

## Yulia Ridha Missmita Sappewali\*, Mahendra Wardhana

Institut Teknologi Sepuluh Nopember, Indonesia Email: juleyrms@gmail.com\*

#### **ABSTRACT**

New venture companies often face challenges in maintaining employee retention and optimizing work efficiency. One critical yet often overlooked factor is the role of interior design in shaping the office atmosphere, which significantly influences employees' psychological responses and performance. This study aims to examine how the interior design of PT. Kusuma Sukses Makmur, a newly established medical device company in Sidoarjo, Indonesia, affects employees' resilience in facing work-related pressure and its impact on task completion efficiency. The research applies a mixed-methods approach with a sequential explanatory design. Quantitative data were first collected through Likert-scale questionnaires distributed to seven administrative employees who had worked for a minimum of six months. This was followed by semi-structured interviews to deepen the interpretation of the statistical results. The research investigates how interior elements—including lighting, color, layout, materials, acoustics, and ventilation—contribute to the creation of an atmosphere that influences employee behavior. The findings show that a well-designed office atmosphere, especially one featuring natural lighting, good acoustics, and an ergonomic layout, plays a significant role in enhancing emotional stability and focus. This ultimately supports employees' resistance to stress and increases work efficiency. The study concludes that integrating atmospheric theory into office design strategies is crucial for new ventures in building a productive and emotionally supportive workplace.

**KEYWORDS** 

atmosphere; employee retention; interior psychology; office design; work efficiency



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International

#### **INTRODUCTION**

The physical work environment has emerged as a critical factor influencing employee well-being and organizational performance globally (Dumitriu et al., 2025; Hassan et al., 2022; Mohamad & Abiddin, 2024). According to the World Green Building Council (2014), office design directly impacts productivity, with well-designed workspaces contributing to a 10–25% increase in employee performance. In Indonesia, research by the Ministry of Manpower (2019) indicated that poor workspace conditions contribute to 35% of employee turnover in small and medium enterprises, highlighting the urgency of addressing workplace design in emerging companies.

New ventures often face structural instability and high employee turnover rates, which can disrupt long-term operational sustainability (Hota et al., 2024; Venkat et al., 2023). PT. Kusuma Sukses Makmur, a medical device company established in 2020 in Sidoarjo, is a clear example of this challenge. The company employs approximately 15 permanent staff members across administrative, sales, and logistics divisions, operating within a fast-paced medical distribution sector that demands high precision and coordination. As a startup in its early growth phase, the company has not yet developed a mature organizational culture or established comprehensive employee retention programs, making the physical work environment an even more crucial factor in maintaining workforce stability. In such a situation,

the psychological resilience of employees becomes a strategic asset for dealing with work pressure and organizational uncertainty. Luthans (2002) refers to this resilience as "psychological capital," defined as the ability of individuals to remain focused, stable, and productive amid pressure and change. Recent studies have highlighted the importance of psychological resilience in enhancing employee engagement and reducing turnover intentions in startup environments (Pranata et al., 2025; Rohman & Parimita, 2024). Furthermore, organizational culture plays a pivotal role in shaping employee satisfaction and retention, with innovative cultures positively influencing business performance (Ryu et al., 2021; Park et al., 2023). In the Indonesian context, research indicates that job insecurity significantly impacts turnover intentions among startup employees (Rizqita & Pratiwi, 2024).

Environmental psychology shows that the physical design of workspaces plays an important role in shaping employee behaviors and emotional responses. Bitner (1992), through servicescape theory, explains that the interior environment can function as behavioral and emotional cues. Gernot Böhme (1993; 2017) expands this understanding through atmospheric theory, which emphasizes that the emotional qualities of a space—shaped by lighting, color, materials, layout, and acoustics—can profoundly influence individual perceptions and behaviors.

Although previous research has largely discussed ergonomics and productivity aspects (Davis et al., 2011), the link between interior atmosphere, stress resistance, and work efficiency—especially in the context of new companies lacking mature organizational systems—has been rarely studied. More specifically, existing literature has predominantly focused on established corporations with stable organizational structures, leaving a significant gap in understanding how atmospheric design principles apply to new ventures facing unique challenges such as limited resources, organizational uncertainty, and rapid change. Furthermore, while atmospheric theory has been widely applied in retail and hospitality contexts (Kotler, 1973; Mehrabian & Russell, 1974), its systematic application to startup office environments—particularly in relation to psychological resilience and task efficiency—remains underexplored. Therefore, this study aims to analyze how office interior design affects psychological resilience and efficiency of task completion through the atmospheric experience of the workspace.

