a thematic analysis approach with the Miles and Huberman (1994) framework, which consists of four main stages.

**Data Collection**

Data was collected through interviews, observations, and documentation, then transcribed into interview transcripts, field notes, and written and visual documentation.

**Data Reduction**

Data reduction was carried out by selecting, summarising, and focusing the data on information relevant to the research focus, such as physical and non-physical work environment aspects, as well as employee productivity indicators. At this stage, the researcher conducted an initial coding process (open coding) to group the informants' statements into specific categories, such as ‘poor lighting’, ‘cramped workspace’, ‘supportive supervisor-subordinate relationships’, or ‘harmonious teamwork’.

**Data Presentation**

Data presentation is carried out in the form of narrative descriptions, matrices, or diagrams that make it easier for researchers to see patterns of relationships between categories and themes. Through data presentation, researchers can compare informants' views and see the relationship between work environment conditions and employee productivity.

**Conclusion and Verification**

At this stage, researchers interpret the themes that have been formed to answer the research questions. Conclusions are provisional and continue to be verified by reviewing the data, clarifying with informants if necessary, and comparing the findings with previous theories and research. This analysis process is cyclical and interactive, allowing researchers to make adjustments until valid

conclusions are obtained that are in line with field conditions. The thematic analysis approach is considered appropriate for this study because it allows researchers to identify recurring patterns of meaning in employees' experiences related to the work environment and productivity, while linking these patterns to the theoretical framework used. Thus, thematic analysis helps to reveal how the physical and non-physical dimensions of the work environment at the Moro'o Sub-District Office concretely affect employee productivity in the context of public services at the sub-district level.

## FINDINGS AND DISCUSSION

### Research Results

### Characteristics of Informants

This study involved four key informants from the Moro'o Subdistrict Office, West Nias Regency, namely the Subdistrict Head, Subdistrict Secretary, Head of General Affairs, and Head of Government Affairs. All informants had been working for more than two years, so they had sufficient experience regarding the work environment and dynamics of employee productivity at the subdistrict level. To maintain confidentiality, the identities of the informants were disguised using the codes P1–P4.

**Table 1.** Characteristics of Key Informants

| Informant Code | Position | General Description |
|---|---|---|
| **P1** | District Head | District Head |
| **P2** | District Secretary | Assists with general coordination |
| **P3** | Head of General Affairs | Managing general affairs |
| **P4** | Head of Government Affairs | Managing government affairs |

### Physical Work Environment

Findings related to the physical work environment indicate that conditions at the Moro'o Subdistrict Office are characterised by a combination of factors that support and limit employee comfort and productivity. In terms of lighting, informants described a clear difference between the front and back rooms. According to P1, the front room has good natural lighting due to large windows, making it quite bright from morning to noon. P1 stated, In the front room, there is plenty of sunlight because the windows are large, so from morning to noon, we have no difficulty seeing documents. However, both P1 and P3 emphasised that some of the back rooms tend to be less bright, especially in the afternoon or when the weather is cloudy, so employees often rely on additional desk lamps to be able to work comfortably. P3 explains, 'In the back rooms, especially in the afternoon or when the weather is cloudy, the room feels dim, and we usually turn on additional lights so that our eyes don't get tired quickly. P2 adds that in poor lighting conditions, the eyes get tired quickly and are sometimes accompanied by headaches, which then lead to a decrease in concentration and the need to take more frequent breaks. P2 revealed that if there is not enough light, my eyes get tired quickly and sometimes I even get dizzy, so I have to take frequent breaks.

This condition shows that the distribution of lighting in the office is not yet even and still heavily relies on natural light. From an ergonomic perspective, this situation has the potential to increase the visual and cognitive load on employees. These findings are in line with studies by Smith, Clark, and Roberts (2021) and Brown and Johnson (2022), which show that adequate and even lighting is important for maintaining visual comfort and supporting productivity in the workplace.

