

# The effect of training, work environment, motivation, job satisfaction, and career satisfaction on employee productivity

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## Abstract

**Purpose:** The purpose of this study was to examine the effect of training and work environment on employee productivity, with motivation, job satisfaction, and career satisfaction as intervening variables in the education sector.

**Research Methodology:** This study employs a quantitative methodology and survey data collected from 300 employees working in various educational institutions. Structural Equation Modeling (SEM) via Smart PLS was used to analyze the relationships between the variables.

**Results:** The findings reveal that Both training and work environments have a significant positive impact on employee productivity. In addition, motivation, job satisfaction, and career satisfaction play critical intervening roles in enhancing employee productivity. The analysis shows that well-structured training programs and a conducive work environment significantly boost employee motivation and satisfaction levels, which, in turn, improve overall productivity.

**Contribution:** This study contributes to the literature by highlighting the importance of training and work environments in the education sector, particularly focusing on the mediating effects of motivation, job satisfaction, and career satisfaction.

**Originality:** The originality of this research lies in its comprehensive approach to understanding the complex interplay between these variables, offering valuable insights for educational institutions that aim to enhance employee performance and productivity. These results underscore the need for targeted interventions in training and work environment improvements to foster a more motivated, satisfied, and productive workforce in the education sector.

**Keywords:** *Training, Work Environment, Motivation, Job Satisfaction, Career Satisfaction*

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## 1. Introduction

The productivity of its workers is not just a component but also a crucial pillar in achieving the educational mission, which is aimed at molding the future of society. Recent trends have shown an increased focus on deciphering the complex interplay between the various factors that affect worker productivity in educational environments. This research endeavors to delve deeper into how training and the workplace environment directly impact employee productivity, particularly emphasizing the roles of motivation, job satisfaction, and career fulfillment as key mediating variables.

In the realm of education, staff efficacy is paramount to the overall success and operational efficiency of institutions. Research has shown that well-structured and relevant training programs significantly enhance staff productivity in higher education settings, as highlighted in a seminal study by Hanaysha and Tahir (2016). However, the effects of training extend beyond the direct impacts. Kim and Ployhart (2014) posit that the benefits of training often manifest through enhanced job satisfaction and elevated employee motivation, which in turn act as catalysts in improving productivity. These findings underscore the multifaceted impacts of professional development initiatives.

Work environment is equally critical to employee performance. Supportive and affirmative work settings not only promote innovation and collaboration but also bolster overall job satisfaction, subsequently leading to heightened productivity (Raziq and Maulabakhsh 2015). Such environmental factors are crucial as they provide the foundational context in which employees operate and perform their daily tasks.

Motivation as an intervening variable was significant. High levels of motivation correlate strongly with increased employee engagement and productivity, thereby significantly influencing organizational outcomes. This connection is supported by a comprehensive meta-analysis by Cerasoli, Nicklin, and Ford (2014), which demonstrated the strong impact of intrinsic motivation on work performance across multiple sectors, including education. Furthermore, job satisfaction has emerged as another pivotal intermediary that significantly affects employee productivity. Research in the educational sector by Toropova, Myrberg, and Johansson (2021) suggests a positive association between teachers' job satisfaction and their professional performance as well as the academic advancement of their students.

Not to be overlooked, career satisfaction holds a crucial role within this complex equation. Employees who feel fulfilled and have clear pathways for professional growth within their organizations tend to exhibit higher levels of commitment and productivity. This correlation is reinforced by the findings of Efrial and Satrya (2023), who indicate that career satisfaction positively influences both job performance and organizational citizenship behaviors.

For educational institutions that aim to amplify worker productivity, it is imperative to fully comprehend these dynamics and interdependencies. By prioritizing effective training programs and nurturing supportive work environments, substantial gains in staff productivity can be realized. This study also points out that, while existing research provides valuable insights into the relationships between employee productivity and various influencing factors, there is a notable gap in longitudinal studies that explore how these dynamics evolve over time, particularly in the rapidly changing educational landscape.

Therefore, this study aims to bridge these gaps by proposing a new conceptual model and thoroughly exploring these critical interactions. By enhancing our understanding of how the direct and indirect effects of the work environment and training influence employee productivity, we can develop effective strategies to empower and support educators and administrative staff. This, in turn, will not only improve educational outcomes for students, but also contribute to societal development. The insights garnered from this study are intended to inform and assist those involved in human resources, policymaking, and administration within the education sector, thereby promoting the creation of supportive environments that foster a motivated, satisfied, and productive workforce.

