

## **Examining How Professional Development mediates the relationship between Training & Development and Job Performance in IT Sector of Uttar Pradesh**

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### **Abstract:**

This study underscores the significant impact of training and development (T&D) on employee performance and career growth. Regular training equips employees with essential skills, fostering continuous expertise and future career progression in dynamic workplaces. Professional development acts as a mediator, amplifying the positive effects of training on motivation, engagement, and work outcomes. Empirical analysis from the IT sector in Uttar Pradesh confirms that training directly and indirectly (through professional development) improves job performance and satisfaction. The research highlights the importance of structured training programs and recommends that organizations invest strategically in ongoing learning initiatives to build a competent, motivated workforce and achieve organizational success. This study employed purposive sampling to target IT company employees in Uttar Pradesh who had direct contact with training and development programs. A total of 460 respondents were surveyed to enhance the study's statistical power and representativeness. Data collection involved both primary and secondary sources, with primary data gathered through a self-administered questionnaire focusing on various aspects of training, such as skill development and attitude change. Electronic methods facilitated efficient data collection. The collected data were analyzed using IBM SPSS Statistics Version 25, utilizing multiple statistical tests to ensure accurate and comprehensive results aligned with the research objectives.

**Keywords:** Professional Development, Training and development, IT Companies, employee performance, Career Growth

## **1. INTRODUCTION:**

Organizations understand the strategic value of spending in their human resources through organized training and development programs in the fast-paced corporate world of today. Despite their frequent interchangeability, training and development have distinct organizational functions. While advancement takes a longer-term approach focused on professional development and educating personnel with abilities that the business will need in the future, training usually concentrates on providing personnel with particular expertise and skills to address immediately apparent performance deficiencies (Chovarda et al., 2021). "The enhancement of the ability of a person to thrive efficiently in his or her current or subsequent position and work organization" is what McCauley & Hezlett define as employee development (Chovarda et al., 2021).

Since training programs are designed to improve employees' present work capabilities and job performance, their implementation is closely linked to corporate strategy (Yang et al., 2017). These programs, which might include classroom instruction, e-learning, mentoring and supervision, leadership development, and on-the-job training, are all intended to help staff members carry out their jobs more successfully while advancing larger corporate goals (Singh, 2023). Swift developments in the market surroundings, technological advancement, changing management practices, and globalization have all increased the significance of ongoing employee development because they hasten the decline of previously learned expertise and abilities (Jakubiec, 2020).

Organizations that invest in talent growth establish a mutually beneficial relationship in which workers are more likely to react favourably and becomes prosocially motivated to advance the interests of the company (Chovarda et al., 2021) (Kuvaas et al., 2009). The corporation as a whole as well as individual employees' skills, knowledge, and capacities depend on this investment (Chovarda et al., 2021).

Businesses are realizing more and more how strategically important it is to fund professional development initiatives. Employee performance, skill development, and job efficiency all benefit from these educational initiatives, which also increase workers' knowledge and inspire them to perform better on the workplace (Revathi et al., 2024). Professional development can yield a substantial return on investment, as evidenced by the fact that businesses with successful learning programs are twice as likely to meet their production targets (Mamaqi, 2023).

### **1.1 Benefit of Training for Employees:**

Employees gain directly from training and development programs in many ways, which improve their performance on the work now and in the future. Gaining and improving job-specific knowledge and abilities is one of the main benefits, as it allows workers to complete their jobs more rapidly and efficiently (Olejniczak-Szuster et al., 2018) (Karim, 2019). This skill development includes soft skills that increase overall workplace effectiveness as well as technical competencies needed for certain tasks (Karim, 2019).

Employees are better equipped to adjust to changing workplace demands and technological improvements thanks to the chances for ongoing learning that training and development give (Karim, 2019). This flexibility is essential in the quickly changing corporate world of today, where people who are always learning are better equipped to adapt to changes in organization and offer innovative approaches (Dyah et al., 2024). Employees can gain new knowledge and improve their technical and soft skills through a variety of learning methods, such as formal instruction, job shadowing, coaching, mentorship, and project involvement (Halim et al., 2024).

In the end, employees are greatly motivated by training and development (Anyika et al., 2024), which paves the way for both career and personal advancement. Employees gain access to markets and career opportunities while also becoming more valuable to their employers by developing their competencies (Xhemajli et al., 2022) (Khadse et al., 2022). Talented workers are more likely to be attracted and retained by organizations that place a high priority on employee development through regular training programs (Ejiwale, 2019) (Arthur et al., 2003).