In terms of air quality and ventilation, all informants acknowledged that the air in the workspace tended to be quite fresh and comfortable in the morning, mainly due to the airflow from the available ventilation. However, in the afternoon and evening, the room began to feel hot and

stuffy. P1 attributed this condition to the lack of an adequate air conditioning system. P1 stated, 'In the morning, the air is still pleasant, but as the day progresses, the room feels hot and stuffy because there is no adequate air conditioning. P3 admitted that they often had to leave the room for a while to get some fresh air because the room felt stuffy. According to P3, when it's noon, I sometimes go outside for a moment just to get some fresh air, because it feels stuffy inside when it's crowded. P4 added that the situation becomes more uncomfortable when the number of employees and visitors increases, making the air feel very stuffy and disrupting service. P4 explains, 'When there are many visitors, the room becomes crowded, the air feels very heavy, and it interferes with our comfort when serving customers.

This description shows that the ventilation system in the office is not yet capable of maintaining stable air quality throughout the day as recommended in the ergonomics literature on healthy work environments (Martínez, García, & Santos, 2024; Smith et al., 2021). In practical terms, this results in increased fatigue, reduced concentration, and decreased work comfort. These findings are in line with Martínez et al. (2024), who identified air quality, temperature, and ventilation as important components of the physical work environment that affect the efficiency and well-being of employees in public institutions (Martínez et al., 2024).

Workspace layout and availability of facilities also emerged as important themes in the data. Informants described the workspace as cramped, cluttered with furniture and documents, and poorly organised. P1 described the room as cramped and cluttered due to the disorderly placement of desks, chairs, and cabinets. P1 stated, 'The room feels cramped because the desks, chairs, and cabinets are placed without a clear pattern, making it look full and cluttered. P2 and P3 acknowledged that this condition forced them to move around more to find documents or equipment, making their work time less efficient. P2 reveals that sometimes we waste time just walking back and forth looking for files because the storage and layout are not neat. Although basic facilities such as desks, chairs, computers, printers, archive rooms, and meeting rooms are available, P3 and P4 highlight that there are still deficiencies in certain supporting facilities, such as air conditioning, scanners, technical measuring instruments, lactation rooms, and play areas for members of the public who come with small children.

These findings indicate that the existing layout and facilities are not yet fully in line with the demands of modern administration and inclusive public service standards. From an ergonomic perspective, inefficient spatial arrangements and limited facilities can increase physical strain and hinder workflow. This is in line with the views of Li and Zhang (2023), who emphasise the importance of flexible, efficient, and aesthetically pleasing workspace design in improving motivation and productivity (Li & Zhang, 2023).

Another aspect that emerged significantly from the data relates to noise in the work environment. Respondents described that most of the time, the work atmosphere is relatively quiet. However, at certain hours, especially when many people come for administrative matters or when there is activity in the next room, the noise level increases and becomes distracting. P1 stated that when it is crowded with people taking care of administrative matters, the sound of chatter and calls makes the room noisy and disrupts concentration. P2 and P3 acknowledged that they had to work harder to stay focused when conversations and activities around the workspace became noisy. P2 explains, When it is crowded, we have to try harder to focus because the noise from the front and side rooms is quite distracting. P4 adds that the noise in the service room often makes communication with the public difficult and has the potential to disrupt the smooth running of the service process. According to P4, sometimes we have to repeat our explanations to residents because the noise around the counter is quite loud.

Analytically, the noise at the Moro'o Sub-District Office is situational and mainly occurs when service intensity is high. Although it does not occur all the time, this condition still affects the quality

of concentration, work speed, and employee comfort. This is in line with the findings of Brown and Johnson (2022) and Martínez et al. (2024) who place noise control as one of the important indicators of a healthy and productive physical work environment (Brown & Johnson, 2022; Martínez et al., 2024).

Overall, the findings on the physical dimension describe a functional work environment but one that does not fully meet the recommended office ergonomics criteria, such as even lighting, thermal comfort, a layout that supports circulation, and noise control (Smith et al., 2021; Brown & Johnson, 2022). Strengths include good natural lighting in the front room and the availability of basic facilities, offset by limitations such as uneven lighting, declining air quality in the afternoon, inefficient room layout, and disruptive situational noise. The assessment that these conditions are 'far from ideal' is the researchers' interpretation based on comparisons with office ergonomics recommendations in the literature. This configuration has the potential to increase physical and cognitive demands in the workplace, especially during busy service hours.

