Shaping High-Performing Sales Teams: The Impact of Training and Onboarding Practices on Productivity and Retention in the Pharmaceutical Equipment Industry

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Abstract
This research explores how training and onboarding methods affect employee productivity and retention in the pharmaceutical manufacturing field. There is specific product knowledge, regulatory familiarity, product demonstration skills, customer relationship management skills, negotiation skills, and after-sales coordination skills needed for success when selling pharmaceutical equipment. Companies selling pharmaceutical equipment must therefore have structured training and systematic onboarding practices to establish effective and successful sales representatives. This research employed a quantitative research methodology to gather information on sales employees from varying positions associated with pharmaceuticals equipment sales. SPSS was used for descriptive statistical analysis and SmartPLS was used to evaluate the relationship among training/onboarding practices, employee productivity, role clarity, and employee retention. The results of this study show that training and onboarding directly affect employee role clarity and employee productivity. Providing quality training programs/sales techniques and appropriate content when conducting training, creating a positive learning environment, using updated training resources, and integrating new employees seamlessly improves employees' understanding of their job and improves performance in technical selling roles. This research has shown that new employees are aided in their adjustment to an organization's culture, the company's product offerings, reporting systems, customer segments, and sales procedures by means of onboarding assistance. Although retaining salespeople may rely on various factors such as training, productivity, and job satisfaction, additional human resource elements— including pay, recognition, advancement opportunities, supervisor support, work-life balance, and commitment to the organization—affect retention of salespeople. In conclusion, pharmaceutical equipment companies would be well advised to incorporate both technical training, as well as structured onboarding, mentoring and retention-supportive human resource practices for the purposes of creating effective, long-lasting sales teams.

Keywords: *Training, Onboarding, Sales Productivity, Employee Retention, Pharmaceutical Equipment Industry, Role Clarity, Sales Personnel, Human Resource Practices.*

1. Introduction

The pharmaceutical equipment industry is a highly specialized B2B industry. Within the industry, sales teams have a unique role in linking manufacturers, dealers, distributors, service providers, hospitals, labs, pharmaceutical companies, and healthcare institutions(Oh & Johnston, 2023). Unlike general selling, pharmaceutical equipment sales require advanced technical product knowledge, product demonstration, knowledge of regulations, relationship-building skills, and post-sale coordination. Sales employees are expected to meet sales targets and also articulate product specifications, installation requirements, compliance, service support, and the service life of the product(Conde, 2026). Thus, the sales team's retention and productivity are determined by the degree of the organization's commitment to training and onboarding. The training is the organized development of the employees' knowledge, skills, and attitudes, and the selling competencies for improved job performance(Precious Azino Usuemerai et al., 2024). In the sale of pharmaceutical equipment, training can consist of product knowledge, technical demonstrations, customer relations, negotiations, use of CRM, compliance, service coordination, and management of the sales territory. A recent study conducted in the field of online salesperson training has shown that short forms of digital training modules positively impact sales(Parihar et al., 2026). However, the effect depends on the type of product being sold, the salesperson, and the region. Thus, training should be continuous and made specific to the context. Training does not account for the critical aspects of the initial work experience for

newly inducted sales staff(Brown, 2024). Poor onboarding leads to a lack of understanding of the organizational culture, the company's products, and the expectations and standards for the role. In a systematic review, the journal, PLOS ONE, found that formal onboarding allows new staff to be socialized into the company, and improves role clarity and adjustment. In support of this, Mosquera and Soares identified that onboarding improves employee well-being, organizational identification, and decreases turnover intention. In pharmaceutical equipment companies, absence of clear onboarding creates role ambiguity and low confidence on products, sales, and service. This affects new staff negatively by increasing role stress and unproductive work, and decreases customer conversion and retention. It also increases turnover intention. New sales staff need time to acquire this knowledge. A formalized onboarding program can make employees productive in a shorter period. Productivity in sales can be determined by the different metrics such as whether the sales target is met, concerns on lead conversion, value of orders, the number of customers visited, how often quotations are agreed upon, repeat sales, and how satisfied customers are(Thilagham K T et al., 2022). These metrics can be positively impacted by onboarding and training, and improve confidence, selling behaviour, product explanation to customers, and relationship-building. A sales force and training hours 2024 study shows that the hours of training staff have a higher impact on sales than the number of sales staffs. Thus, the stronger training hours shows the impact of staff capability development on sales productivity(Shreesha & Kalyani, 2024).