### **1.2 Long Term Career Development Outcomes:**

Employees who participate in developmental and training initiatives gain the skills and credentials necessary for growth in the quickly evolving workplace of today, which has significant long-term career rewards. According to Olejniczak-Szuster et al. (2018), companies that place a high priority on employee development by providing frequent training opportunities allow their employees to consistently expand their expertise and skill set, which lays the groundwork for future career advancement. According to research, employees' advancement paths are fundamentally impacted by their involvement in training efforts, which in turn significantly affects their prospects for career promotion (Olejniczak-Szuster et al., 2018).

Employees' long-term career goals and personal growth are greatly influenced by training and

development initiatives, particularly in settings where work requirements and technology are changing quickly (Ada et al., 2023). By raising knowledge and skill levels, this favorable view of training chances leads to better performance and enhanced learning motivation (Ada et al., 2023).

Businesses that make significant investments in the professional development of their staff members frequently offer a variety of continuing education options that foster long-term career advancement. These could include professional certification possibilities, online learning materials, and tuition reimbursement plans that let staff members develop the skills and certifications necessary for their desired careers (Dyah et al., 2024). By fostering an innovative and flexible culture, this ongoing investment in human capital enhances organizational capacities as well as individual career advancement (Dyah et al., 2024).

Also, employees feel more valued if their growth and career progression is paid attention to. Valuing the people in workforce means pledging to their development, engagement, satisfaction, and well-being. (Badruddin, 2016)

Employees that participate in ongoing education are more equipped to adjust to changes in the organization and offer creative solutions, which increases their career mobility and organizational value (Dyah et al., 2024).

Employee preparation for subsequent managerial and professional responsibilities is a particularly significant long-term professional consequence of training and development. These initiatives effectively create a pipeline of competent internal applicants for higher-level roles by giving current employees the fundamental skills needed for development chances (Nga, 2024). Organizations improve both present performances and long-term career advancement prospects by attending to employees' developmental needs and equipping them with the professional skills pertinent to future jobs (Nga, 2024).

By keeping workers up to date with contemporary management techniques and technology advancements, this strategy helps them prevent their abilities and expertise from becoming outdated (Nga, 2024) (Khuwaja et al., 2020).

## **2. LITERATURE REIEW:**

### **2.1 Direct Impact on Employee Performance:**

Professional development programs significantly improve employees' job performance, according to a wealth of research. Professional development methods and better job outcomes are directly correlated, according to studies conducted in a variety of industries. As an example,

a study conducted on teachers revealed "a significant favorable connection between teachers' ongoing professional growth activities and their job efficiency," suggesting that performance rises in tandem with professional development (Nwakpa, 2019). Similarly, at the Department of Education Office of Gowa, professional development was found to considerably improve staff performance in public administration (Wahyuni, 2016).

Professional growth enhances performance through a variety of factors. Training initiatives improve workers' attitudes, abilities, and knowledge in approaches that directly support the accomplishment of company objectives (Yang et al., 2017). Employees are able to complete jobs more quickly and with greater quality thanks to this skill improvement (Mdhlalose, 2020). Furthermore, professional development enables workers to be more proficient in their roles by exposing them to the newest patterns, efficient procedures, and cutting-edge technologies in the sector (Upadhyay, 2023).

Professional development has been shown to improve performance in a variety of organizational settings. Regression analysis at the Forestry Research Institute of Nigeria revealed significant correlations between employee job performance and perceived training contributions to job performance improved competency and training and development benefits (Deji et al., 2023). Similarly, professional development and training were found to have good and substantial impacts on employee work performance at the Ministry of Finance's Directorate General of Budgeting (Werdiningsih et al., 2023).

Studies conducted in higher education settings have demonstrated that staff productivity is greatly increased by well-designed training programs (Ichdan, 2024) (Kim et al., 2014). These advantages frequently show up as increased motivation and job satisfaction, which serve as stimulants for raising output (Ichdan, 2024). According to a quantitative study conducted at PT Sumber Anugrah Prima in Samarinda, career development and training accounted for 70.1% of the improvement in employee performance (Apuy et al., 2024).