## **2. Literature Review**

### ***2.1 Training Enhances Motivation, Job Satisfaction, and Career Satisfaction***

Training has become a critical component in determining employee motivation, work happiness, and career satisfaction in the ever-changing educational industry. The complex effects of training initiatives on these important facets of employee performance and well-being have recently been highlighted.

Training programs have been shown to dramatically increase employee motivation in educational environments. According to a study by Nagy, Rudolph, and Zacher (2022), intrinsic motivation and work engagement were positively correlated when they participated in professional development activities. According to a study, training gives workers a feeling of accomplishment and progress, which

in turn increases their drive to do well in their positions (Ozkeser, 2019). Moreover, Appova and Arbaugh (2018) found that educators are much more motivated to implement new strategies and improve their practices when they see training as relevant and useful to their daily work. This highlights the need to design training programs that meet educational professionals' specific needs and contexts.

A recent study revealed a strong correlation between job satisfaction and training in the educational industry. According to a comprehensive study conducted by Erum, Abid, Contreras, and Islam (2020), training opportunities and total job satisfaction are positively correlated. According to the findings, employees who had regular access to excellent training expressed more work satisfaction and were more likely to stay in their roles.

Training opportunities have an equivalent impact on career satisfaction as they do on job satisfaction. According to a long-term study by Topchyan and Woehler (2021), instructors who regularly participate in professional development have greater levels of job satisfaction over time. According to experts, the reason for this is that continuous training has led to more professional competence and wider employment options.

**H1: Training has positive impact on Motivation**

**H2: Training has positive impact on Job Satisfaction**

**H3: Training has positive impact on Career Satisfaction**

## ***2.2 Work Environment enhancement motivation, job satisfaction, and career satisfaction.***

The work environment in educational institutions has a significant impact on how employees perceive their experiences, which in turn shapes their motivation, contentment in their jobs, and pleasure in their careers. Recent research has highlighted the intricate interplay between environmental influences and employee outcomes, which has shed important light on these relationships.

The physical and psychosocial aspects of the work environment significantly affect employee motivation in educational settings. Han and Yin (2016) found that a supportive work environment with collegial relationships and administrative support positively influences teachers' intrinsic motivation. When educators feel valued and supported, their enthusiasm for teaching and professional growth increase. Similarly, Khan (2019) discovered that a positive school climate, including clear communication, collaborative decision making, and a shared vision, is strongly associated with higher levels of teacher motivation and engagement. This highlights the importance of fostering a positive organizational culture in educational institutions.

Recent literature highlights the strong link between the work environment and job satisfaction in the education sector. Toropova et al. (2021) found that factors like workload, professional development opportunities, and teacher cooperation significantly predict job satisfaction among teachers. Addressing these factors can improve teachers' retention and performance. Similarly, Aldridge and Fraser (2016) discovered that teachers' perceptions of principal support and goal consensus are strongly correlated with job satisfaction, indicating that leadership practices and organizational alignment are crucial for job satisfaction in educational settings.

Career satisfaction, distinct from job satisfaction, is heavily influenced by the work environment. Vekeman et al. (2018) found that teachers in schools with strong professional learning communities reported higher career satisfaction because of opportunities for collaboration, reflection, and growth. Skaalvik and Skaalvik (2017) also found that alignment between personal and school values, along with supervisory support, positively affects teachers' sense of belonging and career satisfaction. This underscores the importance of a work environment that aligns with employees' values and provides adequate support.

**H4: Work Environment has positive impact on Motivation**

**H5: Work Environment has significant impact on Job Satisfaction**

**H6: Work Environment has positive impact on Career Satisfaction**

### ***2.3 Motivation, Job Satisfaction, Career Satisfaction Enhance Employee Productivity***

Recent studies have extensively explored the relationship between the psychological aspects of employees and their productivity, particularly in the educational sector. It has been consistently demonstrated that key factors, such as motivation, job satisfaction, and career fulfillment, have significant impacts on employee productivity, each contributing uniquely to various performance outcomes.

Motivation plays a critical role in driving employee productivity. In an in-depth study conducted by Nie et al., a significant link was established between teachers' innovative behaviors and their job performance, which was closely tied to their levels of intrinsic motivation. The study revealed that educators who possess strong intrinsic motivation are not only more engaged but are also more likely to exceed expectations in their roles, thereby enhancing overall productivity. Furthermore, Lazaroiu expanded on this by pointing out that while intrinsic motivation is crucial, external motivators, such as recognition and tangible rewards, play a substantial role in enhancing employee productivity. This finding suggests that educational institutions should strive for a well-rounded approach to fostering motivation, one that effectively balances internal drivers such as personal satisfaction with external incentives.