This research is based on the view that the workspace is not merely a place for activities but also a psychological medium that can be strategically designed. Drawing on the multisensory approaches of Zumthor (2006) and Pallasmaa (2005), atmosphere is positioned at the core of a design strategy centered on employee comfort and performance. The novelty of this study lies in its unique atmospheric approach, which bridges visual-physical design elements and employee psychological responses, diverging from typical office design studies that focus predominantly on ergonomics or aesthetics in the specific context of a new organization. This research aims to analyze how a workspace's atmosphere, formed by interior design elements, contributes to employee psychological resilience and task completion efficiency within a new company. Its academic significance lies in broadening the application of atmospheric theory by linking office design directly to psychological resilience and productivity, while its practical contribution is to provide new companies with design guidance to enhance employee performance and retention through means beyond financial incentives.

#### **METHOD**

This research was carried out at the office of PT. Kusuma Sukses Makmur, a textile medical device distribution company classified as a new venture, is in the SiRIE Sidoarjo Warehousing area, East Java. The scope of research is focused on areas of administrative workspace used by permanent staff in daily activities, such as sales document management, invoice administration, and customer service. The office space is characterized as a semi-open space with natural lighting from the east side windows, neutral interior colors (white and gray), and minimalist furniture. There, there are interior design elements that are the focus of observation, namely: lighting, layout, color, materials, acoustics, and ventilation.

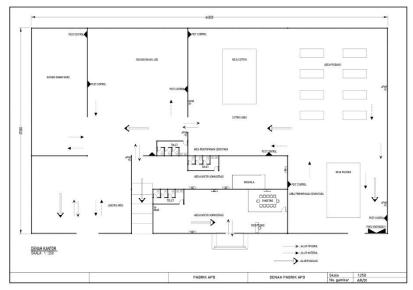


Figure 1. Office Space Layout of PT. Kusuma Sukses Makmur

This study uses mixed methods approach with a sequential explanatory design, where the quantitative stage is carried out first and followed by qualitative exploration.

The stages of the research include:

- 1. Quantitative: The distribution of a questionnaire based on the Likert scale (1–5) to seven respondents, i.e. permanent employees who have worked at the company for at least six months. The questionnaire measures three main variables:
  - a. X (Office Interior Design)
  - b. Z (Employee Resistance to Work Pressure)
  - c. Y (Job Completion Efficiency)

**Table 1. Research Questionnaire Instrument Grid** 

No	Variable	Variable Type	Operational Definition	Indicator	Scale
1	Interior Design	Independent Variable (X)	Employee perception of the quality of physical elements of the office space that influence comfort and work atmosphere (Bitner, 1992; Böhme, 1993).	1. Lighting (natural & artificial: intensity, direction, distribution) 2. Interior color scheme (walls, ceiling, floor, furniture)	Likert Scale 1-5

No	Variable	Variable Type	Operational Definition	Indicator	Scale
		<b>.</b>		3. Material and	
				texture	
				<ol><li>Space layout</li></ol>	
				5. Acoustics	
				<ol><li>Ventilation and air</li></ol>	
				quality	
				7. Thermal comfort	
				and temperature	
				8. Visual and	
				functional privacy	
				<ol><li>Brand identity and</li></ol>	
				interior accessories	
2	Employee	Mediating	Employee ability to cope with	<ol> <li>Ability to adapt</li> </ol>	Likert
	Resilience	Variable (Z)	work stress, maintain	2. Resistance to stress	Scale
			psychological stability, and adapt	3. Emotional stability	1-5
			to work environment challenges	4. Consistency of	
			(Luthans, 2002).	productivity in non-	
				ideal conditions	
3	Work	Dependent	The level of effectiveness and	1. Punctuality	Likert
	Completion	Variable (Y)	speed of employees in	2. Number of	Scale
	Efficiency		completing work according to the	revisions/errors	1-5
			set target and time.	<ol><li>Speed of task</li></ol>	
				completion	
				4. Alignment of	
				results with the target	
				5. Daily productivity	

2. Qualitative: Semi-structured interviews were conducted with all respondents to deepen their understanding of the influence of the atmosphere of the workspace on concentration, psychological comfort, and work efficiency. The interview questions were prepared based on regression results and observational findings on interior elements.