The advantages go beyond quick gains in performance. Employability, career achievement, and work satisfaction are all positively impacted by professional development (Marzec et al., 2021). In order to prevent skills obsolescence, training and development enable staff members to stay up to date with scientific, technological, social, and economic advancements (Nwakpa, 2019). This is especially crucial in the quickly changing workplace of today, when performance can be severely hampered by out-of-date knowledge. New employee classifications have been developed to satisfy the changing demands of the global business world. Employing people

with the necessary talents at the appropriate time and location is an organization's top priority (Badrudin & Saxena, 2016).

Performance and professional development have a causal relationship rather than merely a correlational one. Employee performance is directly impacted by training, according to several research (Kwarteng et al., 2022; Murphy et al., 2019; Putri et al., 2024). Employee performance is directly impacted by ongoing professional development, according to research conducted with accounting professionals (Kwarteng et al., 2022).

## **2.2 In respect of IT Companies:**

The body of research highlights the critical role that professional development plays in improving work performance in a variety of industries, with a focus on how it acts as a mediator between training programs and employee results. According to (Mafindi, 2024), job dedication and motivation are important components that affect job performance. It is suggested that motivational elements, which can be developed through focused development programs, are essential to converting training efforts into better performance. Similar to this, Malik's research from 2024 highlights how activities related to learning and development act as mediators in the interaction between work engagement and job design, which in turn affects performance indicators.

Employee involvement and leadership techniques are also noted as important mediators. For example, according to a 2016 study by an unidentified source, offering training and development increases employee engagement, and this in turn improves job performance. This is consistent with the more general knowledge that professional development programs increase workers' abilities and drive, which mitigates the impact of their initial instruction on performance results. Additionally, an unidentified source (2023) looks at high-performance work systems and suggests that they could act as mediators between task performance and employee development, highlighting the need of complete development frameworks in promoting high performance.

Performance management and workforce planning also highlight the importance of developing skills and knowledge. Examining the connection between programming expertise, training requirements, and performance (unspecified) indicates that ongoing professional development mediates the influence of training on work effectiveness by assisting in the alignment of employee skills with organizational goals. Furthermore, Malik (2024) discusses the significance of developing significant working environments through development programs,

pointing out that job performance can be greatly impacted by the mediated impact of work engagement, which is promoted through professional development.

There is still broad agreement that professional development events are essential for enhancing the relationship between training and performance, even though some studies—like those published on November 15, 2020—indicate that workplace fulfillment might not constantly mediate the connection between career advancement and task performance. Results showing that development programs improve competencies, motivation, and engagement all work together to mitigate the impact training has on job performance and lend credence to this. In conclusion, the body of research consistently supports the idea that professional development plays a crucial mediating role in enhancing the beneficial impacts of T&D upon work performance. It accomplishes this by encouraging drive, involvement, and skill development, which makes it easier to convert training inputs into observable performance results in corporate contexts, such as the UP IT sector.

In summary, the overwhelming body of research indicates that employee performance is directly and favorably impacted by professional development programs. These programs help employees operate more efficiently and effectively by improving their skills, knowledge, and competences, which eventually helps the organization succeed (Almandeel et al., 2019) (Sahibzada et al., 2022).

### **3. Research Methodology:**

The thorough approach and methodology that researchers use to methodically look into study problems and questions is known as research methodology. From problem conceptualization to literature evaluation, data collecting, analysis, and conclusion drawing, it offers a systematic road map that directs through the whole research process (Abdulai et al., 2014). "A structured and methodological procedure for sampling, collecting, examining, and interpreting findings to resolve hypotheses or test hypotheses" is the fundamental definition of research methodology (Hariramani et al., 2024).

#### **3.1 Hypothesis:**

**H<sub>0</sub> 1:** Professional Development (PD) does not significantly mediate the relationship between Training & Development (T&D) and Job Performance (JP).

#### **3.2 Research Design:**

The impact of training and development methodologies on the professional growth of employees in Uttar Pradesh's IT enterprises has been fully investigated in this study using a

blend of exploratory, descriptive, and cross-sectional research approaches. By combining both recognized paradigms and new ideas, this multifaceted method guarantees a solid grasp of the study subject.

### **3.3 Research Approach**

Since the main goal of this study is to use organized, objective data to measure the influence of training and development techniques on professional development, it predominantly uses a quantitative research approach. A well-crafted, closed-ended questionnaire using a five-point Likert scale was used to gather quantitative data.

### **3.4 Population:**

Employees from a variety of Uttar Pradesh-based IT organizations make up the study's target group. The group comprises people from various organizational levels—from entry-level executives to top management—who work in professional roles in the IT industry, since the study intends to investigate the influence of training and development procedures on professional development.