Retention in a sale-intensive industry poses the challenge of repeated customer disconnect, unstable territories, unrecoverable recruitment and repeated training costs, and loss of revenue. From several studies, retention-related factors of training and development, career growth opportunities, job satisfaction, supervisor/manager support, and workplace climate are the determinants of the intent to stay. For instance, El Mountasser and Sahraoui concluded that training and development positively and significantly affect retention(Elsafty & Oraby, 2022). The balance of technical and sales expertise in the pharmaceutical equipment industry underscores the importance of advanced training. Employees exposed to advanced training do likely do better at complex and competitive employee based rational objection/info challenges. Employees do likely appreciate the structured/advanced training and mentoring. Increased workplace productivity and retention is the result of these. The focus of this study is the shaping of high performing sales teams through training and advanced mentoring in the pharmaceutical equipment industry(Xuecheng et al., 2022). The importance of the study is that it attempts to relate human resource functions to production of a measurable result in sales. The study attempts to show a correlation between retention and training/advanced mentoring and sales improvement, workplace satisfaction, and increased productivity. Findings of the study will help pharmaceutical equipment industries improve their technical training and mentoring, induction and sales training systems(Qamar & Soomro, 2025).

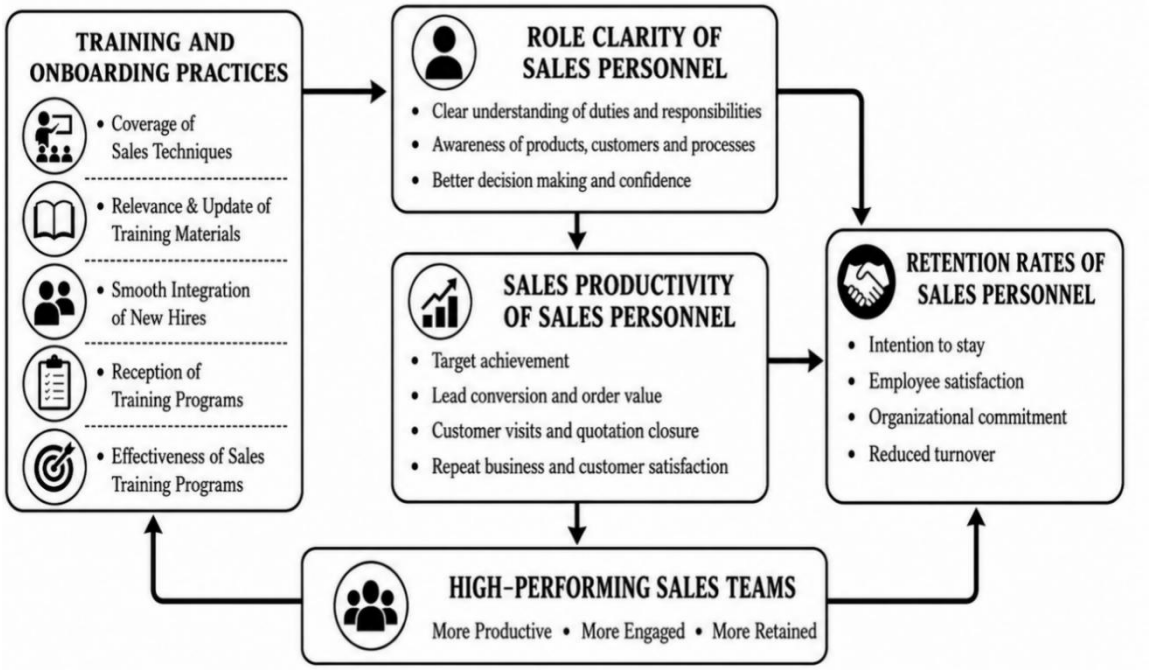


Figure 1.1: Conceptual Framework of Training and Onboarding Practices for High-Performing Sales Teams

The diagram shows the role of training and onboarding practices in developing high-performing sales teams in the pharmaceutical equipment sector. Training helps sales teams improve their sales techniques, product knowledge, and confidence. Good onboarding helps sales teams understand their roles, which improves sales productivity. Productivity and role clarity strengthen employee retention, overall engagement, and team performance, thereby positively impacting the onboarding practice.