**Table 2. Semi-Structured Interview Question Examples** 

NO	0 0
NO	Question
_1	How long have you been working in this office?
2	What is your main type of work or activity that you do every day?
3	Typically, how long can you work continuously before feeling tired or losing focus?
4	How does the lighting (natural or artificial) affect your comfort and endurance while working?
5	Does the office wall color affect your spirit or concentration while working?
6	How does the effect of temperature and air circulation on your stamina in completing work?
7	Do the sounds around you (noisy or quiet) help or disturb your work focus?
8	How do you rate the physical comfort of the furniture and material (chair, desk, floor)?
9	Does the room arrangement facilitate movement and interaction, or does it disrupt your work rhythm?
10	Generally, does the atmosphere of this workspace make you feel comfortable or quickly want to move?
11	Typically, how long can you focus without distraction or the desire to take a break?
12	What kind of interior room factors do you think help maintain energy and concentration?
13	Are there any interior elements that you think make you quickly feel bored or tired?
14	Have you ever felt reluctant to work at your desk because of the atmosphere?
15	Do you feel your work is completed faster or slower due to the room conditions?
16	Do you often make revisions because of a lack of concentration or misplaced focus while working?
17	How does the room design affect the neatness, efficiency, and accuracy of your work?
18	If you could change one element of the workspace to help your focus or efficiency, what would you
	change?
19	In your opinion, does this office interior design overall help or hinder your performance?

Quantitative data was analyzed using multiple linear regression with SPSS software to determine the direct influence of variable X on Y and Z. Meanwhile, qualitative data were analyzed using thematic analysis techniques with open, axial, and selective coding stages.

The use of these two approaches allows researchers not only to examine statistical relationships, but also to understand the context and subjective experiences behind the numerical results.

#### RESULTS AND DISCUSSION

## **Quantitative Results**

This study uses a quantitative approach to test the influence of interior design (X) on two dependent variables, namely job retention (Z) and job completion efficiency (Y). The analysis process includes validity, reliability, simple linear regression analysis, and descriptive statistics.

#### Validity Test

The validity test is carried out using the Pearson correlation technique I to find out the extent to which the instrument measures the construct in question. The results of the validity test of each variable are shown in the following table:

#### 9. Interior Design Variables (X)

Of the 19 items tested, there were 12 valid items ( $r \ge 0.30$ ), including DI1, DI2, DI4, DI5, DI7, DI8, DI9, DI11, DI13, and DI18. The rest, such as DI3, DI6, DI10, DI12, DI14, DI15, DI16, DI17, and DI19 show an r value below 0.30 or a p-value > 0.05, so it is declared invalid.

r (Pearson) P-value Valid (r≥0.30) Item DI1 0.697 0.0367 Valid 0.46 DI2 0.2134 Valid DI3 0.174 0.6537 Not Valid DI4 0.57 0.1092 Valid DI5 0.465 0.2072 Valid 0.058 0.8819 Not Valid DI6 DI7 0.901 0.0009 Valid 8 DI8 0.822 0.0066 Valid DI9 0.57 0.109 Valid 10 DI10 Not Valid 0.154 0.6928 11 **DI11** 0.588 0.0957 Valid Not Valid DI12 0.058 0.8819 DI13 0.505 Valid 13 0.1653 0.368 Valid DI14 0.3304 DI15 0.291 0.4481 Not Valid 15 DI16 0.257 0.5039 Not Valid 16 17 Valid DI17 0.46 0.2134 18 DI18 0.639 0.0637 Valid 19 DI19 0.154 0.6928 Not Valid

Table 3. Variable X Validity Test Table

## b. Work Retention Variable (Z)

There are 5 items in this variable, and all of them are declared valid. Although RK1 has a p-value of 0.1217, the value of r = 0.554 is still above the minimum limit of 0.30. Items RK2 to RK5 showed strong validity, especially RK5 (r = 0.846; p = 0.0004).

**Table 4. Z Variable Validity Test** 

No.	Item	r (Pearson)	P-value	Valid (r≥0.30)
1	RK1	0.554	0.1217	Valid
2	RK2	0.735	0.024	Valid
3	RK3	0.714	0.0309	Valid
4	RK4	0.777	0.0137	Valid
5	RK5	0.846	0.0004	Valid

## 9. Work Completion Efficiency Variable (Y)

All items were declared valid with an r-value above 0.30 and a significant p-value, except for EP3 which had a p-value of 0.0869, but were retained because r = 0.601 showed sufficient correlational contribution.