### **3.5 Sampling Techniques:**

To conduct this study, a non-probability method called purposive sampling was used. Because the study specifically focused on IT company employees who had direct contact to training and development programs, this technique was judged appropriate.

### **3.6 Sample Size:**

A well-calculated sample reduces sampling error and boosts the study's statistical power (Creswell, 2014). The researcher gathered information from 460 respondents in order to improve the study's statistical power and representativeness. This guarantees wider coverage and goes above and beyond the bare minimum.

### **3.7 Source of Data Collection**

The current study used both primary and secondary data sources to guarantee the findings' precision, comprehensiveness, and contextual relevance.

The primary data was obtained directly from workers in Uttar Pradesh's IT industries via a self-administered, standardized questionnaire. The questionnaire was thoughtfully created to capture a range of training and development aspects, including professional identity, attitude modification, skill improvement, information acquisition, and general growth. Purposive sampling was used to choose respondents, and electronic data collection was used to guarantee speed and accessibility.

### **3.8 Tools and Tests for Statistics**

IBM SPSS Statistics Version 25, a commonly used program for quantitative analysis in social science research, was used to examine the data gathered for this study. To guarantee a comprehensive and precise analysis of the data in line with the goals of the study, a number of statistical tests were used.

## **4. Data Analysis and Interpretation:**

### **4.1 Reliability Analysis**

A high level of reliability is crucial for ensuring the accuracy and trustworthiness of research outcomes, as it demonstrates the consistency and internal coherence of the tool employed to collect data (Nunnally & Bernstein, 1994).

#### **Reliability Statistics: Professional Development (PD)**

<b>Reliability Statistics</b>		
<b>Scale</b>	<b>Cronbach's Alpha</b>	<b>N of Items</b>
<b>Professional Development (PD)</b>	.758	28

**Table 1- Reliability Statistics: Professional Development (PD)**

**Interpretation:** With 28 elements, the Cronbach's Alpha value for the full set of data is quite high (.758). Therefore, it can be said that the information gathered is quite trustworthy for additional research.

#### **Reliability Statistics: Job Performance (JP)**

<b>Reliability Statistics</b>		
<b>Scale</b>	<b>Cronbach's Alpha</b>	<b>N of Items</b>
<b>Job Performance</b>	.793	05

**Table 2- Reliability Statistics: Job Performance (JP)**

**Interpretation:** With 05 items, the Cronbach's Alpha value for the total set of data is quite high (.793). Therefore, it can be said that the information gathered is quite trustworthy for additional research.

#### **4.2 Normality Test:**

In order to utilize the proper statistical tests (parametric and non-parametric) for statistical analysis, normality analysis was done to ensure that the data was normal.

**(H0):** The sample comes from a normal distribution.

**(H1):** The sample does not come from a normal distribution

Test of Normality	Shapiro-Wilk		
	Statistics	DF	Sig
My training programs have significantly enhanced my technical skills relevant to my job.	.822	460	.000
Training sessions effectively cover the latest industry trends and technologies.	.850	460	.000
My training has improved my ability to collaborate effectively on IT projects.	.870	460	.000
The company invests in training that improves my problem-solving abilities.	.889	460	.000
Training programs are tailored to address specific skill gaps in my role.	.887	460	.000
I am encouraged to reflect on my work experiences and identify areas for improvement.	.895	460	.000
The company provides opportunities for self-assessment and feedback on my performance.	.874	460	.000
I regularly engage in reflective journaling or discussions to analyse my work.	.885	460	.000
I use feedback from training to adjust my work strategies and approaches.	.852	460	.000
Training has helped me develop the ability to critically evaluate my own work.	.868	460	.000
The company's training programs have helped me define my career goals within the IT industry.	.820	460	.000
I feel a strong sense of professional identity within the company.	.842	460	.000
The company provides clear pathways for career advancement in IT.	.867	460	.000
I am encouraged to pursue professional certifications and further education.	.883	460	.000
Training has helped me understand my role and responsibilities better.	.843	460	.000