Specifically, this research indicates that a combination of intrinsic and extrinsic motivators can optimize employee productivity in the education sector. Intrinsic motivation, such as sense of purpose, personal growth, and job autonomy, can cultivate a deep-seated drive for excellence and innovation. Complementary extrinsic motivators such as performance-based bonuses, professional development opportunities, and public recognition can further reinforce and sustain this internal drive. By employing this multifaceted approach, educational institutions can create an environment that nurtures both personal fulfillment and tangible rewards, which motivate educators to consistently perform at their best and contribute to the overall productivity of the organization.

#### **H7: Motivation has significant impact on Employee Productivity**

Job satisfaction is unequivocally linked to employee productivity across various sectors, particularly in the field of education. The foundational study by Judge et al. established a significant positive correlation between job satisfaction and employee performance, setting the stage for further investigation of this relationship. Expanding on these findings, Toropova et al. (2021) confirmed that higher levels of job satisfaction among teachers not only lead to increased commitment and lower turnover rates but also result in improved classroom practices, collectively enhancing overall productivity. These improvements in classroom effectiveness directly contribute to better educational outcomes, illustrating the critical role that job satisfaction plays in the educational sector (Ameliah & Jatnika, 2024; Tapang & Mbarika, 2023).

Furthermore, research conducted by Aldridge and Fraser (2016) delves deeper into the significant influence of school climate on job satisfaction. Their comprehensive study revealed that various aspects of the overall school environment, such as the physical setting, administrative support, and collegial relationships among staff, have a substantial impact on teachers' job satisfaction. This, in turn, affects their self-efficacy and belief in their own ability to teach effectively, which ultimately influences their productivity. This complex chain reaction shows the intricate interplay between organizational characteristics, emotional well-being at work, and productivity within educational settings.

These studies collectively underscore the profound interconnectedness of job satisfaction, the work environment, and productivity in the education sector. They highlight how enhancing job satisfaction through the creation of positive organizational climates and fostering supportive professional relationships can lead to substantial improvements in educational productivity. By cultivating a positive and enriching work environment, educational institutions can not only improve job satisfaction among their staff, but also boost overall productivity, leading to more effective teaching and, consequently, improved student outcomes. Ultimately, the research suggests that by prioritizing employee well-being and creating a nurturing work environment, educational institutions can unlock the full potential of their workforce, driving enhanced productivity and, ultimately, better educational outcomes for students.

This holistic approach to employee satisfaction and workplace culture can have a transformative impact on the education sector, empowering teachers and ultimately benefiting the students they serve (Arimie, 2019; Mappadang, Wijaya, & Mappadang, 2021).

#### **H8: Job Satisfaction has positive impact on Employee Productivity**

Career satisfaction is a crucial factor for employee productivity. Jiang et al. found that career satisfaction positively impacts job performance and organizational citizenship behaviors, both of which are key indicators of productivity. According to their study, employees who are satisfied with their career progression are more likely to invest greater effort in their roles, which, in turn, enhances their job performance. Furthermore, organizational citizenship behaviors, which includes actions that go beyond the basic requirements of the job, is also positively influenced by career satisfaction. This highlights the importance of fostering an environment in which employees feel content about their career development and have opportunities for professional advancement and growth.

In the field of education, Duffy et al. conducted a study that specifically examined the concept of "work volition" the ability to make career choices despite existing constraints. Their findings revealed that work volition significantly increases both career satisfaction and job performance among school counselors. This suggests that when employees are empowered to shape their career paths and have the autonomy to make decisions about their professional development, they are more likely to be satisfied with their careers and perform better in their jobs. Consequently, the ability to make autonomous career decisions is a vital component in boosting overall productivity and organizational success. This indicates that educational organizations should consider strategies to empower their employees, enabling them to navigate their career trajectories effectively and to feel a greater sense of ownership and investment in their work. By fostering an environment that supports employees' career development and autonomy, organizations can unlock the full potential of their workforce and achieve enhanced productivity, job satisfaction, and organizational commitment.

#### **H9: Career Satisfaction has significant impact on Employee Productivity**

Understanding the dynamics of productivity in the workplace is essential because it is often affected by a complex interplay of factors such as motivation, job satisfaction, and career fulfillment. A comprehensive study by Dou et al. (2017) delved deeply into this realm within the education sector, uncovering intricate relationships between these key variables. Their research revealed that teachers' satisfaction and commitment levels were significantly influenced by the degree of autonomy within their schools and the quality of leadership provided by principals. These factors, in turn, play a pivotal role in shaping teachers' motivation levels, ultimately affecting their overall performance and output in the educational setting. Dou et al. (2017) highlighted the importance of understanding how school autonomy and principal leadership interact to influence teachers' experiences. Their findings emphasized that these variables are closely linked and together influence teachers' job satisfaction and commitment, which are critical for maintaining high levels of motivation and productivity.