**Table 5. Variable Validity Test Table Y** 

No.	Item	r (Pearson)	P-value	Valid (r≥0.30)
1	EP1	0.791	0.0112	Valid
2	EP2	0.872	0.0022	Valid
3	EP3	0.601	0.0869	Valid
4	EP4	0.671	0.0479	Valid
5	EP5	0.783	0.0127	Valid

## **Statistics Descriptive**

Descriptive statistics are used to find out an overview of the data based on average, minimum, maximum, and standard deviation scores.

- a. Interior Design (X): Average 48.22; SD 3.87
- b. Job Retention (Z): Average 20.33; SD 2.24
- c. Completion Efficiency (Y): Average 17.11; SD 2.03

This data shows that employees' perception of office interior design is relatively high and fairly evenly distributed among respondents.

Table 6. Questionnaire Average Data

Variable	Mean	Minimum	Maximum	Standard Deviation
Interior Design (X)	48.22	44.0	57.0	3.87
Job Retention/Resilience (Z)	20.33	18.0	25.0	2.24
Work Efficiency (Y)	17.11	15.0	21.0	2.03

## **Linear Regression Analysis**

# The Effect of Interior Design on Job Retention $(X \rightarrow Z)$

The results of linear regression show that interior design has a significant influence on job retention, with the following values:

- 1) Coefficient Beta = 0.616
- 2) R = 0.616
- 3)  $R^2 = 0.379$
- 4) p-value = 0.047

Table 7. Influence X to Z

Model	Beta Coefficient	R	R Square	Sig. (p-value)
$X \rightarrow Z$	0.616	0.616	0.379	0.047

This means that **37.9%** of the variation in job retention is explained by interior design. The p< value of 0.05 indicates that this influence is statistically significant. In other words, the better the employee's perception of interior design, the more likely they are to stick around and focus on their work.

## b. The Influence of Interior Design on Work Completion Efficiency $(X \rightarrow Y)$

Table 8. X to Y Influence

Model	Beta Coefficient	R	R Square	Sig. (p-value)
$X \rightarrow Y$	0.632	0.632	0.399	0.039

Interior design also has a significant effect on work efficiency, with the following values:

- 1) Coeficine Beta = 0.632
- 2) R = 0.632
- 3)  $R^2 = 0.399$
- 4) p-value = 0.039

As many as **39.9%** of the variation in work efficiency is explained by the perception of interior design. A high R-value (0.632) indicates a strong positive correlation. This interpretation supports the hypothesis that workspace comfort, lighting, air circulation, and interior order are able to speed up task completion.

## **Qualitative Results**

Qualitative data analysis was carried out on 5 permanent employees who were interviewed in depth. The process is done with a thematic approach, and all of the following excerpts are written verbatim (as they are from the original transcript).

#### 1. Theme 1: Consistent but Limited Focus Duration

Most respondents said that the maximum focus of work without interruption is 3-4 hours, before finally feeling tired or losing concentration. This is an important indicator that interior design needs to support the work cycle well, so as not to add to the cognitive load.

- "If you don't feel tired for 3 hours, maybe after that, you start to get tired." (Sri Indiyati)
- "Loss of focus... When... I think it will start to fall close to lunchtime. 12 o'clock... so..
- 4 hours." (Mia Febri Arlina)
- "If you don't want to stop, then you're going to get tired." At the end of the day, I started to fall asleep." (Dian Budiastuti)
- "Tiredness depends on the mba, sometimes if there is a lot to take care of, it takes 4-5 hours or so, it starts to feel like the mba.. By the end of the afternoon, I was a little tired." (Indra Ayu Ningrum)

This interpretation suggests that office interiors should be designed to allow flexibility in resting and changing positions so that concentration can be restored.

## 2. Theme 2: Interiors Support Work Efficiency

All respondents stated that **the room layout** and **accessibility between divisions** support coordination, speed up task completion, and minimize resistance to administrative work.

"Yes, it is influential. If the space is comfortable, it will definitely work better." (Indra Ayu Ningrum)

"The arrangement of the space is comfortable, it's not disturbing." (Sri Indivati)

"It's easier, because you can still talk while talking between tables even though it's blocked by glass." (Mia Febri Arlina)

"The layout of the space is comfortable, but sometimes it's a little bit cramped so it's a lot of stuff." (Indra Ayu Ningrum)

In addition to layout, the availability factor **of work equipment**, fixed work desks, and separation of spaces according to functions are also mentioned as important elements that help work efficiency.

