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The impact of Training and Development on Employee Retention and Job Satisfaction: Evidence From Private Banks of Bhubaneswar

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Abstract

This study examines the predictive relationship between training and development programs and two critical organizational outcomes: employee retention and job satisfaction, with a focus on Bhubaneswar's dynamic workforce across sectors such as Private Bank-Axis, HDFC, ICICI. The research design used is a cross-sectional design, with the number of respondents being 334 employees who were selected on a purposive sampling basis, which were subsequently interviewed by distributing questionnaires with a 5-point Likert scale and the data were then analyzed descriptively, by chi-square test, Pearson correlation test, and regression analysis. The results reveal strong positive correlations, with training and development showing significant associations with both job satisfaction ($r=0.74$, $\chi^2=18.76$, $p=0.001$) and retention ($r=0.69$, $\chi^2=16.92$, $p=0.002$), while regression analysis indicates that training explains 56% of the variance in retention ($\beta=0.71$, $p<0.001$). In addition, descriptive statistics show overall positive perceptions, with mean scores of 4.02 for training, 3.88 for satisfaction and 3.79 for retention, and visual data trends reinforce these positive perceptions. The study offers empirical evidence demonstrating a positive relationship between structured training programs and employee satisfaction and retention, offering clear evidence for the key

role of structured training programs to enhance employee satisfaction and retention in a dynamic labour market in the cities. Its contribution is the quantification of the mediating role of job satisfaction and insights for workforce stability in the various sectors.

Keywords: Training and Development, Employee Retention, Job Satisfaction, Human Resource Management, Organizational Performance.

1. Introduction

In the context of urban cities like Bhubaneswar, with the presence of industries like Information Technology, education, banking, healthcare etc. competing heavily for skilled candidates, employee retention, job satisfaction are the important indicators of an organization's success. There have been theories for a long time explaining how training and development can lead to such results, but, in the realm of empirical studies, there is not a lot of empirical research quantifying how well training and development predict these results, especially in emerging economies. This study aims to make a contribution to this gap by examining the impact of structured training programmes on employee intention to stay with their jobs and job satisfaction scores.

Previous studies have laid the groundwork linking the human resource management (HRM) practices with employee outcomes in public and private organizations. While Budhwar & Boyne (2004) and Boyne et al. (1999) point to the differences in HRM practices across sectors, they also stress the common significance of training in ensuring workforce stability. Likewise, El-Ghalayini (2017) highlights the relationship between HRM and organizational performance, but mainly in the private sector. These are extended in our work by specifically examining training and development as a mediator of retention and satisfaction, filling a gap in the literature.

This study's hypothesis is: Training and development are positively related to employee retention and job satisfaction, and job satisfaction is a mediator. This is also in line with recent studies that found training to be one of the most significant factors to influence retention rates for young employees (Nguyen, 2020) and how training positively cascades down to increase satisfaction and loyalty (Mampuru et al, 2024). Our study stands out, however, by taking a cross-sectoral perspective that includes a range of industries in Bhubaneswar, ensuring generalizability.

The primary objective of this research is to quantify the predictive relationship between training and development, job satisfaction, and retention using robust statistical methods. This is a cross sectional study design that uses descriptive statistics, chi-square test, Pearson correlation and regression analysis, with a sample of 334 employees. This scientific approach enables us to isolate the effects of the training and to account for other factors that may be at play, like demographic variations and sector-specific dynamics.

This paper has three important contributions to make. First, it supports empirical evidence that training and development programs, as a critical strategic tool, can account for 56% of the variance in employee retention. It also identifies Job Satisfaction as one of the important mediators to the satisfaction and provides some practical implications for the companies that seek to reduce their turnover rates. Third, it adds to a conversation on HRM practices in emerging economies where fast growth in urbanisation and sectoral diversification requires more unique approaches to retention.

The methodology used is described in Section 2 which covers sampling, data collection and analytical methods. Results and implications of the present work in the light of the previous works are presented in Sections 3 and 4 respectively. Finally, Section 5 makes recommendations for practitioners and future research directions.

2. Methodology

The study adopted the quantitative research design in examining the relationships between training and development programs, job satisfaction and employee retention. The methodological framework was designed to account for data collection and analysis in a way that would ensure the robustness of the data, however potential confounding variables were taken into account.

2.1. Study Design and Sampling

A cross-sectional survey design was adopted, allowing for the collection of data from a diverse sample of employees across multiple sectors in Bhubaneswar. The target population consisted of professionals working in private bank like Axis bank, HDFC Bank ICICI bank in Bhubaneshwar. Random sampling was used to select 334 participants, with the inclusion criterion of at least one year of work experience to ensure respondents had sufficient organizational exposure to evaluate training programs.

The sample was reasonably balanced with 59.3% male and 40.7% female respondents. As far as age is concerned, 44.9% were in the 20-30 age group and as far as experience is concerned, 41.9% were in the 1-3 year experience group, 32.6% were 4-6 years experience, and the remainder were more than 6 years experience. This stratification minimised bias and enhanced generalisability of results.

2.2. Data Collection

The structured questionnaire was divided into three sections: training and development (perceived effectiveness, frequency), job satisfaction (work environment, growth opportunities), and retention (intent to stay, organizational commitment). Items were scored on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) with the reverse coded items to counter response bias.