### ***2.3 Training Enhances Employee Productivity***

The correlation between staff development and productivity has become increasingly crucial in the rapidly evolving educational landscape. Recent research has established that training programs play a pivotal role in enhancing staff productivity in educational institutions. Studies conducted by Hanaysha and Tahir (2016) revealed that investing in employee training within higher education establishments can yield significant improvements in productivity levels. By equipping staff members with enhanced technical skills, problem-solving capabilities, and increased adaptability, productivity can be significantly elevated.

Moreover, the research by Diamantidis and Chatzoglou (2019) further solidifies the relationship between training effectiveness and productivity enhancements. Their findings emphasize that the success of training initiatives in augmenting productivity is intricately tied to how staff members perceive the relevance and usefulness of the acquired knowledge to their daily responsibilities. This underscores the importance of tailoring training programs to the specific needs and requirements of educational staff members. Customized training that aligns closely with the demands of their roles

ensures that newly acquired skills can be readily applied in day-to-day tasks, leading to tangible productivity gains across educational settings. By focusing on the relevance and applicability of the training content, educational institutions can maximize the impact of their development programs and drive sustained improvements in staff performance and overall productivity.

#### **H10: Training has positive and significant impact on Employee Productivity**

### **2.4 Work Environment Enhances Employee Productivity**

Employee productivity is greatly influenced by the work environment, especially in the education sector, where the caliber of the output directly affects student learning outcomes. Recent research has clarified numerous components of the workplace and how they affect worker productivity in educational settings. D M (2024) conducted a study examining the effect of open-plan offices on productivity across a range of industries, including education. It was shown that, whereas open areas can promote teamwork, they can also result in more distractions, which could lower individual productivity. This emphasizes the necessity of designing balanced workspaces in educational settings to optimize collaboration and individual focus.

The organizational climate, which encompasses the psychological and social elements of the work environment, is another critical factor in employee productivity. Aldridge and Fraser (2016) conducted a thorough study and found that elements of the school climate, such as goal consensus and principal support, had a major impact on teachers' work satisfaction and self-efficacy, which in turn improved their productivity. Their research highlighted that a supportive and cohesive organizational climate can significantly enhance teachers' job satisfaction and effectiveness. The current body of research strongly supports the significant impact of various work environment factors on employee productivity in the education sector, including physical space design and organizational climate. These findings underscore the importance of considering both physical and psychological aspects of the work environment to foster a productive and effective educational setting.

#### **H11: Work Environment has positive impact on Employee Productivity**

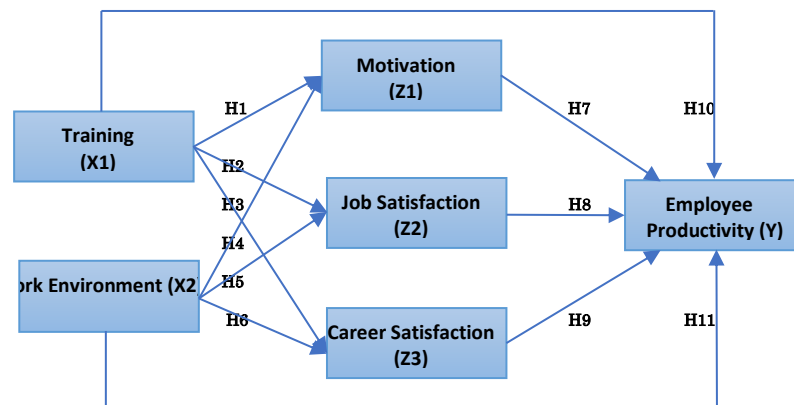


Figure 1. Conceptual Framework

## **3. Methodology**

The study population was comprised of personnel employed at different educational institutions situated within a specific geographic area. To guarantee representation from a variety of educational institutions, including primary, secondary, and postsecondary institutions, the sample was chosen using a stratified random sampling technique. This approach ensured that different types of educational institutions were represented proportionally in the sample. To provide sufficient power to identify significant impacts, 300 employees participated in the study. The sample size was chosen based on statistical power analysis, which helps determine the minimum number of participants required to detect a statistically significant effect if one exists.