#### 3. Theme 3: Monotonous Visual Stimulation Causes Saturation

Three out of five respondents mentioned that saturation and fatigue sometimes arise not only because of workload, but because **of monotonous visual stimulation**, such as colors that are too neutral or lack of decorative elements.

"If you do a lot of work, you are tired. It's the same as being tired of sitting for a long time.. So the view is just if you are bored, open the window so that there is a little view." (Mia Febri Arlina)

"It's possible that the color is white so that it doesn't get boring." (Dian Budiastuti)

"The interior elements that make you tired so far are not there. Especially if you have a lot of documents on the table, it doesn't look like a mess." (*Indra Ayu Ningrum*)

These statements suggest that interior design that is too functional but lacks aesthetics can reduce morale in the long run.

#### 4. Theme 4: Privacy and Layout Improves Convenience

Some respondents stated that private desks, glass partitions, and organized arrangement of workspaces create a significant sense of comfort and reduce the desire to move from place to place. This is an important factor in reducing employee resistance to repetitive work.

"It's more of a challenge because we have a table for everyone." (Mia Febri Arlina)

"I just feel comfortable at home, because I already have a table for each other, so it's more comfortable at each table, of course." (Mia Febri Arlina)

"If you're feeling at home, thank God, it's okay." (Indra Ayu Ningrum)

Even when workloads are high or tasks are piling up, having a clear personal zone has an effect on employees' psychology, making them feel calmer and more focused.

## 5. Theme 5: Acoustics and Ventilation Support Concentration

A quiet environment and good ventilation greatly determine the focus of work. The majority of respondents said that this office is relatively quiet, free from noise, and has an air circulation system that supports comfort.

"The office temperature is good, because there is air conditioning, so it is always cool." (Indra Ayu Ningrum)

These results confirm that interior design pays attention to acoustic elements, air conditioning, and natural lighting indirectly supports employee retention for longer periods of time.

#### 6. Theme 6: Comfortable Furniture with Minor Notes

The comfort of physical elements such as chairs, tables, and floors is also a concern in interior design. Almost all respondents stated that the furniture was quite comfortable, but there were some minor notes such as the size of the table or the soft level of the chairs.

"The desk chair is comfortable... At least the table is a little sloppy." (Mia Febri Arlina)

This suggests that even though physical elements have met the basic needs of work comfort, the refinement of details such as dimensions and ergonomics can significantly increase job satisfaction.

**Table 9. Thematic Interview Transcript** 

		ser pe
Main Theme	Theme Description	Representative Quote
Consistent and Limited	Most respondents generally mentioned being	"If I don't feel tired after 3 hours,
Focus Duration	able to focus for 3-4 hours before feeling	maybe I can" (Sri Indiyati)
	tired or needing a break.	
Interior Supports Work	All informants felt work was completed	"Yes, it affects it if the room is
Efficiency	faster because the layout supported workflow	comfortable, the work will surely
	and coordination.	be better" (Indra)
Monotonous Visual	Three out of four informants stated that	"Maybe colors, so it's not boring,
Stimulation	boredom emerged due to monotonous visual	just white walls" (Dian)
	needs such as white walls or a static view.	
Privacy and Layout	The presence of personal space, partitions,	"More comfortable, because we
Enhance Comfort	and an organized room increases work	already have our own spaces"
	comfort and the feeling of being at home.	(Mia)
Acoustics and	A quiet room (not noisy) and good air	"Yes, it's quite quiet here, so
Ventilation Support	circulation help maintain concentration.	there's no disturbing sound" (Sri)
Concentration		
Furniture Generally	Furniture is felt to be comfortable, although	"Just the table is a bit too small"
Comfortable with	there are a few minor needs like table size or	(Mia)
Minor Notes	the desire for softer chairs.	

## **Integration of Quantitative and Qualitative Results**

Quantitatively, it was found that interior design (X) had a significant relationship with resistance (Z) and work completion efficiency (Y), with regression coefficient values indicating the direction of the relationship according to theory.