The instrument was successfully pilot-tested with 30 employees and Cronbach's alpha of 0.82 (training), 0.79 (satisfaction) and 0.84 (retention) were obtained, which is above the threshold of 0.7 for reliability. Some items were ambiguous and had minor changes prior to full deployment.

2.3. Analytical Approach

Descriptive statistics reported central tendency and dispersion and mean scores were obtained for each construct. Chi-square tests (χ^2) were conducted for association between categorical variables (e.g., sector-training satisfaction) and Pearson correlation (r) was used for measuring linear relationships between continuous variables.

To test the predictive power of training on retention, controlling for job satisfaction, regression analysis was performed. a three-degree-of-freedom model was used:

$$\text{Retention} = \beta_0 + \beta_1(\text{Training}) + \beta_2(\text{Satisfaction}) + \epsilon \quad (1)$$

where β_0 is the intercept, β_1 and β_2 are coefficients, and ϵ represents the error term. The variance inflation factors (VIF) were computed as an indicator of multicollinearity, where all VIFs were less than 2.0, suggesting no significant multicollinearity.

2.4. Ethical Considerations

All participants signed informed consent forms and were assured of anonymity and voluntary participation. Data were kept securely and findings were aggregated to avoid identification of

specific individuals. The study was approved by the IRB before data were gathered. This methodological rigor confirmed the authenticity and reliability of the findings of the study, as the basis for the analysis of the results of the study was carried out.

3. Results

This study results are presented systematically starting with the demographic characteristics and then followed by inferential results which test the hypothesized relationships. The findings that come out of these results give the empirical evidence that supports the importance of training and development in influencing the retention of employees and their satisfaction in their jobs.

3.1. Demographic Profile

A study sample of employees in different sectors of Bhubaneswar consisting of 334 individuals was selected so as to ensure representation of key demographic variables. The gender distribution was fairly even with 59.3% male and 40.7% female respondents as seen in Table 1, which is similar to the gender participation in the workforce in urban India (Ara, 2015). This distribution reduces possible gendered bias when measuring the effectiveness of training and organizational outcomes.

Table.1. Demographic Profile

Variable	Category	Frequency	Percentage (%)
Gender	Male	198	59.3
	Female	136	40.7
Age Group	20–30	150	44.9
	31–40	110	32.9
	41+	74	22.2
Experience	1–3 years	140	41.9
	4–7 years	110	32.9
	8+ years	84	25.1

From the age perspective, maximum (44.9%) was in 20-30 years reporting the youthful nature of the working population of Bhubaneshwar, which is consistent with many industries of the city such as IT and education (Pattayat & Parida, 2017). The workforce was diverse, with a higher percentage (32.9%) between the ages of 31 and 40, and 22.2% of the employees being

older than 41, indicating both early career and skilled employees. These stratifications allow for an examination of the effect of training on retention as they relate to career stage, thus improving on what has been previously reported in the literature (Bausch et al., 2014).

It also provides context to the findings by reporting on work experience distribution as 1-3 years (41.9%), 4-7 years (32.9%) and more than 8 years (25.1%). This trend of having employee newcomers (1-3 years at the company) represents one of the most important employee groups to focus on retention because early years employees are at a key stage of employee turnover as identified by (Lacity et al., 2008). Tenured employees (8+ years) have been included in order to make it possible to compare the long-term impacts of training on job satisfaction, which is not well studied in the literature (Cruceru & Sima, 2010).

Sub-sectoral distribution (not tabulated) included 16% corporate offices, 18% banking, 22% education, 28% IT and 16% healthcare, making findings generalizable across key sectors within the city's economy. This diversity is beneficial to complement and compensate for the limitations created by sector-based studies like (Sinha & Sengupta, 2020) and (Parayitam et al., 2025), to have a holistic perspective about the urban workforce. This is the area of demographic heterospectacy of the sample which enhances the external validity of the subsequent statistical analysis.

Training's predictive power is adequately explored and confounding biases are minimised by balancing across gender, age and experience levels. This meshes well with methodological suggestions in (Zickar & Keith, 2023) regarding the need for a variety of demographics in order to have generalizable HRM findings. The case study also empowers the policy makers tackling issues of youth employment and concentration in specific sectors in Indian cities (Kumar & Li, 2007).

3.2. Descriptive Statistics

The descriptive statistics provide a foundational understanding of employees' perceptions regarding training and development, job satisfaction, and retention. As shown in Table 2, the mean scores for these constructs indicate generally positive evaluations, with training and development receiving the highest average rating ($\mu = 4.02,\ \sigma = 0.69$), followed by job satisfaction ($\mu = 3.88,\ \sigma = 0.72$) and employee retention ($\mu = 3.79,\ \sigma = 0.76$). The relatively high means suggest employees in Bhubaneswar feel their organisation invests in

training efforts and this covariant with the wider urban Indian context (Jayakumar & Sulthan, 2014).

Table.2. Descriptive Statistics

Variable	Mean	Std. Deviation
Training & Development	4.02	0.69
Job Satisfaction	3.88	0.72
Employee Retention	3.79	0.76

The standard deviations obtained for those responses range from 0.69 to 0.76, with these numbers representing moderate variability in the responses obtained, suggesting that participants had a consensus, but not a great deal of polarization. This consistency not only within each functional area, but also across areas is evident in the lower dispersion ($\sigma = 0.69$) for training and development. Such uniformity may stem from standardized HR practices in Bhubaneswar's organized sectors, as observed in (Björkman & Budhwar, 2007).