A structured questionnaire was administered to the chosen sample to collect the data. The questionnaire was designed to measure several characteristics through specific items crafted to elicit detailed and

relevant responses. Training was assessed using items that gauge the frequency, relevance, and quality of training sessions attended by staff members. This section aims to understand how often staff members receive training, how applicable the training is to their job roles, and the overall quality of these training sessions. Workplace circumstances, administrative support, collegial connections, and general school climate were also evaluated using specific items. These questions were designed to capture the broader work environment and support structures available to employees, as well as the nature of their relationships with colleagues.

Motivation is measured using a scale that accounts for both extrinsic and intrinsic motivation. This includes items that explore what drives employees, whether external rewards such as salary and bonuses, or internal factors such as personal satisfaction and sense of achievement. Job satisfaction was measured using a standard job satisfaction scale that considered factors such as compensation, recognition, and working conditions. This section of the questionnaire aims to gauge how satisfied employees are with various aspects of their jobs, including financial remuneration, acknowledgment of their efforts, and the overall conditions under which they work.

Employee productivity is assessed through self-reported performance indicators and supervisor assessments that consider factors such as work efficiency. Self-reported performance indicators allow employees to provide their own assessment of their productivity, whereas supervisor assessments provide an external evaluation of their performance. Career satisfaction is evaluated using items that assess employees' satisfaction with their career progression, development opportunities, quality, and output. This part of the questionnaire sought to understand how employees feel about their career trajectory, opportunities available for professional growth, and the quality and quantity of their work output.

Smart PLS (Partial Least Squares) software is used to analyze the data using Structural Equation Modeling (SEM). This statistical technique allows for the examination of complex relationships between the observed and latent variables. First, the obtained data were cleaned and examined for missing values to ensure accuracy and completeness of the dataset. Descriptive statistics were then produced to comprehend the fundamental properties of the sample, including measures of central tendency and dispersion. Additionally, the validity and reliability of the constructs were evaluated to ensure that the measurement instruments accurately captured the intended variables, and that the results were consistent and dependable.

## **4. Result and discussions**

### ***4.1 Respondent Description***

A total of 215 questionnaires were used for the analysis. The proportion of male respondents (40.3%) was slightly lower than that of female respondents (59.7%). The respondents were generally between 30 and 46 years old (46.1%). Most respondents had a bachelor's degree (77.8%), while the rest were high school and postgraduate (22.2%). Most respondents had over three years of teaching experience (71.3% > 3 years). Most were classroom teachers (52.9%), whereas the rest were administrative staff and principals (47.1%).

### ***4.2 Evaluation of Measurement Model (Outer Model)***

When evaluating an outer model in structural equation modeling (SEM), especially using methods such as Partial Least Squares (PLS-SEM), the validity and reliability of the constructs must be evaluated. The results of the data-processing algorithm model can be used to gauge the validity and reliability of the tests. An indication can only be considered valid or acceptable if its value is > 0.7. The results of the algorithm model employed in this study are as follows.