I am satisfied with the opportunities for professional growth within the company.	.873	460	.000
Training sessions provide opportunities to network with colleagues from different departments.	.819	460	.000
The company encourages collaboration and knowledge sharing among employees.	.845	460	.000
Training has improved my ability to communicate and collaborate effectively with others.	.868	460	.000
I am encouraged to share my knowledge and expertise with colleagues.	.813	460	.000
The company uses collaborative tools and platforms to facilitate knowledge sharing.	.841	460	.000
I feel that the company values collaboration and networking as part of professional development.	.869	460	.000
Training programs emphasize ethical practices in the IT industry.	.884	460	.000
I feel that the company promotes a positive and inclusive work environment.	.844	460	.000
Training has reinforced my commitment to continuous learning and improvement.	.872	460	.000
The company's values align with my own professional values.	.819	460	.000
Training has helped me develop a strong work ethic.	.845	460	.000
Training has helped me develop a positive attitude towards my work.	.869	460	.000
I consistently meet or exceed the performance expectations of my role.	.885	460	.000
I am efficient and effective in completing my assigned tasks.	.886	460	.000
I believe my work contributes significantly to the overall success of the company.	.850	460	.000
I am able to handle challenges and solve problems effectively in my job.	.865	460	.000
I consistently receive positive feedback regarding the quality of my work.	.823	460	.000

**Table: 3- Normality Test**

**Interpretation:** The Shapiro-Wilk test statistics are used to analyze the results. The alternative hypothesis has been accepted and it is determined that the data originates from a non-normal

distribution since the p-value is significant (less than 0.05). Therefore, for additional statistical analysis, non-parametric methods must be employed.

**4.3 Descriptive Analysis:** In order to comprehend data distribution and central tendencies, descriptive analysis offers a thorough synopsis of the dataset, including metrics like means, standard deviations, and range (Creswell & Creswell, 2017).

<b>Descriptive Statistics</b>					
	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std Dev</b>
My training programs have significantly enhanced my technical skills relevant to my job.	460	1.00	5.00	3.8348	1.07805
Training sessions effectively cover the latest industry trends and technologies.	460	1.00	5.00	3.8478	1.07997
My training has improved my ability to collaborate effectively on IT projects.	460	1.00	5.00	3.7391	1.02123
The company invests in training that improves my problem-solving abilities.	460	1.00	5.00	3.4848	1.14987
Training programs are tailored to address specific skill gaps in my role.	460	1.00	5.00	3.4304	1.28573
I am encouraged to reflect on my work experiences and identify areas for improvement.	460	1.00	5.00	3.4326	1.20177
The company provides opportunities for self-assessment and feedback on my performance.	460	1.00	5.00	3.6913	1.07270
I regularly engage in reflective journaling or discussions to analyse my work.	460	1.00	5.00	3.4304	1.23561
I use feedback from training to adjust my work strategies and approaches.	460	1.00	5.00	3.6587	1.08607
Training has helped me develop the ability to critically evaluate my own work.	460	1.00	5.00	3.7870	.98698

The company's training programs have helped me define my career goals within the IT industry.	460	1.00	5.00	3.8326	1.10269
I feel a strong sense of professional identity within the company.	460	1.00	5.00	3.8543	1.09389
The company provides clear pathways for career advancement in IT.	460	1.00	5.00	3.7565	1.04447
I am encouraged to pursue professional certifications and further education.	460	1.00	5.00	3.5022	1.16316
Training has helped me understand my role and responsibilities better.	460	1.00	5.00	3.6391	1.07668
I am satisfied with the opportunities for professional growth within the company.	460	1.00	5.00	3.7348	1.02224
Training sessions provide opportunities to network with colleagues from different departments.	460	1.00	5.00	3.8435	1.07935
The company encourages collaboration and knowledge sharing among employees.	460	1.00	5.00	3.6891	1.07309
Training has improved my ability to communicate and collaborate effectively with others.	460	1.00	5.00	3.7891	.99732
I am encouraged to share my knowledge and expertise with colleagues.	460	1.00	5.00	3.8674	1.07346
The company uses collaborative tools and platforms to facilitate knowledge sharing.	460	1.00	5.00	3.8935	1.06210
I feel that the company values collaboration and networking as part of professional development.	460	1.00	5.00	3.7500	1.03348
Training programs emphasize ethical practices in the IT industry.	460	1.00	5.00	3.5043	1.15375