1.1 Training and Onboarding Practices in Pharmaceutical Equipment Sales Teams

The development of cohesive and efficient sales teams depends on interrelated HR practices such as experiential learning and transitional employee integration, among others. Training and developmental learning focus on the enhancement of employees' professional skills and competencies, while the transitional integration process concentrates on incorporating new employees into the organization seamlessly in the initial stage of their employment. Both practices are particularly critical in the sales profession in the pharmaceutical equipment industry. This is because the sales employee interacts with clients who are professionals dealing with complex products within a highly competitive marketplace. In this regard, pharmaceutical sales employees must comprehend product features as well as the principles of product operation and the requirements and conditions related to the product's maintenance, installation, warranty, documentation, and pricing. Selling pharmaceutical manufacturing machinery, hospital equipment, laboratory instruments, and cleanroom systems, among others, requires more than good sales skills. It also requires trust-building with professional clients and the ability to articulate the value of a product while distinguishing it from its competitors. For this reason, experiential learning on products, product demonstration, and practical application training focus on sales learning and training enhancement. Knowledge and learning on the history, structure, and products of the organization as well as the sales process and supportive systems and structures improve the sales employee's understanding of the organizational and client expectations and standards as well as the professional support and technical teams and their roles. Effective transitional employee integration facilitates organizational learning, reduces employee turnover, and improves productivity.

Sales team onboarding is not a one-day event. It should span the first 30, 60, and 90 days and include training manuals, shadowing, mentorship and supported customer visits, sales scripts, objection training, and reviews. This helps employees contextualize and prepare for selling, as well as build confidence. Onboarding helps build an employee's sense of organizational identity and well-being, which positively impacts retention. Training should be ongoing. New offerings and upgrades are common in pharmaceutical equipments. Employees need to know how to sell the latest offerings to stay competitive. Digital sales enablement, CRM, modular online training, and integrated customer tracking are new sales tools. Oliveira et al. show sales enablement tools help build the digital skills and sales techniques needed to improve B2B sales, collaboration, and sales effectiveness.

Employees attribute skill and career development investments to organizations positive growth. This perception strengthens employee retention. Employees also benefit from investments in development support. Commitments and satisfaction levels improve. Hosen et al. elaborated on the interconnection of development and training with career growth and organizational commitment and work performance. Building and managing high-performance sales teams relies heavily on the onboarding and training processes. Employees tackle role ambiguity better, and develop a higher level of technical confidence and customer handling skills. They also develop a stronger commitment to the organization. Pharmaceutical equipment manufacturers improve their market competitiveness when they invest in structured training and onboarding because they improve customer relationships, employee retention and overall productivity.

2. Literature Review

(Singh et al., 2022) showed that structured online training of salespeople improved sales performance. However, the impact was contingent on the characteristics of the salesperson, the category of the product, and the region. (Friess, 2025) examined the role of gamification in virtual sales training and found that competitive quiz elements enhanced both the motivation and learning outcomes of sales reps. This reveals that the application of engaging and technology-integrated modes of training can augment employee participation and the retention of information. (Janowski, 2025) studied sales force training as well. They identified that training effectiveness is determined by employee age, education, experience, and seniority. This implies that newly hired sales executives would require training on the organization's products and basic sales processes, whereas sales managers who have been in the organization for some time would require training that focuses on negotiation, customer relationship management, and strategic selling skills. According to (Yotapditya & Sibarani, 2024), there is a

significant effect on the improvement of a salesperson's performance when the number of training hours is increased and suggests that productivity is improved with ongoing education. Likewise, (Valenzuela-Fernández & Villegas Pinuer, 2025) argued that, in business-to-business and technical sales, customer attitudes are influenced by knowledge of the industry and the presence of adaptive selling behavior. This applies in the context of selling pharmaceutical equipment, as clients require detailed explanations of the products, as well as extensive comparisons, warranty terms, and information related to after-sales service.

(Frögéli et al., 2023) carried out a systematic review on formal onboarding and cited that structured onboarding programs play a significant role in the adjustment of new professionals to the organization, as they reduce uncertainty, and facilitate socialization. This is critical, as confusion is often faced by newly recruited sales employees regarding product portfolios, sales territories, reporting systems, pricing policies, customer categories, incentive structures, and internal coordination processes. Based on the findings of (Mosquera & Soares, 2025) turnover intentions decreased due to improved employee well-being and a greater sense of identification with the organization during the onboarding process. Greater employee organizational connectedness and support during the joining phase leads to greater retention. Examining onboarding success, (Sharma & Stol, 2020) assert that the elements of on-the-job culture and job satisfaction contribute to reduced turnover intentions. Based on their findings, onboarding programs need to provide more than job-related information; they need to provide elements that help new employees understand the organizational culture, values, and communication and performance expectations. (Didion et al., 2024) discussed studies regarding organizational socialization and onboarding and noted that providing support to newcomers helps them to better integrate into their work roles. (Pinco et al., 2025) stated further that onboarding assists workers in comprehending the expectations, values, and responsibilities intrinsic to the workplace, in addition to familiarizing them with internal processes. The studies depict the positive effects of onboarding on role clarity, confidence, adjustment, and early productivity. In the pharmaceutical equipment industry, onboarding processes should include product manuals, field shadowing, mentor support, CRM training, customer visits, and review meetings.