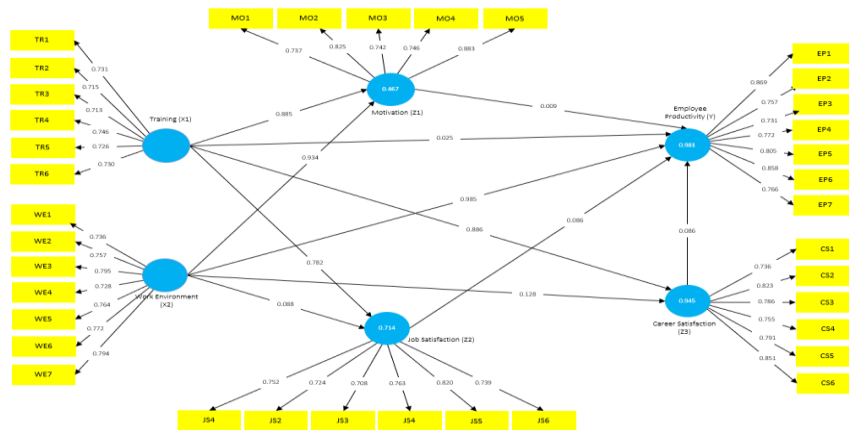


Figure 2. Loading Factor Path Diagram

Table 1. Loading Factor Outer Model

Variable	Indicator	Outer Loading	Condition	Information
<b>Training (X1)</b>	TR1	0.731	>0.7	Valid
	TR2	0.715	>0.7	Valid
	TR3	0.713	>0.7	Valid
	TR4	0.746	>0.7	Valid
	TR5	0.726	>0.7	Valid
	TR6	0.730	>0.7	Valid
<b>Work Environment (X2)</b>	WE1	0.736	>0.7	Valid
	WE2	0.757	>0.7	Valid
	WE3	0.795	>0.7	Valid
	WE4	0.728	>0.7	Valid
	WE5	0.764	>0.7	Valid
	WE6	0.772	>0.7	Valid
	WE7	0.794	>0.7	Valid
<b>Motivation (Z1)</b>	MO1	0.737	>0.7	Valid
	MO2	0.825	>0.7	Valid
	MO3	0.742	>0.7	Valid
	MO4	0.746	>0.7	Valid
	MO5	0.883	>0.7	Valid
	JS1	0.752	>0.7	Valid



<b>Job Satisfaction (Z2)</b>	JS2	0.724	>0.7	Valid
	JS3	0.708	>0.7	Valid
	JS4	0.763	>0.7	Valid
	JS5	0.820	>0.7	Valid
<b>Career Satisfaction (Z3)</b>	JS6	0.739	>0.7	Valid
	CS1	0.736	>0.7	Valid
	CS2	0.823	>0.7	Valid
	CS3	0.786	>0.7	Valid
	CS4	0.755	>0.7	Valid
	CS5	0.791	>0.7	Valid
<b>Employee Productivity(Y)</b>	CS6	0.851	>0.7	Valid
	EP1	0.869	>0.7	Valid
	EP2	0.757	>0.7	Valid
	EP3	0.731	>0.7	Valid
	EP4	0.772	>0.7	Valid
	EP5	0.805	>0.7	Valid
	EP6	0.858	>0.7	Valid
	EP7	0.766	>0.7	Valid

Source: Output smartPLS 3

The convergent validity of each evaluation construct served as the foundation for the construction of the assessment. Convergent Validity was computed using outer loading and the AVE (Average Variance Extracted) parameters. A reflexive measure was deemed to correlate with the construct to be measured if its value increased by 0.7 with the construct to be measured. However, a measurement scale with a loading factor value of 0.5 to 0.6 is considered sufficient for investigations that are still in the early phases of development. Convergent validity aims to analyze the relationship between an indicator and its underlying variables or constructs to determine if it is valid. Convergent validity aims to analyze the relationship between an indicator and its underlying variables or constructs to determine if it is valid.

Table 2. Composite Reliability (CR) dan Average Variance Extracted (AVE)

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Job Satisfaction (Z2)	0.836	0.842	0.877	0.559
Employee Productivity (Y)	0.897	0.890	0.918	0.586

Work Environment (X2)	0.804	0.896	0.923	0.596
Training (X1)	0.878	0.870	0.804	0.567
Motivation (Z1)	0.768	0.672	0.782	0.535
Career Satisfaction (Z3)	0.842	0.845	0.882	0.568

Source: Output Diagram Smart PLS 3(2024)

Estimating Composite Reliability (CR) and Average Variance Extracted (AVE) are important methods for checking the construction validity and assurance in structural models. While AVE evaluates the validity of the construction in a comprehensive manner, CR evaluates the internal construction reliability. Standard criteria for CR are  $\geq 0.70$ , and standard criteria for AVE are  $\geq 0.50$  (Hair Jr., Sarstedt, Hopkins, & Kuppelwieser, 2014). This analysis confirms the validity and reliability of the constructs in the measurement model.

The data presented in Table 2 indicate that, overall, for variables such as Job Satisfaction (Z2), employee productivity (Y), Work Environment (X2), training (X1), motivation (Z1), and Career Satisfaction (Z3), the reliability threshold was greater than 0.70, indicating the consistency of each item of work or the dependability of each item of work for each variable. However, an Average Variance Extracted (AVE) value of less than 0.50 indicates that the construction validity of the structural model was met.

Tabel 3. Fornell-Lacker Criterion

	Z2	Y	X2	X1	Z1	Z3
Job Satisfaction (Z2)	<b>0.924</b>					
Employee Productivity (Y)	0.568	<b>0.794</b>				
Work Environment (X2)	0.492	0.792	<b>0.932</b>			
Training (X1)	0.557	0.797	0.925	<b>0.919</b>		
Motivation (Z1)	0.830	0.789	0.496	0.951	<b>0.752</b>	
Career Satisfaction (Z3)	0.654	0.713	0.488	0.813	0.642	<b>0.924</b>

Source: Output Smart PLS 3 (2024)

Based on the evaluation of the Fornell-Lacker criteria, it can be inferred that the AVE coefficient for the training variable (X1) is 0.91, which is lower than the coefficient of correlation with employee productivity (Y) of 0.79. Additionally, the coefficient of correlation with other variables was higher than that with other variables. This evaluation indicated that the construct of the model had strong discriminant validity.