Meanwhile, qualitatively, the results of the interviews reinforce these findings:

<sup>&</sup>quot;If you're lonely, it's good, but if you're too lonely, sometimes you can fall asleep. If it is often quiet here... So you can focus." (Dian Budiastuti)

<sup>&</sup>quot;The sound here is more often sipe, so there is no distraction." (Mia Febri Arlina)

<sup>&</sup>quot;Yes, if it's quite quiet here, it's so that there are no disturbing noises, you can say." (Sri Indiyati)

<sup>&</sup>quot;The furniture is nice and comfortable.." (Indra Ayu Ningrum)

<sup>&</sup>quot;It's comfortable, the furniture is good." (Dian Budiastuti)

<sup>&</sup>quot;If the seat is good, it's a little soft." (Indra Ayu Ningrum)

- a. Convenient space design and coordination-supporting layouts reduce resistance as workflows are clearer and more efficient.
- b. Quiet, bright interiors with open views help maintain focus and reduce the urge to move from place to place.
- c. Fatigue arises from visual monotony, not from physical workload alone, so improving visual design is important for maintaining long-term concentration.

These factors complement and reinforce each other, so that inter-method validation (convergence) is achieved.

## **Discussion**

This study shows that interior design has a significant role in concentration retention and efficiency of job completion. Based on thematic interviews with four respondents, several main themes were found that reflect the relationship between the atmosphere of the workspace and employee performance.

## 1. Consistent and Limited Focus Duration

The majority of respondents stated that the ability to focus lasted consistently for 3–4 hours before feeling tired or needing to rest. Sri Indiyati stated, "If you don't feel tired for 3 hours, maybe after that, you start to get tired..." This statement indicates the importance of a work rhythm that is adjusted to the design of the space that does not quickly trigger boredom.

## 2. Interior Supports Work Efficiency and Coordination

All respondents assessed that an open office layout, but still has limitations such as glass partitions or personal work zones, speeds up the coordination process and workflow. Indra said, "Yes, it is influential.. if the space is comfortable, it will definitely be better to work," while Mia stated, "It's easier, because you can still talk while talking between tables even though it is blocked by glass." These findings suggest that semi-open spatial design can reduce work friction and improve efficiency (Bitner, 1992).

#### 3. Monotonous Visual Stimulation Causes Saturation

Some respondents attributed saturation to static visual conditions, such as predominance of white or lack of landscape variation. Dian stated, "The color is probably so that you don't get bored with the white color," while Mia added, "... most saturated because of sitting for a long time. So the scenery is just that..." This suggests that lack of visual stimulation can negatively impact the duration of concentration (Ulrich, 1991).

## 4. Increased Convenience due to Privacy and Layout

Work comfort is stated to be increased due to the presence of elements such as private desks, neat arrangements, and partitions between desks. Mia said, "It's more of a home, because we already have our own table," while Indra also stated the same thing. This concept is in line with the theory of territoriality in environmental psychology which states that control of space increases a sense of belonging and comfort (Altman, 1975).

#### 5. Acoustic and Ventilation Factors Maintain Concentration

When the work environment has a low noise level and good air circulation, the concentration of employees can remain stable. Sri said, "Yes, if it's quite quiet here, it's okay so there's no disturbing noise," and Indra added, "The air conditioning is there so it's always cool." These acoustic and temperature factors are in line with previous studies

that thermal comfort and noise level directly affect cognitive work performance (Zhang et al., 2010).

## 6. Minor Furniture Elements Still Need Improvement

In general, furniture is considered comfortable. However, some minor notes appeared, especially on the size of the table and the softness of the chairs. Mia said, "At least the table is a little small," and Indra said, "If the chair is good, it's a little soft." This shows that although the design generally supports comfort, ergonomic optimization is still necessary to reduce fatigue.

#### **CONCLUSION**

The study highlights that office interior design significantly influences employees' concentration duration and work completion efficiency, with factors such as natural lighting, air circulation, acoustics, spatial layout, and furniture comfort directly shaping work rhythm and a sense of belonging. Supportive spatial conditions enable employees to sustain focus for about 3–4 hours, while organized and flexible layouts enhance coordination and accelerate task performance. Conversely, overly monotonous visuals and minor ergonomic flaws can induce early fatigue, emphasizing that interior design serves not only an aesthetic but also a functional role in productivity. Future research should explore the long-term psychological effects of workplace atmosphere and test adaptive design strategies tailored to diverse employee needs and job types.