Employee retention overlaps with training and onboarding because many companies dedicate time and money to developing their sales staff. (Hosen et al., 2024) showed that training and development, career development, and commitment to the organization enhanced employee work performance. This means employees work better when given training and when they can see next steps in their career within the organization. (Bhakuni & Saxena, 2023) noted that training and development initiatives foster employee engagement and retention. The relevance of this finding is that engaged employees are more motivated and committed to working productively. According to (Weng et al., 2023), talent management, perceived organizational support, and work engagement positively affect employees' intentions to stay. According to (Gelencsér et al., 2023), workplace wellbeing and motivation develop organizational support which is important to retain employees. A holistic labor retention model was also developed. In a similar case, (Almashyakhi, 2024) noted that coaching, mentoring, and career and leadership development positively impact employee retention.

2.1 Research Gap

Existing studies analyze the effectiveness of training and onboarding and their impact on employee retention and performance in the IT, healthcare, hospitality, education, banking, and general sales domains. However, research is scant in the pharmaceutical equipment industry where sales employees need technical product knowledge and the ability to engage in relational selling. Training and onboarding are typically studied independently, and there is a dearth of literature on the relationship between training, onboarding, and sales employee retention. The literature on Indian pharmaceutical equipment companies is especially lacking with regard to sales executives, sales engineers, sales managers, and business development managers. This study attempts to fill this gap by examining the impact of training and onboarding on the sales team in the pharmaceutical equipment industry and the subsequent impact on sales team retention and productivity.

2.2 Research Objectives

1. To examine the impact of training and onboarding practices on the sales productivity of sales personnel in the pharmaceutical equipment industry.
2. To analyse the impact of training and onboarding practices on the retention rates of sales personnel in the pharmaceutical equipment industry.
3. To evaluate the role of sales productivity in improving the retention rates of sales personnel in the pharmaceutical equipment industry.

2.3 Research Hypotheses

1. **H_0:** Training and onboarding practices do not have a significant positive impact on the sales productivity of sales personnel in the pharmaceutical equipment industry.

H_a: Training and onboarding practices have a significant positive impact on the sales productivity

of sales personnel in the pharmaceutical equipment industry.

2. **H_0:** Training and onboarding practices do not have a significant positive impact on the retention rates of sales personnel in the pharmaceutical equipment industry.

H_a: Training and onboarding practices have a significant positive impact on the retention rates of sales personnel in the pharmaceutical equipment industry.

3. **H_0:** Sales productivity does not have a significant positive impact on the retention rates of sales personnel in the pharmaceutical equipment industry.

H_a: Sales productivity has a significant positive impact on the retention rates of sales personnel in the pharmaceutical equipment industry.

3. RESEARCH METHODOLOGY

Research methodology explains the procedure of the study including the design, sample, data, variables, and statistical analysis. This study used a quantitative method to assess the impact of training and onboarding on the sales productivity and employee retention in the pharmaceutical equipment sector. Primary data were gathered on 140 sales personnel through the use of a developed questionnaire. The respondents were of various age brackets, education levels, job ranks, and years of experience in sales. The frequency, percentage, mean and standard deviation were analyzed in SPSS, while SmartPLS was used to evaluate the relation between training, onboarding, productivity, and retention with structural equation modeling.

3.1 Research Design

The study used both descriptive and analytical research methods. The descriptive method was used to document the demographic statistics of the 140 respondents, like their gender, age, educational level, work experience, and job position. The analytical method assessed how training and onboarding impacted sales productivity and retention. Because the study employed a standard questionnaire and statistical analysis, a quantitative method was appropriate. This method was useful to assess the impact of various factors like sales training methods, relevance of training and onboarding materials, integration of new employees, and the perceptions and evaluation of training on sales personnel's performance and retention.

3.2 Sample Size

The sample of the study consisted of 140 individuals employed in sales-related positions in the pharmaceutical equipment industry and included individuals of diverse gender, age, educational, and experiential distribution. The sample included 120 males and 20 females, and their sales experience was reported to be in the range of 1 year to over 10 years. This sample was suitable for a descriptive statistical analysis using SPSS and a structural model using SmartPLS. The diverse respondent sample provided balanced views on training, onboarding, and the retention and productivity practices.