**Non-Physical Work Environment**

In the non-physical dimension, the findings show a relatively different picture. Although the physical environment still faces various limitations, the non-physical work environment is described as quite strong and supportive. Informants consistently stated that the relationship between leaders and subordinates at the Moro'o Sub-District Office is open, communicative, and supportive. P1 explained that regular meetings are used as a means of discussion and monitoring work progress, as well as a forum for gathering input from employees. P1 said, we hold regular meetings to check on work progress and hear feedback from staff, so that issues can be discussed together. P2 mentioned that leaders are easy to contact and willing to listen to problems and suggestions, so he feels valued and more motivated to work well. P2 stated, "The leaders are easy to contact, and if there are obstacles, they are willing to listen. This makes us feel valued and more enthusiastic about our work." P3 and P4 described how leaders provide clear direction, guidance, and the support needed to carry out their duties.

This relationship reflects support-oriented leadership, which, in the Job Demands–Resources (JD-R) Model literature, is considered an important job resource that can increase work engagement, reduce stress, and encourage performance. This is in line with the findings of Kim and Park (2022) and Williams et al. (2021), which show that effective communication and managerial support contribute directly to job satisfaction and motivation, including in the public sector (Williams, Thompson, & Lee, 2021; Kim & Park, 2022).

Interpersonal relationships among colleagues are also described as very positive. P2 emphasised that colleagues help each other and communicate intensively in completing work, creating a comfortable and pleasant working atmosphere. P2 said, 'If there is a backlog of work, colleagues usually help immediately without being asked. P3 highlighted teamwork in completing technical tasks, while P4 emphasised that sharing information and supporting each other made it easier for them to provide services to the community. P3 adds, 'We often share information informally so that everyone understands the procedures, thereby enabling smoother service delivery.' In general, informants view the work climate as characterised by a sense of togetherness, mutual respect, and a willingness to cooperate.

This kind of work climate is in line with organisational climate theory, which states that employees' perceptions of organisational support, fairness, and openness will influence their work attitudes and behaviour. Research by Nguyen and Waring (2016) and Williams et al. (2021) shows that a supportive organisational climate encourages creativity, innovative behaviour, and efficiency among public sector employees (Nguyen & Waring, 2016; Williams et al., 2021). Findings at the Moro'o Sub-District Office show that positive social relationships and the work climate are one of

the main social assets in maintaining the smooth running of service tasks, even though the physical facilities are not yet ideal.

Regarding conflict, informants acknowledged that differences of opinion among employees sometimes occur, but they assessed that such situations can generally be resolved through discussion and communication. P1 stated that despite differences in views, conflicts are usually discussed immediately and solutions are sought together. P2 and P3 also emphasised that disagreements that arise tend to be minor and can be resolved without causing prolonged tension.

P4 observed that the overall work atmosphere remains harmonious thanks to joint efforts to maintain communication and cooperation. From an analytical perspective, these dynamics indicate that conflicts that arise tend to be functional and manageable. Harmony is not interpreted as the absence of differences, but rather the ability of the organisation and its employees to deal with differences constructively.

This situation strengthens teamwork and supports the sustainability of a positive work climate. This is in line with the studies by Green and Henseke (2016) and Kim and Park (2022), which place open communication and mutual trust as important foundations for a healthy and productive organisational climate (Green & Henseke, 2016; Kim & Park, 2022).

In general, the non-physical dimensions at the Moro'o Sub-District Office show supportive leadership, cooperative working relationships, and a relatively harmonious organisational climate. These conditions are important resources that support motivation, work enthusiasm, and teamwork, thereby helping employees overcome various limitations in the physical aspects of the work environment.

**Discussion**

When findings on physical and non-physical dimensions are viewed together, there is tension and complementarity between the two. On the one hand, the physical conditions of the office, uneven lighting, poor air quality during busy hours, suboptimal room layout, and situational noise have the potential to increase work demands and reduce comfort and work efficiency. On the other hand, supportive supervisor-subordinate relationships, harmonious coworker relationships, and a cooperative work climate act as buffers that help employees remain motivated and committed to performing their service duties.