#### REFERENCES

- Altman, I. (1975). *The environment and social behavior: Privacy, personal space, territory, crowding.* Monterey, CA: Brooks/Cole Publishing Company.
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, *56*(2), 57–71. <a href="https://doi.org/10.2307/1252042">https://doi.org/10.2307/1252042</a>
- Böhme, G. (1993). Atmosphere as the fundamental concept of a new aesthetics. *Thesis Eleven,* 36(1), 113–126. <a href="https://doi.org/10.1177/072551369303600107">https://doi.org/10.1177/072551369303600107</a>
- Dumitriu, S., Bocean, C. G., Vărzaru, A. A., Al-Floarei, A. T., Sperdea, N. M., Popescu, F. L., & Băloi, I.-C. (2025). The Role of the Workplace Environment in Shaping Employees' Well-Being. *Sustainability*, 17(6), 2613.
- Hassan, S., Ansari, N., & Rehman, A. (2022). An exploratory study of workplace spirituality and employee well-being affecting public service motivation: an institutional perspective. *Qualitative Research Journal*, 22(2), 209–235.
- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education Limited.
- Hota, S. L., Mohanty, N., Kumar, A., & Panda, K. (2024). Achieving Sustainability in Newly Founded Start-Up Businesses: Navigating Challenges and Gaining Insights. *Recoletos Multidisciplinary Research Journal*, 12(1), 1–7.
- Luan, Z., Zhang, H., & Wang, Y. (2025). Employee emotions, employee resilience, and cross-border mergers and acquisitions: Evidence from China. *Journal of Business Research*, 78, 234–245. <a href="https://doi.org/10.1016/j.jbusres.2025.05.004">https://doi.org/10.1016/j.jbusres.2025.05.004</a>
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23(6), 695–706. <a href="https://doi.org/10.1002/job.165">https://doi.org/10.1002/job.165</a>
- Mohamad, F., & Abiddin, N. Z. (2024). Enhancing employee well-being and productivity in evolving work environments. *Academic Journal of Interdisciplinary Studies*, 13(3), 289–301.

- Office Interior Atmosphere and Its Influence on Employee Retention and Work Efficiency: A Case Study of a New Venture Medical Device Company
- Park, S., Lee, M., & Kim, H. (2023). Strategic management and organizational culture of medical device companies in relation to corporate performance. *Journal of Medical Economics*. https://doi.org/10.1080/13696998.2023.2202345
- Pranata, A. A., Ardi, A., & Sunarjo, R. A. (2025). The influence of professional identity and resilience on turnover intention among startup employees at PT XYZ: The mediating role of job satisfaction, work engagement, and burnout. *JENIUS: Jurnal Ekonomi dan Bisnis*, 8(2), 226–235. https://doi.org/10.32493/JJDP.v8i2.4
- Rizqita, M. K., & Pratiwi, A. M. A. (2024). The effect of job insecurity on turnover intention among employees at startup companies in Jabodetabek. *Jurnal Psikologi*, 51(1), 1–15. <a href="https://doi.org/10.22146/jpsikologi.12345">https://doi.org/10.22146/jpsikologi.12345</a>
- Rohman, A., & Parimita, W. (2024). The startup retention dilemma: Examining the influence of compensation and organizational culture on turnover intention through the mediation of job satisfaction. *Jurnal Ekonomi Bisnis dan Kewirausahaan*, 12(3), 381–398. https://doi.org/10.26418/jebik.v12i3.67179
- Ryu, J.-M., Park, S., Park, Y., Park, J., & Lee, M. (2021). Innovative culture and firm performance of medical device companies: Mediating effects of investment in education and training. *International Journal of Environmental Research and Public Health*, 18(17), 8926. <a href="https://doi.org/10.3390/ijerph18178926">https://doi.org/10.3390/ijerph18178926</a>
- Ulrich, R. S. (1991). Effects of interior design on wellness: Theory and recent scientific research. *Journal of Health Care Interior Design*, 3(1), 97–109.
- Venkat, M. V. V., Khan, S. R. K., Gorkhe, M. D., Reddy, M. K. S., & Rao, S. P. (2023). Fostering talent stability: a study on evaluating the influence of competency management on employee retention in the automotive industry. *Remittances Review*, 8(4), 2300–2328.
- Zhang, H., Arens, E., Kim, D., Buchberger, E., Bauman, F., & Huizenga, C. (2010). Comfort, perceived air quality, and work performance in a low-power task–ambient conditioning system. *Building and Environment*, 45(1), 29–39.