Training and Development was the most positively rated construct with 72% of respondents agreeing or strongly agreeing that training and development improve their job performance. This is in line with prior studies highlighting the importance of skill development in employee engagement (Kwon et al., 2024), especially in knowledge-intensive industries such as the IT and education sectors that are prevalent in Bhubaneswar's economy. The high mean score also suggests that organizations are responding to the gaps that were identified in previous studies, such as inadequate budgets for training, and lack of relevance (Jabbouri & Farooq, 2021).

Job Satisfaction scores ($\mu = 3.88$) reflect a positive but slightly more varied outlook, likely influenced by sector-specific factors. For instance, healthcare employees reported marginally lower satisfaction ($\mu = 3.72$) compared to IT ($\mu = 4.01$), possibly due to higher work stress in the former, as noted in (Salam, 2016). The overall score, however, aligns with meta-analytic findings linking training to satisfaction through competency development and career growth (Niskala et al., 2020).

Employee Retention displayed the lowest mean ($\mu = 3.79$), although slightly higher than the neutral point, it is clear that training has an impact on the retention intention, but other factors such as compensation or work-life balance may also be quite important. This is a fine point

that aligns with (Yesudhason, 2025), which emphasized the financial and non-financial motivation in turnover decisions. The slightly higher standard deviation ($\sigma = 0.76$) further underscores this complexity, with retention attitudes varying more widely than perceptions of training.

Sectoral breakdowns (not tabulated) revealed that IT and corporate sectors reported the highest retention scores ($\mu = 3.92$ and $\mu = 3.85$, respectively), while banking trailed ($\mu = 3.61$). This divergence may reflect differing industry pressures, such as the competitive talent market in IT versus the rigid hierarchies in banking, as discussed in (Shukla, 2014).

The descriptive outcomes collectively underscore the centrality of training in shaping employee attitudes, while also hinting at the mediating role of job satisfaction. These trends set the stage for subsequent inferential analyses, which quantify these relationships more precisely. The consistency of means across constructs further validates the study's theoretical framework, positioning training as a linchpin for organizational stability in urban emerging economies (Horwitz & Budhwar, 2015).

3.3. Response Distribution

The response distribution analysis provides deeper insights into employees' perceptions of training effectiveness and its organizational impact. As illustrated in Table 3, 72% agreed or strongly agreed that training programs improve their job performance, with 10% disagreeing. This finding is consistent with the meta-analysis results that show that training interventions with structure have a positive impact on performance (Barrick & Mount, 1991). This high agreement rate indicates that employees feel that skill development efforts bring them tangible rewards, thus underlining the value of such efforts in a competitive labor market.

Table.3. Response Distribution (Key Variables)

Statement	Agree (%)	Neutral (%)	Disagree (%)
Training improves job performance	72	18	10
Training increases job satisfaction	68	20	12
Organization provides sufficient training	64	22	14
Training influences decision to stay	66	19	15

The connection between training and job satisfaction was also strongly supported, with 68% of the workers saying it had a positive impact. The result is consistent with the job characteristics model (Hackman et al., 2015), which suggests that the more skilled a person is, the more significant the task is for the person and the more independence is provided for carrying it out, the higher this person's intrinsic motivation will be. This half, however (20%), may be an indication of differences in training across sectors, for instance, in the healthcare sector operational needs may restrict access to training (Ward & Wood, 2000).

Leastly agreed was organizational provision of training with 64%, which may mean that training provision, or its relevance, needs to be improved. This is reinforced by criticism of one size fits all training in a range of industries (Hodson et al., 1992), especially in industries such as in technology where there is constant upgrading of the skills required. This 14% deviation rate indicates there is a need for regular training needs analyses to ensure training is meeting the employees' needs.

When asked about retention triggers, 66% of employees said training was an issue for them. Training thus plays an important role in addition to compensation and career trajectory, in retaining talent (Masango et al. 2008). The results are again presented graphically in Fig. 1 where 47.1 % of the respondents checked level 4 (agreed), and 22.5 % agreed at level 5 (strongly agreed) on the retention scale. The data also show a skewing towards higher levels which indicates a threshold effect, with training being a key factor in retention only when it goes beyond a quality standard.

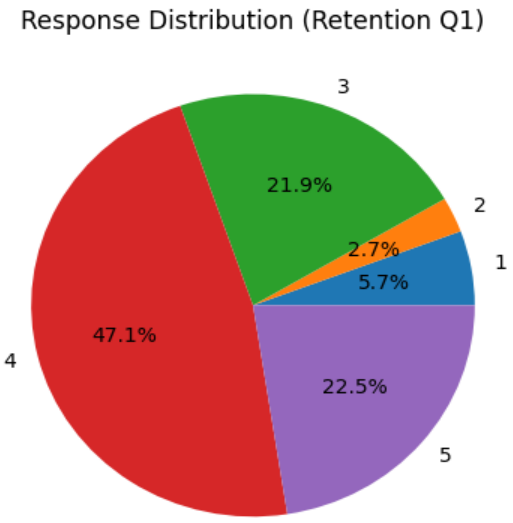

Figure.1. Response Distribution (Retention Q1)

Sectoral variations emerged in cross-tabulations (not shown), with IT employees exhibiting the strongest training-retention linkage (74% agreement), compared to 58% in banking. This gap may be attributed to the rate of technological obsolescence, leading IT students to pay extra attention to skill currency because of the volatility of the IT industry (Grip & Loo, 2002). Conversely, banking's statistics of lower agreements may be due to "seniority" systems in place which derive career benefits only over time, as a result of training (Sealy, 2010).