The next step was hypothesis testing. To test the hypothesis, an analysis was conducted using the bootstrapping test on the Path Coefficient. Significance thresholds were interpreted when T-statistik  $> 1.96$  and P-Value  $< 0.05$ .

Tabel 4. Hypothesis Testing (Path coefficient and T Statistic)

	Coefficient ( $\beta$ )	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Job Satisfaction (Z2) $\rightarrow$ Employee Productivity (Y)	0.086	0.016	1.999	0.025
Work Environment (X2) $\rightarrow$ Job Satisfaction (Z2)	0.088	0.045	1.952	0.014
Work Environment (X2) $\rightarrow$ Employee Productivity (Y)	0.985	0.018	147.01	0
Work Environment (X2) $\rightarrow$ Motivation (Z1)	0.934	0.068	5.357	0
Work Environment (X2) $\rightarrow$ Career Satisfaction (Z3)	0.128	0.035	4.437	0

Training (X1) → Job Satisfaction (Z2)	0.782	0.026	22.046	0
Training (X1) → Employee Productivity (Y)	0.025	0.039	1.501	0.207
Training (X1) → Motivation (Z1)	0.885	0.052	6.58	0
Training (X1) → Career Satisfaction (Z3)	0.886	0.032	39.526	0
Motivation (Z1) → Employee Productivity (Y)	0.019	0.018	1.302	0.078
Career Satisfaction (Z3) → Employee Productivity (Y)	0.048	0.037	1.53	0.065

Source: Output Smart PLS 3(2024)

The findings of testing the research hypotheses are presented in Table 4, where a number of positive and noteworthy outcomes are seen. For instance, examining the effect of the work environment (X2) on employee productivity (Y), motivation (Z1), and career satisfaction yields a result of  $0.00 < 0.05$ . A p-value of  $0.00 < 0.05$ , indicating that the test results for training (X1) on job satisfaction (Z2), motivation (Z1), and career satisfaction (Z3) were also positive and significant.

A number of test results, however, indicate different relationships between employee productivity (Y) and job satisfaction (Z2), work environment (X2), job satisfaction (Z2), training (X1), productivity (Y), motivation (Z1), and productivity (Y), and career satisfaction (Z3) and productivity (Y) all show positive but insignificant results  $> 0.05$ .

## 5. Conclusion

The findings show that training and work environments have a positive influence on employee productivity. This is because training improves employees' skills and knowledge, leading to increased motivation and job satisfaction. Implementing personalized learning paths tailored to individual employee needs and skill levels by utilizing adaptive learning systems to provide targeted training and enhance skill acquisition (Zhang, 2024). Additionally, a good work environment fosters a sense of belonging and job satisfaction, which in turn increases employee productivity. Foster a sense of belonging and community among employees by promoting teamwork and collaboration, encouraging open communication, providing opportunities for feedback and growth, and ensuring that the feedback and growth, and ensuring that the physical environment is clean, well-maintained, and comfortable (Chistyakova & Mezheritskaya, 2023).

The results of this research are of great importance to the education sector, as they highlight the importance of providing adequate training and maintaining a positive environment to improve employee productivity. This can be achieved by implementing effective training programs and ensuring a work environment conducive to employee satisfaction and motivation. This finding also underscores the need to consider the intervening variables of motivation, job satisfaction, and career satisfaction when examining the relationship between training, work environment, and employee productivity. and work environment, and employee productivity. Implement motivational activities and incentives to enhance student motivation and engagement while recognizing and rewarding employee achievements and contributions to boost morale and job satisfaction (Pahlevi and Digdowiseiso, 2024). Conclusion: Training and work environments have a positive impact on employee productivity in the education sector. on employee productivity in the education sector, mediated by motivation, job satisfaction, and career satisfaction. The implications of these findings are significant for educational institutions that aim to increase employee productivity and improve overall performance. By prioritizing employee training and creating a supportive work environment, educational institutions can foster a more motivated and productive workforce, ultimately leading to better educational outcomes and a more effective learning environment.

## References

Aldridge, J. M., & Fraser, B. J. (2016). Teachers' views on their school climate and their relationship with teacher self-efficacy and job satisfaction. *Learning Environments Research*, 19, 291-307.