Within the framework of the Job Demands–Resources Model (JD-R), less than ideal physical conditions can be categorised as job demands that have the potential to trigger stress and fatigue, while leadership support, teamwork, and harmony among colleagues are job resources that encourage work engagement and reduce the negative impact of these demands. Findings at the Moro'o Sub-District Office show that although the physical work environment is not yet fully supportive, the existence of strong non-physical resources enables employees to maintain relatively stable productivity, especially in terms of their commitment to serving the community. This picture is in line with JD-R-based research in the public sector, which found that job resources can weaken the relationship between high job demands and fatigue, while strengthening the relationship between work engagement and performance (Williams, Thompson, & Lee, 2021; Singh & Verma, 2023).

However, non-physical resources cannot completely replace the need for structural improvements on the physical side. Increased public service loads, regulatory changes, and higher accountability demands have the potential to increase work pressure. If not balanced with improvements in lighting, ventilation, layout, and support facilities, even strong non-physical resources can reach their limits in bearing this burden. This is where the relevance of ergonomics and productivity theory becomes clear: sustainable productivity requires a balance between physical comfort, psychosocial support, and efficient work process management. Office ergonomics

studies show that good lighting, maintained air quality, and efficient layout can reduce fatigue and improve task performance (Smith, Clark, & Roberts, 2021; Brown & Johnson, 2022), while productivity literature emphasises that the quality of the work environment is an important component in increasing output and service quality (Zhang & Liu, 2020).

The findings of this study also provide interesting insights that workplace decoration and aesthetics are rarely considered a priority, even though ergonomic literature shows that visual elements such as plants, wall colours, and attractive room displays can improve psychological mood and work motivation. This condition indicates the potential for relatively simple and low-cost improvements through decorative interventions that can enrich the quality of the physical work environment without requiring large investments. This is in line with the findings of Li and Zhang (2023) and Martínez, Fernández, and Ruiz (2024), which show that workplace design that considers aesthetic and psychological comfort aspects can increase employee engagement and job satisfaction, even when other physical resources are limited.

When compared to previous studies, the results of this study both confirm and expand on existing findings. The findings regarding the influence of lighting, air quality, layout, and noise on comfort and work concentration are consistent with the results of studies by Kurniawan and Kusumaputri (2016), Smith et al. (2021), and Li and Zhang (2023), which were mostly conducted in manufacturing companies and offices in urban areas with relatively adequate facilities. However, this study expands the literature by showing that similar ergonomic issues also arise in the context of sub-district offices in rural and resource-constrained areas such as West Nias, where local fiscal capacity and infrastructure support tend to be more limited than in large cities. Thus, this study adds a new perspective that physical work environment challenges are not only an issue for private organisations or urban offices, but are also inherent in the delivery of frontline public services in peripheral areas.

On the other hand, findings related to strong leadership support, positive work relationships, and a cooperative organisational climate confirm the results of studies by Nguyen and Waring (2016), Williams et al. (2021), Kim and Park (2022), and García, Torres, and Delgado (2024), which emphasise the important role of non-physical resources, such as participatory leadership styles, leadership support, and collaborative work cultures, on the performance of public sector employees. An important difference in this study lies in its context: at the Moro'o Sub-District Office, these non-physical resources function as 'social capital' that helps mitigate the negative impact of physical limitations, something that is relatively less highlighted in studies conducted on public sector organisations in urban areas with more adequate physical facilities.

The context of West Nias as a peripheral and resource-constrained region also has important implications for interpreting the research results. Budget constraints, geographical challenges, and scattered development priorities meant that the sub-district office facilities could not be upgraded as quickly and extensively as in urban areas. Thus, the Moro'o Sub-district Office exhibited a distinctive configuration in which frontline public services had to be delivered in less than ideal physical conditions, but at the same time were supported by social cohesion, commitment to service, and a relatively strong leadership style. This pattern results in a form of 'adaptive' productivity: employees strive to maintain service quality and meet administrative demands, but work efficiency and physical comfort remain limited by structural factors beyond the control of individuals or work units.

In the context of productivity, the research results support the view that the productivity of public sector employees is not only about the quantity of output, but also the quality of service, timeliness, and public satisfaction (Green & Henseke, 2016; Zhang & Liu, 2020). The limitations of the physical environment at the Moro'o Sub-District Office have been shown to affect work efficiency, particularly in the form of physical fatigue, decreased concentration, and slowed work

processes during busy hours. However, on the other hand, good working relationships, supportive leadership styles, and a harmonious working climate help maintain service effectiveness and employee commitment to their duties.