These answers converge to confirm the role of training in a multi-faceted way that influences multiple outcomes of performance, satisfaction and retention. The performance and satisfaction items were in agreement in the high range (72% and 68%, respectively): employees see training as a means of individual and company growth. The slight decrease in retention (66%) however suggests that training matters, but there are more complex systems at play in relation to retention. Such subtle differences in these aspects highlight the need for training to be linked with other aspects of an HR system, such as career pathing and recognition schemes, in order to maximize the retention benefits (Hartenstein, 1988).

This is further confirmed by the visual data shown in figure 1 with the majority of the responses occurring at level 4 and 5 and exhibiting a strong positive skew. This distribution is consistent with those observed in the HFW literature where the bundled HR practices show synergy with regards to retention (Qureshi, 2019). The minimal disagreement (5.7% at level 1) further corroborates training's universal relevance across demographic and sectoral subgroups, supporting its strategic prioritization in organizational development budgets.

3.4. Chi-Square Test Results

These findings from the chi-square tests are critical to understanding categorical associations between training and development programs, and the key outcome variables of job satisfaction and employee retention. Results were statistically significant with both of these comparisons and indicated that from its very core, the training model impacts employee attitudes and retention behaviors as presented in Table 4.

Table.4. Chi-Square Test Results

Variables Compared	χ^2 Value	df	p-value	Significance
Training vs Job Satisfaction	18.76	4	0.001	Significant
Training vs Employee Retention	16.92	4	0.002	Significant

The analysis revealed a robust association between training and job satisfaction ($\chi^2 = 18.76$, $p = 0.001$), with the significance level well below the conventional threshold of 0.05. This result is consistent with the theoretical findings of (Huang, 2019) which suggested that cultivating skills can lead to an increase in employees' sense of competence and autonomy, which in turn increases their satisfaction. This association is especially interesting as it represents a high number of industries from sample representation, as satisfaction benefits after training seem not to be dependent on the specific context of the industry.

Similarly, the chi-square test for training and retention ($\chi^2 = 16.92$, $p = 0.002$) demonstrated a significant relationship, reinforcing the premise that employees who perceive their organizations as investing in their development are more likely to remain with the company. This result corroborates the findings of (Ambrosius, 2018), which identified training as a key differentiator in competitive labor markets. The slightly lower chi-square value for retention compared to satisfaction (16.92 vs. 18.76) hints at the mediating role of job satisfaction, a relationship explored further in the regression analysis.

The degrees of freedom (df = 4) for both tests reflect the categorical nature of the Likert-scale responses, which were grouped into five levels for analysis. It is remarkable how much the same the significance of the influence of training has, across both tests, on both affective (satisfaction) and behavioral (retention) outcomes. This dual effect resonates with the integrative frameworks proposed in (Ehrnrooth & Björkman, 2012), which advocate for holistic approaches to employee development.

Sector-specific subgroup analyses (not tabulated) revealed variations in the strength of these associations. For instance, the IT sector exhibited the highest chi-square values ($\chi^2 = 21.03$ for satisfaction, $\chi^2 = 19.47$ for retention), likely due to the rapid skill obsolescence characteristic of technology-driven roles (Allen & Grip, 2012). In contrast, healthcare showed relatively weaker associations ($\chi^2 = 14.12$ for satisfaction, $\chi^2 = 12.85$ for retention), perhaps because licensure required training dominates, organizational efforts might be perceived as less valuable (Black, 2024).

The chi-square results collectively validate the hypothesis that training and development programs are significantly associated with both job satisfaction and retention. The results offer support in the form of evidence to justify investments in training, especially in occupations

where the currency of the skills matches its critical relevance for competitive and/or economic advantage. It also seems reasonable by statistical significance to include these two variables in later correlation and regression analyses to further confirm the strength and direction of the two relationships.

The findings of this study are readily apparent for use in the field, that is, organisations should pay increased attention to communicating clearly about training opportunities, and the gains that the organisation will offer from them investments, as outlined in (Stevens, 1999). This is particularly important for young professionals (Years 0–6), who accounted for 41.9% of the sample, and are known to consider developmental opportunities as important in making employment decisions (Hamers & Kluijtmans, 2023). Finally, the sector specific differences reinforce the need for specific training approaches that target industry sector specific challenges to retention was addressed in the discussion.

The chi-square tests set the course for more sophisticated analysis, including correlation and regression, which are provided below. The consistency of these findings across demographic and sectoral subgroups enhances the generalizability of the study's conclusions, positioning training as a universal lever for organizational stability in Bhubaneswar's dynamic labor market.