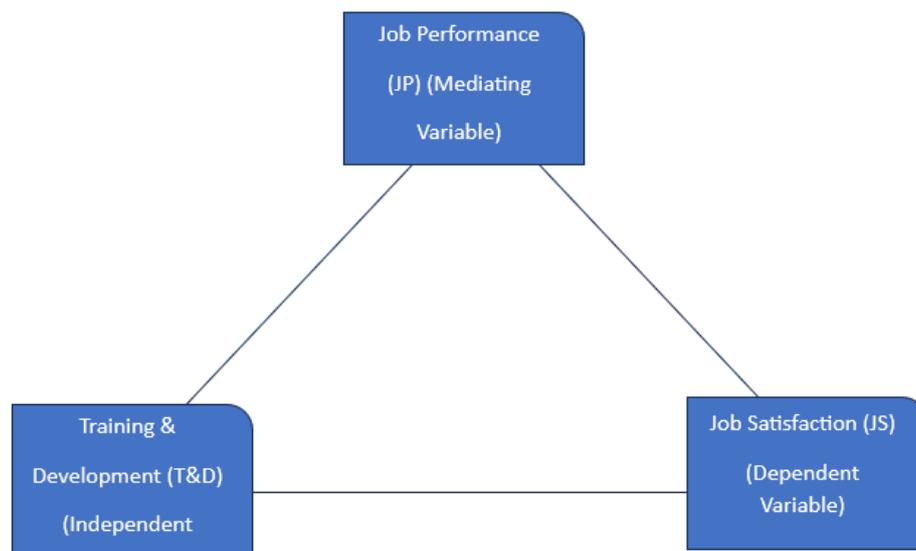
I feel that the company promotes a positive and inclusive work environment.	460	1.00	5.00	3.6609	1.06958
Training has reinforced my commitment to continuous learning and improvement.	460	1.00	5.00	3.7717	.99348
The company's values align with my own professional values.	460	1.00	5.00	3.8609	1.06550
Training has helped me develop a strong work ethic.	460	1.00	5.00	3.8913	1.04430
Training has helped me develop a positive attitude towards my work.	460	1.00	5.00	3.7391	1.03184
I consistently meet or exceed the performance expectations of my role.	460	1.00	5.00	3.5000	1.15564
I am efficient and effective in completing my assigned tasks.	460	1.00	5.00	3.4326	1.29429
I believe my work contributes significantly to the overall success of the company.	460	1.00	5.00	3.6587	1.08808
I am able to handle challenges and solve problems effectively in my job.	460	1.00	5.00	3.7826	1.01434
I consistently receive positive feedback regarding the quality of my work.	460	1.00	5.00	3.8174	1.11892

**Table: 4- Descriptive Statistics**

#### **4.4 Mediating role of Professional Development (PD) in the relationship between Training & Development (T&D) and Job Performance (JP)**

The below hypothesis was formulated and model was proposed as per it

- H<sub>0</sub> 1: Professional Development (PD) does not significantly mediate the relationship between Training & Development (T&D) and Job Performance (JP).



**Figure:1- Mediation Effect Model: Mediating effect of Professional Development (PD) on the Training & Development (T&D) and Job Performance (JP) relationship**

This mediation model represents the relationship between an independent variable (X), a mediator (M), and a dependent variable (Y). It includes:

- Path a: Effect of T&D (IV) on PD (M)
- Path b: Effect of PD (M) on JP (DV)
- Path c': Direct effect of T&D (IV) on JP (DV) (after mediation)
- Indirect effect:  $a \times b$

Total Effect (c):  $(a*b) + c'$

R	R <sup>2</sup>	MSE	F	df1	df2	p-value
0.9788	0.9580	0.0413	10452.5828	1	458	0.0000

**Table: 5 - Model Summary for Outcome Variable – PD**

**Interpretation** – The regression model examining the relationship between Professional Development (PD) and Training & Development (T&D) has an R<sup>2</sup> value of 0.9580, meaning that T&D accounts for 95.8% of the variance in PD. Considering a p-value of 0.000 and an F-value of 10452.58, the model is considered very significant. This indicates that T&D and PD have a very significant predictive association.

	<b>Coeff</b>	<b>SE</b>	<b>t</b>	<b>p</b>	<b>LLCI</b>	<b>ULCI</b>
<b>Constant</b>	0.0155	0.0380	0.4070	0.6842	-0.0592	0.0902
<b>T&amp;D</b>	0.9931	0.0097	102.2379	0.0000	0.9740	1.0121

**Table: 6- Model Coefficients for Outcome Variable – PD**

**Interpretation** - T&D → PD (Path a) has a coefficient of 0.9931, a t-value of 102.24, a p-value of 0.000, and a standard error of 0.0097. This means that Professional Development rises by roughly 0.9931 units for every unit increase in T&D. The dependability of the impact is confirmed by the very significant finding and the fact that zero is not included in the confidence interval [0.9740, 1.0121].