Therefore, the integration of empirical findings and literature indicates that improving employee productivity at the Moro'o Subdistrict Office requires a comprehensive approach. Improving the physical work environment through the application of ergonomic principles must go hand in hand with maintaining and strengthening the non-physical work environment through supportive leadership, the development of a positive organisational climate, and constructive conflict management. It is the combination of these two dimensions, physical and non-physical, as an integrated work environment construct, that can realistically promote increased comfort, efficiency, and productivity of employees in providing public services at the sub-district level, especially in rural and resource-constrained areas such as West Nias.

**CONCLUSIONS**

Based on the findings and discussion, the conclusions of this study are compiled directly with reference to the research objectives and questions. First, regarding the research question about the working environment conditions at the Moro'o Subdistrict Office, the analysis results show that the physical working environment is in a "sufficiently functional but not yet ergonomic" condition. Lighting still depends on natural light and is not evenly distributed between rooms, especially in the back rooms, and in the afternoon or when the weather is cloudy. Air quality is relatively good in the morning, but deteriorates in the afternoon due to limited ventilation and cooling, especially when the number of employees and visitors increases. The workspace layout tends to be cramped, full of furniture and archives, and is not efficiently organised, while decorative elements that support the working atmosphere (plants, colours, inspirational visuals) are hardly utilised. Noise levels are generally low, but increase sharply during busy service hours and when certain activities are taking place, thereby disrupting concentration and communication. On the other hand, basic facilities such as desks, chairs, computers, printers, archive rooms, meeting rooms, and waiting rooms are available, although specific supporting facilities (air conditioning, scanners, technical measuring equipment, lactation rooms, and children's play areas) are still limited.

Secondly, regarding the research question on factors affecting employee productivity, this study found that physical and non-physical factors work simultaneously and influence each other. From a physical perspective, variations in lighting, declining air quality during peak hours, suboptimal room layout, a lack of functional aesthetic elements, and situational noise were found to contribute to visual fatigue, physical discomfort, increased cognitive load, slowed workflow, and reduced service quality. From a non-physical perspective, open and supportive supervisor-subordinate relationships, relatively effective communication, and cooperative relationships between colleagues create a harmonious work climate that increases employee motivation, sense of belonging, engagement, and confidence. This harmony allows conflicts that arise to remain functional and be resolved constructively, preventing them from developing into disruptions to team performance. Thus, physical factors tend to increase job demands, while non-physical factors function as job resources that help employees cope with these physical limitations. Third, regarding the research question on how the work environment relates to employee productivity, this study concludes that productivity at the Moro'o Sub-District Office is the result of the interaction between physical limitations and the strengths of the non-physical environment. On the one hand, less-than-ideal physical conditions clearly interfere with concentration, increase fatigue, and slow down task completion, thereby reducing efficiency and potentially lowering service quality. On the other hand, leadership support, harmonious social relations, and a collaborative work climate are able to maintain motivation, commitment, and enthusiasm for service, so that productivity does not

decline drastically even though employees work in limited physical conditions. Within the framework of the Job Demands–Resources (JD-R) Model, these findings indicate that non-physical resources at the Moro'o Sub-District Office function as a buffer that mitigates the negative impact of physical demands in the work environment on productivity.

Theoretically, this study makes three main contributions. First, it integrates Ergonomic Theory, the JD-R Model, and Organisational Climate Theory in the real context of sub-district government agencies in areas with limited facilities. This integration shows that the physical work environment cannot be separated from social relations and organisational climate dynamics when explaining the productivity of public sector employees. Second, this study confirms and enriches the JD-R Model by showing that in the context of sub-district offices with limited infrastructure, non-physical resources (leadership support, team cohesion, harmonious working climate) can delay, but not eliminate, the need for structural improvements in physical aspects. Third, this study adds empirical evidence from peripheral regions (West Nias) that public sector productivity in regions is not solely determined by the adequacy of facilities, but also by the quality of social relationships and leadership practices at the micro-organisational level.