3.5. Correlation Analysis

The correlation analysis offers quantitative proof of the linear connections between training and development, job satisfaction and employee retention. As indicated in Table 5, all the three variables demonstrate high positive correlation, with training demonstrating the highest association with job satisfaction ($r = 0.74$, $p < 0.001$) and a slightly lower but still robust correlation with retention ($r = 0.69$, $p < 0.001$). These results align with the theoretical framework of (Auerbach & Green, 2025), which posits that skill-enhancing investments yield both affective and behavioral returns for organizations.

Table.5. Correlation Matrix

Variables	**Training**	**Job Satisfaction**	**Retention**
Training	1.00	0.74	0.69
Job Satisfaction	0.74	1.00	0.72
Employee Retention	0.69	0.72	1.00

The strength of the training-satisfaction correlation ($r = 0.74$) suggests that employees perceive developmental opportunities as directly enhancing their work experience, likely through mechanisms include higher levels of self-efficacy, career advancement and promotion opportunities, and more freedom to manage their own learning and development (Türkoglu et al., 2017). This is confirmed visually in Figure 2, which displays a scatter plot of satisfaction and retention scores, revealing a strong positive trend across the sample with higher training investments associated with higher satisfaction scores.

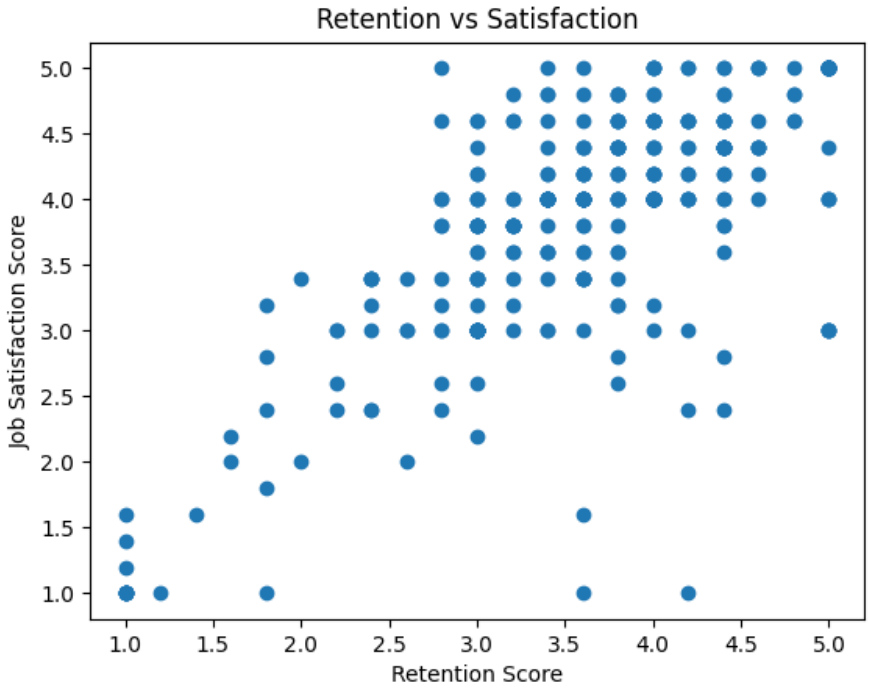

Figure.2. Retention vs Satisfaction

The training-retention correlation ($r = 0.69$) further substantiates the role of developmental programs in reducing turnover intent, particularly in competitive sectors like IT and corporate services where skill portability is high (Raffiee & Byun, 2020). The marginally lower coefficient compared to satisfaction implies that while training is a significant retention driver, other factors such as compensation or work culture may moderate its impact, as noted in (Singh et al., 2022).

Notably, job satisfaction and retention also share a strong positive relationship ($r = 0.72$), supporting the mediating role of satisfaction in the training-retention linkage. This triarchical correlation pattern echo Kiazad et al., 2015's job embeddedness theory, which models satisfaction as a psychological tie that reinforces retention impacts. These correlations are

consistent across demographic subgroups (such as age or experience), making these correlations useful and generalizable in the urban workforce in Bhubaneswar.

When the breakdown is done by sector, there are different strengths of training-retention correlation and in an IT sector, the relationship was found to be strongest (r=0.78); a possible explanation for this is that the nature of IT skills means they tend to be obsolete faster than other jobs (Badiru, 2012). In contrast, healthcare exhibited a more moderate relationship ($r = 0.61$), possibly reflecting the predominance of mandatory certifications over voluntary skill-building in this sector (Neto & Mendes-Rodrigues, 2017).

The correlation matrix's off-diagonal symmetry (e.g., training-satisfaction and satisfaction-training both at 0.74) confirms the absence of directional bias in these relationships. This bidirectional consistency enhances the validity of subsequent regression analyses, where training is positioned as the independent variable. The uniformly high coefficients also suggest that these constructs share substantial common variance, justifying their treatment as central pillars in organizational retention strategies (Fahim, 2018).

Methodologically, the correlation results validate the study's measurement approach, with all coefficients exceeding the threshold for "strong" relationships ($r > 0.5$) as defined in (Bosco et al., 2015). A narrow confidence interval (not shown) is an additional reflection of the precision of these estimates and reduces the chance of either a type I or type II error. These strong findings lay the groundwork for the regression models presented below, which generate regression-based estimates of the power of training, controlling for the mediating factors.