<b>R</b>	<b>R<sup>2</sup></b>	<b>MSE</b>	<b>F</b>	<b>df1</b>	<b>df2</b>	<b>p-value</b>
<b>0.8897</b>	<b>0.7916</b>	<b>0.1283</b>	<b>867.9299</b>	<b>2</b>	<b>457</b>	<b>0.0000</b>

**Table: 7- Model Summary for Outcome Variable – JP**

**Interpretation** – With an R2 of 0.7916, the regression model that predicts Job Performance (JP) based on T&D and PD indicates that the combined influence of T&D and PD accounts for 79.16% of the variance in JP. A p-value of 0.000 and an F-statistic of 867.93 show that the model is of statistical significance.

	<b>Coeff</b>	<b>SE</b>	<b>T</b>	<b>P</b>	<b>LLCI</b>	<b>ULCI</b>
<b>Constant</b>	1.0041	0.0670	14.9822	0.0000	0.8724	1.1358
<b>T&amp;D</b>	0.5179	0.0835	6.1987	0.0000	0.3537	0.6820
<b>PD</b>	0.1955	0.0823	2.3741	0.0180	0.0337	0.3573

**Table: 8- Model Coefficients for Outcome Variable – JS**

**Interpretation**- PD → JP (Path b) has a coefficient of 0.1955, a t-value of 2.3741, and a p-value of 0.0180. This shows that, while T&D is held constant, a one-unit rise in professional development is linked to a 0.1955-unit increase in job performance. Since zero is not included in the confidence interval [0.0337, 0.3573], the result is statistically significant.

T&D has a strong direct beneficial effect on JP even after controlling for PD, as evidenced by the coefficient for T&D → JP (Path c') of 0.5179, t-value of 6.1987, and p-value of 0.000. This significance is supported by the confidence interval [0.3537, 0.6820].

Indirect Effect of X (T&D) on Y (JP) via M (PD)

Effect	BootSE	BootLLCI	BootULCI
0.1941	0.0728	0.0545	0.3393

**Table:9 Indirect Effect of X (T&D) on Y (JP) via M (PD)**

**Interpretation-** With a bootstrapped standard error of 0.0728, the indirect impact of training and development on job performance via the mediator professional development is 0.1941. Since it excludes zero, the 95% CI for this indirect impact, which spans from 0.0545 to 0.3393, indicates that the mediation effect is statistically significant.

Partial mediation is present because the direct effect (0.5179) and the indirect effect (0.1941) are both significant. In other words, the relationship between job performance and training and development is somewhat mediated by professional development.

The sum of the direct and indirect effects of T&D on JP, or total effect (c), is 0.5179 (direct) + 0.1941 (indirect) = 0.7120, indicating a significant combined influence of T&D on JP via both direct and mediated routes. H0 1 is thus disproved.

### 5. Findings:

The results demonstrated a bootstrapped standard error of 0.0361 and an indirect relationship between Training & Development (T&D) and Job Satisfaction (JS) through Job Performance (JP) of 0.4134. The statistical significance of this effect was confirmed by the 95% CI, which varied from 0.3432 to 0.4859. Even after taking into account the mediator JP, the direct effect of T&D on JS (0.4325, p = 0.000) remained significant, and the indirect effect was likewise significant, suggesting partial mediation. T&D had a significant overall impact on JS, as evidenced by its total effect of 0.8459. As a result, H<sub>01</sub> was disproved, demonstrating that job performance mediates the relationship between job satisfaction and training and development to some extent.

## 6. Conclusion:

The results of this study demonstrate that the association between Training & Development (T&D) and Job Satisfaction (JS) is significantly mediated by Job Performance (JP). The fact that the null hypothesis ( $H_{01}$ ) was rejected suggests that T&D has an indirect effect on JS in addition to a direct one through enhanced work performance.

This implies that workers perform better at work and are more satisfied with their jobs when they have access to good training and development options. The findings highlight how crucial it is to fund organized training and development initiatives in order to improve employee happiness and attitudes as well as skill levels.

These findings have important ramifications for HR professionals, who ought to think about performance-enhancing training programs as a tactical instrument to raise staff satisfaction and organizational efficacy generally.

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