From a practical perspective, several clear and actionable recommendations can be proposed for policymakers and administrators, both at the sub-district and district levels. For regional policymakers (district governments and budget planners), the policy priorities that can be implemented include: (1) incorporating improvements to the physical working environment of sub-district offices—such as adding lighting, improving ventilation and/or air conditioning, rearranging the layout, and providing supporting facilities (scanners, technical measuring instruments, lactation rooms, and child-friendly areas)into regional planning and budgeting documents; (2) integrating aspects of ergonomics and occupational safety into the minimum standards for sub-district office facilities and infrastructure; and (3) supporting programmes to improve leadership capacity and organisational climate management for sub-district heads and structural officials.

For administrators at the Moro'o Sub-District Office level, several relatively realistic and gradual operational steps can be taken, for example: (1) rearranging the layout to reduce the impression of cramped and cluttered spaces, optimising circulation, and facilitating access to documents and equipment; (2) adding artificial lighting in dimly lit rooms and maximising existing ventilation, while proposing the addition of cooling facilities during the budgeting process; (3) reducing noise through zoning of service areas, simple barriers, or scheduling of activities that have the potential to generate loud noises; and (4) enriching functional decorative elements, such as green plants, soothing wall colours, and motivational visual media, as a low-cost intervention with a positive psychological impact.

On the non-physical side, administrators can strengthen existing good practices by: (1) maintaining open communication patterns through regular meetings that focus not only on work targets but also on reflecting on working conditions and employee welfare; (2) developing simple but consistent mechanisms for appreciating employee performance and initiatives; (3) establishing informal forums or social activities to maintain team cohesion; and (4) formulating a mutual agreement on conflict management mechanisms so that differences of opinion are managed functionally and do not interfere with service delivery.

Thus, this study confirms that improving employee productivity at the Moro'o Sub-District Office, and more broadly in sub-district offices in areas with similar conditions, requires an approach that simultaneously improves the physical dimensions and strengthens the non-physical dimensions of the work environment. It is the integration of these two dimensions that can realistically improve comfort, efficiency, and the quality of public services at the forefront of government in the community.

## LIMITATIONS & FURTHER RESEARCH

This study has several methodological limitations that need to be considered when reading and interpreting the findings. First, the main data were obtained through interviews and qualitative observations, so the results are highly dependent on the subjectivity of the informants and the researcher's interpretation. This limitation has implications for potential perception bias (informants' perceptions may be overly positive/negative) and researcher bias in the interpretation process, as there are no standardised quantitative measurements that can be used to test the statistical consistency of the findings. Second, this study uses a single case study design in one location, namely the Moro'o Sub-District Office in West Nias Regency. Methodologically, this design is strong for an in-depth understanding of the local context, but it limits *the transferability* of findings to other government agencies with different characteristics, such as sub-district offices in urban areas, regencies with higher fiscal capacity, or agencies at different levels of government. Third, the study was conducted over a relatively short period of time and was *cross-sectional in nature*, so that the dynamics of employee productivity and changes in working conditions were not observed longitudinally. This limitation means that the study cannot explain how policy changes, service seasons, or specific managerial interventions affect productivity in the medium and long term.

Based on these limitations, several directions for further research can be proposed more specifically. First, subsequent research is recommended to use a *mixed methods* approach by combining in-depth qualitative studies and quantitative surveys using standardised instruments, such as the Job Demands–Resources (JD-R) scale, job satisfaction scale, organisational climate scale, or ergonomic comfort scale. This approach allows for a more measurable examination of the relationship between the work environment, psychosocial factors, and productivity, while maintaining contextual depth. Second, further studies could expand the research location to multi-case studies in several sub-district offices in different districts/cities (e.g., comparisons between sub-districts in coastal, mountainous, and urban areas), thereby enabling comparative analysis and increasing *the transferability* of findings. Third, longitudinal research or *pre-post* studies of specific interventions—such as spatial improvements, ventilation enhancements, or leadership strengthening programmes—can be conducted to see how real changes in the physical and non-physical work environment impact productivity and the quality of public services over time. Fourth, further research could also add other relevant variables, such as job satisfaction, organisational commitment, *public service motivation,* burnout, or leadership style, and use more specific theoretical frameworks (e.g. JD-R, Organisational Climate Theory, or Transformational Leadership Theory) to construct a more comprehensive model of the relationship between the work environment and the productivity of public sector employees. With this research direction, the empirical and theoretical contributions regarding the work environment and productivity in local government agencies are expected to become stronger and more tested.

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