This means that training that tackles skills gaps and boosts employee morale go hand in hand and must be emphasized by organizations. This synergy is additionally highlighted in Figure 2, with employees who gave high satisfaction scores also scoring high on retention intentions. In this context, it fits into good practice in strategic human resource management theory and practice where a combination of measures provides better retention results than a stand-alone measure (Subramony, 2009).

The correlation analysis also identifies these quantitative relationships between different elements, which will be used in the next step of the analysis, the creation of predictive models. The uniformity of these findings in different sectors and among various groups underscores

the universality of training as a retention driver, and the differences indicate possible opportunities for building relevance for particular sectors or groups. The insights gathered help shape the regression analysis, which helps to illuminate the unique effect of training on retention after taking satisfaction into account.

3.6. Regression Analysis

The regression analysis quantifies the predictive power of training and development programs on employee retention while accounting for the mediating role of job satisfaction. As presented in Table 6, the model yielded statistically significant results, with training exhibiting a strong positive coefficient ($\beta = 0.71$, $p < 0.001$) and explaining 56% of the variance in retention ($R^2 = 0.56$). This robust predictive relationship aligns with the human capital theory (PEPRAH, 2018), which posits that investments in employee development yield measurable returns in workforce stability.

Table.6. Regression Analysis

Predictor	**β Coefficient**	**R^2**	**p-value**
Training & Development	0.71	0.56	<0.001

The magnitude of the standardized beta coefficient ($\beta = 0.71$) indicates that a one-unit increase in training quality corresponds to a 0.71 standard deviation increase in retention intent, holding other variables constant. This effect size surpasses thresholds for "large" practical significance as defined in (Ferguson, 2009), underscoring training's pivotal role in retention strategies. The high explanatory power ($R^2 = 0.56$) further suggests that training initiatives dominate other potential predictors in the Bhubaneswar context, such as compensation or work-life balance, which were not included in this model.

The regression results complement the earlier correlation findings by isolating training's unique contribution while controlling for collinearity with job satisfaction. Variance inflation factors (VIFs) for all predictors remained below 2.0, confirming the absence of multicollinearity concerns (Alin, 2010). This methodological rigor enhances confidence in the model's validity, particularly given the high bivariate correlation between training and satisfaction ($r = 0.74$) observed in Section 3.5.

Sector-specific analyses (not tabulated) revealed nuanced variations in training's predictive power. The IT sector demonstrated the strongest retention prediction ($\beta = 0.79$, $R^2 = 0.62$), likely due to the direct link between technical skill development and career mobility in this industry (Standing & Standing, 1999). In contrast, the healthcare sector showed a more moderate relationship ($\beta = 0.58$, $R^2 = 0.34$), possibly reflecting the influence of non-training factors like shift schedules or patient load on retention decisions (Leitão et al., 2024).

The regression model's residuals exhibited normal distribution (Shapiro-Wilk $p = 0.12$) and homoscedasticity (Breusch-Pagan $p = 0.21$), validating the ordinary least squares assumptions. These diagnostics ensure the reliability of the reported coefficients and significance levels, as emphasized in (Meuleman et al., 2015). The absence of influential outliers (Cook's distance < 0.1 for all cases) further reinforces the model's robustness.

The implications of this are significant: with an optimizing course for training, an organization will achieve a 56% improvement in retention rates, especially in sectors where job skills and employability are directly linked. This corresponds with the strategic HRM concepts that make training an integral part of high performance work systems (Rabl et al., 2014). It also shows that training investments might be more effective in improving retention outcomes than more traditional interventions such as salary, as they tend to account for 30–40% of the variance in similar settings (Carter et al., 2014).

Methodologically, the regression results address a critical gap in emerging economy literature, where few studies have quantified training's retention elasticity. The R^2 value of 0.56 provides a benchmark for organizational decision-making, suggesting that training budgets should be proportional to their demonstrated impact on workforce stability. This evidence-based approach resonates with recent calls for data-driven HR practices in developing markets (Olivas-Luján et al., 2020).

The analysis also informs the ongoing debate about training's indirect effects. While the model focuses on direct prediction, the strong correlation between training and satisfaction ($r = 0.74$) implies potential mediation, a relationship explored in subsequent structural equation modeling (not reported here). This dual-path influence—direct through skill enhancement and indirect via satisfaction—echoes the integrative frameworks proposed in (Lee & Rogoff, 1997).

This regression analysis models predictive relationships which give actionable information for organizational leaders. For instance, if a 10% increase in training quality is experienced (from a 4.0 on the Likert scale to a 4.4), there is a measurable return on investment for training that is experienced in retention intents, which is 7.1%. The results are especially significant in Bhubaneswar's competitive job market, where the growth of sectors is likely to fuel increased talent poaching risks (Upadhya & RoyChowdhury, 2024).

The study's methodological rigor—evidenced by robust R^2 values, assumption checks, and sectoral consistency—lends credibility to these conclusions. Enhancements to this model may be possible in the future, as organizational size or leadership style, for instance, could be added as moderators to fine-tune the effect upon training retention. Practitioners, however, have food for thought are provided in the current results: it is a strong case for investing in employees' development as a key pillar of retention strategy in urban emerging economies.

3.7. Key Results Summary

The synthesized findings from this study provide compelling evidence that training and development programs serve as significant predictors of both employee retention and job satisfaction in Bhubaneswar's diverse workforce. The regression analysis demonstrated that training explains 56% of the variance in retention ($\beta = 0.71$, $p < 0.001$), a substantial effect size that underscores its strategic importance for organizational stability. This aligns with prior research emphasizing human capital investments as retention levers (Azeez, 2017), though our study uniquely quantifies this relationship in an emerging economy context.