- Ameliah, A. D., & Jatnika, R. (2024). Descriptive Study of College Student's Career Adaptability with An Internship Experience. *Annals of Human Resource Management Research*, 4(1), 1-11.
- Appova, A., & Arbaugh, F. (2018). Teachers' motivation to learn: Implications for supporting professional growth. *Professional development in education*, 44(1), 5-21.
- Arimie, C. J. (2019). Employer-employee relations and employee engagement in a tertiary institution in Benin-City, Edo State. *Annals of Management and Organization Research*, 1(1), 9-24.
- Cerasoli, C. P., Nicklin, J. M., & Ford, M. T. (2014). Intrinsic motivation and extrinsic incentives jointly predict performance: a 40-year meta-analysis. *Psychological bulletin*, 140(4), 980.
- D M, A. (2024). Open Office Design and its Impact on Employees: A Review of Research and Perspectives.
- Diamantidis, A. D., & Chatzoglou, P. (2019). Factors affecting employee performance: an empirical approach. *International Journal of productivity and Performance management*, 68(1), 171-193.
- Efrial, A. S., & Satrya, A. (2023). THE MEDIATING EFFECT OF CAREER ADAPTABILITY BETWEEN WORK SOCIAL SUPPORT, STRESS, SATISFACTION, AND TURNOVER INTENTION ON PRIVATE SECTOR EMPLOYEES. *Maker: Jurnal Manajemen*, 9(2), 196-207.
- Erum, H., Abid, G., Contreras, F., & Islam, T. (2020). Role of family motivation, workplace civility and self-efficacy in developing affective commitment and organizational citizenship behavior. *European Journal of Investigation in Health, Psychology and Education*, 10(1), 358-374.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- Han, J., & Yin, H. (2016). Teacher motivation: Definition, research development and implications for teachers. *Cogent Education*, 3(1), 1217819.
- Hanaysha, J., & Tahir, P. R. (2016). Examining the effects of employee empowerment, teamwork, and employee training on job satisfaction. *Procedia-Social and Behavioral Sciences*, 219, 272-282.
- Khan, N. (2019). The Impact of Organizational Climate on Teachers Commitment. *Journal of Education and Educational Development*, 6(2), 327-342.
- Kim, Y., & Ployhart, R. E. (2014). The effects of staffing and training on firm productivity and profit growth before, during, and after the Great Recession. *Journal of applied psychology*, 99(3), 361.
- Mappadang, A., Wijaya, A. M., & Mappadang, L. J. (2021). Financial performance, company size on the timeliness of financial reporting. *Annals of Management and Organization Research*, 2(4), 225-235.
- Nagy, N., Rudolph, C. W., & Zacher, H. (2022). Reciprocal relationships between subjective age and retirement intentions. *European Journal of Work and Organizational Psychology*, 31(4), 583-595.
- Ozkeser, B. (2019). Impact of training on employee motivation in human resources management. *Procedia computer science*, 158, 802-810.
- Pahlevi, M. R., & Digdowiseiso, K. (2024). RETRACTED: The Effect of Job Satisfaction, Work Motivation, Work Environment, and Training on Employee Productivity at PT. Wijaya Karya Beton Tbk in East Jakarta. *Journal of Social Science*, 5(2), 537-547.
- Raziq, A., & Maulabakhsh, R. (2015). Impact of working environment on job satisfaction. *Procedia Economics and Finance*, 23, 717-725.
- Skaalvik, E. M., & Skaalvik, S. (2017). Still motivated to teach? A study of school context variables, stress and job satisfaction among teachers in senior high school. *Social Psychology of Education*, 20, 15-37.
- Tapang, F., & Mbarika, I. (2023). The effect of electricity reliability on the sustainability of SMEs in Fako Division of Cameroon. *Annals of Human Resource Management Research*, 3(1), 17-39.
- Topchyan, R., & Woehler, C. (2021). Do teacher status, gender, and years of teaching experience impact job satisfaction and work engagement? *Education and Urban Society*, 53(2), 119-145.
- Toropova, A., Myrberg, E., & Johansson, S. (2021). Teacher job satisfaction: the importance of school working conditions and teacher characteristics. *Educational Review*, 73(1), 71-97.
- Vekeman, E., Devos, G., Valcke, M., & Rosseel, Y. (2018). Principals' configuration of a bundle of human resource practices. does it make a difference for the relationship between teachers' fit,

- job satisfaction and intention to move to another school? *Educational Management Administration & Leadership*, 46(5), 820-840.
- Zhang, X. (2024). Using Reinforcement Learning Algorithms to Optimize Practical Skills Development in Higher Vocational and Technical Education. *Journal of Electrical Systems*, 20, 2146-2155. doi:10.52783/jes.3129