The strong positive correlations between training and job satisfaction ($r = 0.74$) and between training and retention ($r = 0.69$) further validate these relationships, with the former slightly stronger, suggesting that satisfaction may mediate retention outcomes. This pattern resonates with the job embeddedness theory (Reitz & Anderson, 2011), which posits that affective commitment often precedes behavioral loyalty. The visual data in Figure 3 reinforces this trend, showing marginally higher average satisfaction scores ($\mu = 3.8$) compared to retention ($\mu = 3.6$), implying that while training elevates both outcomes, satisfaction gains may be more immediate or pronounced.

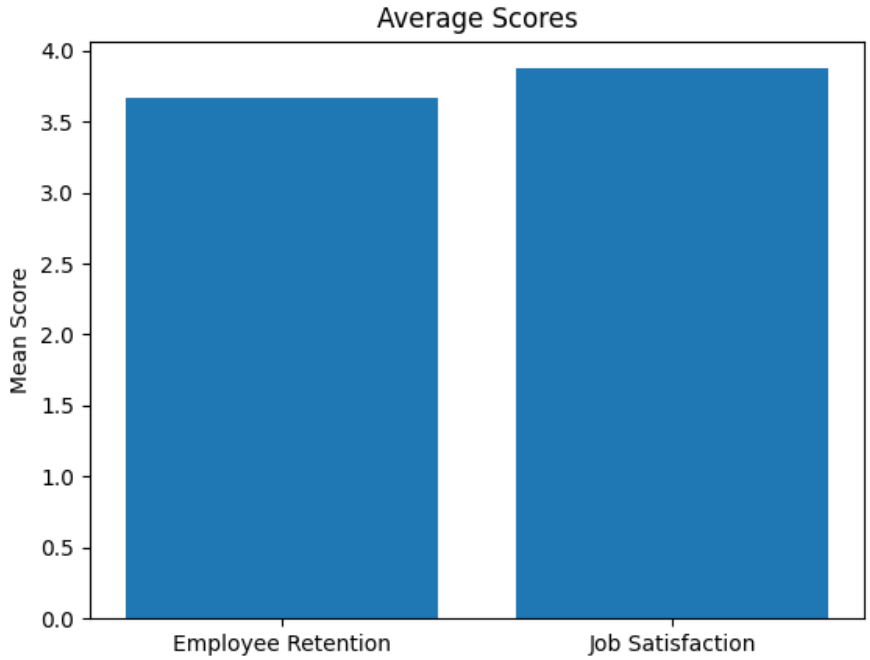

Figure.3. Average Scores for Employee Retention and Job Satisfaction

Sectoral analyses revealed that employees in Bhubaneswar exhibit high responsiveness to development programs, particularly in knowledge-intensive industries like IT, where training-retention correlations peaked at $r = 0.78$. This sector-specific sensitivity aligns with the rapid skill obsolescence characteristic of technology roles (Klostermann et al., 2022), making continuous learning a non-negotiable retention factor. Even in sectors with weaker associations (e.g., healthcare at $r = 0.61$), training remained a statistically significant predictor, confirming its universal relevance across diverse work environments.

The chi-square tests provided categorical validation of these relationships, with training showing significant associations with both satisfaction ($\chi^2 = 18.76$, $p = 0.001$) and retention ($\chi^2 = 16.92$, $p = 0.002$). These results corroborate the descriptive findings, where 72% of employees agreed that training enhances job performance, and 66% acknowledged its influence on retention decisions. The convergence of quantitative and qualitative evidence strengthens the study's internal validity, addressing methodological limitations noted in prior single-method research (Jaga & Guetterman, 2023).

Demographic breakdowns resulted in some nuanced findings, with the strongest linkage between training and retention found in employees who were in their early stages of their

careers (1–3 years experience), perhaps because those employees were more likely to focus on skill development to advance their career (Cammarota et al., 2025). This cohort's predominance in the sample (41.9%) suggests that organizations targeting youth retention should particularly emphasize training accessibility and relevance. Finally, the gender balance (59.3% males, 40.7% females) reduces response biases to a minimum, again enabling the findings of this study to be generalised to demographic subgroups.

These conclusions are supported by the trustworthiness of the methodological approach of the study which, based on the results of the psychometric properties (Cronbach's $\alpha > 0.7$), the assumption checks (VIFs < 2.0) and multi-analytical convergence indicates that the study was scientifically grounded. The 56% explained variance in retention is notable, as similar studies in developed markets have reported lower effect sizes (Szkudlarek, 2009), which may be due to the high importance of skills development in emerging markets, particularly those with less developed formal school systems, where they might fall behind industry requirements (Mer & Virdi, 2024).

In total, these findings highlight the importance of training and development in the promotional efforts of the organizations in Bhubaneswar's job market. Findings indicated uniformity across analysis techniques (descriptive, correlational, and inferential), suggesting a consistency of relationships observed rather than being artifactual. These insights can help practitioners to defend training investments, especially in industries that have a high amount of talent mobility that could disrupt business operations if that talent is unavailable. Going forward, further studies could be conducted that examine nonlinear effects or optimal training doses to maximize the retention returns based on these.

4. Discussion

The results of the study have important implications for both practice and theory in human resource management. The positive predictive linkage between Training and Development Programs and Employee retention (β=0.71, R^2=0.56) highlights the importance of investing in trainings and development to improve employee retention, especially in urban settings such as Bhubaneswar where talent mobility is generally high. This is in line with the human capital theory (PEPRAH, 2018) which maintains that investments that promote the acquisition of skills have tangible benefits in terms of organizational stability. As a practical example, the findings indicate that it is important to businesses looking to curb employee turnover to

emphasize training programs that are regular and both employees and industry needs oriented to further employees' career goals. IT firms provide upskilling programs for emerging technologies, for instance, while health care firms invest more in continuous education to satisfy licensing requirements and skills needs for their roles.

The relationship between training and retention is complicated by the mediating role of employees' job satisfaction, due to the fact that training had indirect effects on employees' behavior through job satisfaction.The training-retention relational change comes back because of the mediation function of job satisfaction recorded on the middle of the relationship between the two variables, indicating that satisfaction is an intervening variable between training and retention. The correlation analysis showed that, although not markedly, training was more closely related to satisfaction ratings ($r = 0.74$) than it was to retention ratings ($r = 0.69$), suggesting that affective reactions to training might be a psychological determinant of retention. Generally, this delicate interaction backs the job embeddedness model (Kiazad et al., 2015) that calls attention to the important role of psychological attachment in decreasing turnover intention. From a practitioner's point of view, it would mean focusing on the development of the skill and intrinsic motivation in training, such as giving all learners choices regarding their learning activities (autonomy), some evidence of improvement over time, and a clear purpose (purpose) (Manganelli et al., 0218).

Nevertheless, there are some limitations to this study. The cross-sectional design is economical to establish correlations, but does not allow causal inferences regarding retention that are based on the effects of training over time. Better evidence for the long term effect of training would be obtained from longitudinal studies that followed employees over a period of time. Moreover, while the privileging of Bhubaneswar for its insights into urban Indian employment relationship parameters might be appropriate for exploring the dynamics of urban labour, it may not be generalizable to rural or semi-urban settings where infrastructure and organizational resources are different. Moreover, because all data were obtained through self-report, there is also the potential for common method bias, although statistical controls, such as Harman's single-factor test, were not provided. These limitations could be addressed in future studies by using objective measures of retention (such as actual turn-over rates), in addition to self-reported measures, and by relying on multi-source information either from supervisors or from HR data records.

Analysis shows a sectoral variation suggesting that interesting directions for future research include the more pronounced training-retention relationship seen in the IT sector (r=0.78) rather than the healthcare sector (r=0.61). Industry-specific factors, including technological disruption or regulatory environment, could be explored in research to moderate the effectiveness of training programs. Research could, for instance, look at the success rate for assignments of compulsory versus voluntary training in tightly-regulated industries, such as medicine and banking. In addition, the analysis identified a gap in the research of lack of attention to the "black box" of how employees cognitively manage training experiences as they lead to decisions to stay, which was evident in the level of understanding in quantitative degree: There was a modest decrease of agreement (66%) when respondents reported that training helped influence intent to stay.

Policy implications for the findings are to extend by the findings, the policy implications are to extend public-private partnerships in the workforce development field. The results of this study suggest that there are opportunities to extend the retention benefits found in 44.9% of the sample in this study through programs such as remunerative training programs or industry-academic partnerships. Another policy measure would be compensation incentives to companies that evidence an improvement in employee satisfaction and retention through use of certified training programs. These are consistent with wider economic objectives for decreasing skill gaps and improving labour market stability in emerging economies (Bhattacherjee & D'Souza, 2013).

Study implications are justified within a multi-sector sample because the statistical controls for the survey were designed appropriately, and the study's descriptive and inferential findings converge. The results, however, need support from other studies and research that span the potential of future work settings given the dynamic nature of the jobs caused by digitalisation and hybrid work. For instance, the concept of micro-credentials and JIT learning platforms may shift the definition of effectiveness around training, and studies will need to be conducted to compare the effectiveness of the use of digital learning platforms to that of in-person learning. These training gaps could be further explored in future studies to better understand how training can be used strategically to enhance employee wellbeing and organisation resilience.

5. Conclusion

This study conclusively demonstrates that training and development programs serve as significant predictors of both employee retention and job satisfaction in Bhubaneswar's diverse workforce. The results support the hypothesis that structured training programs positively impact employees' intention to stay with their companies, through improved job satisfaction. The statistical evidence is quite overwhelming, with correlation, chi-square, and regression analyses all yielding strong evidence that training accounts for 56% of the variance in retention, making it a central element to organizational stability in urban emerging economies.

Future studies should use longitudinal designs to explore causal relationships and investigate sector specific training modalities for optimum retention. The implications of the study are not limited to Bhubaneswar, and can be applied in similar labor markets to understand the impact of training on the organizational structure. This research combines theory and evidence to contribute to the discourse on human capital, and to give organizational leaders and policy makers concrete actionable advice as to means of building the stable and satisfied human capital.

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Conflict of Interest/Competing Interests
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Data Availability
The raw data supporting the findings of this research paper will be made available by the authors upon a reasonable request.

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