3.3 Data Collection Method

This study utilized primary data collected using questionnaires. The study's objectives guided the development of the questionnaires, which included items on training practices, onboarding practices, sales productivity, and retention. The respondents expressed their opinions using the Likert-scale approach. The questionnaires consisted of demographic and construct-based questions. The demographic questions gathered information on respondents' gender, age, education level, total years of selling, and their current work position. The core research questions inquired on various dimensions of training and onboarding covering the following areas: sales techniques, relevance and periodic updates of training materials, new hires integration into the sales unit, acceptance of training programs, effectiveness of sales training programs, and sales personnel retention.

3.4 Variables of the Study

The study utilized independent and dependent variables. Independent variables focused on training and onboarding practices. The study looked at the following variables: coverage of sales techniques, the relevance and updating of training materials, integration of new hires, feedback on training programs, and sales training programs. The retention rate of sales personnel was the dependent variable. These variables were examined to understand the effect structured training and onboarding have on team members' confidence, clarity on their role, productivity, satisfaction with their job, and retention in the sales team, as well as on retention in sales teams in the pharmaceutical equipment area.

3.5 Data Analysis Tools

The analyzed data were processed in SPSS and SmartPLS. SPSS was used to perform some descriptive statistics such as frequency counts, percentages, means, and standard deviations. SPSS frequency analysis was used to construct the demographic profile of respondents. Averaged responses were analyzed using descriptive statistics to draw insights on the main study variables. Structural equation modeling was performed using SmartPLS. It was used to analyze multiple relationships between independent and dependent constructs. The SmartPLS model was built to understand the interplay of sales training and sales personnel onboarding practices in contextualizing their impacts on the retention of sales personnel.

SmartPLS was used adequately, as the model comprised multiple constructs and the study was focused on examining their interrelationships and how to predict them.

3.6 Statistical Techniques Used

This study incorporated both descriptive and inferential statistical methods. To detail respondents' demographic data, frequencies and percentages were computed. The mean and standard deviation reported the variation in responses, as well as the central tendency of the data collected.

Measurement model and structural model assessments were analyzed in this study using SmartPLS. The measurement model assessed the reliability and validity of the constructs. The structural model assessed the relationship of the training and onboarding components to the retention of sales personnel. The relationship of the variables in the study was assessed through path coefficient values.

3.7 Reliability and Validity

Reliability and validity are crucial to the quality of research instruments. Reliability refers to how consistent the items in a questionnaire are in measuring a specific construct. Validity refers to whether or not a questionnaire measures what it is supposed to measure. In this study, reliability and validity were administered through the SmartPLS output. Constructs were measured through the indicators, as well as the direct relationships concerning the respective latent variables. The SmartPLS model provided a framework to measure the extent to which the selected indicators actually represented the constructs. This also made sure that the results drawn from the questionnaire were appropriate to conduct further analysis and interpretations.

3.8 Ethical Considerations

Data collection in the study adhered to fundamental ethical practices. Data collectors explained the study objective and offered the respondents a choice to participate. Data were collected for the purpose of academic study only. Anonymity was maintained and the personal information of respondents was not disclosed. The responses were analyzed collectively.

4. Results and Discussion

The demographic data suggests gender representation was roughly even, and participants varied across age ranges, educational attainment, work experience, and job classification. The largest designation group was Area Sales Managers, followed by Senior Sales Executives and Regional Sales Managers. According to the experience data, a sizeable number of respondents had over seven years of sales experience. This increased the trust in the data collected, given that employees with more experience are able to provide better insights into the evaluation of training, the onboarding process, productivity, and retention.

Table 4.1: Demographic Profile of Respondents

Demographic Variable	Category	Frequency	Percent (%)
Gender	Male	120	85.7
	Female	20	14.3
Age Group	Below 25 years	11	7.9
	25–35 years	29	20.7
	36–45 years	37	26.4
	46–55 years	25	17.9
	Above 55 years	38	27.1
Educational Qualification	Diploma	20	14.3
	Graduate	39	27.9
	Postgraduate	43	30.7
	MBA	27	19.3
	Other	11	7.9
Total Sales Experience	Below 1 year	9	6.4
	1–3 years	18	12.9
	4–6 years	30	21.4
	7–10 years	39	27.9
	Above 10 years	44	31.4
Current Designation	Sales Executive	26	18.6
	Senior Sales Executive	37	26.4
	Area Sales Manager	50	35.7
	Regional Sales Manager	27	19.3
Total		140	100.0

The demographic profile describes 140 respondents from the pharmaceutical equipment industry. The sample had 120 (85.7%) males and 20 (14.3%) females indicating that males dominated the sample. The age groups that dominated the sample were 55 and above (27.1%) and 36–45 years (26.4%) indicating a high level of participation from the mature population. Respondents with postgraduate education were the highest at 30.7% followed by graduates at 27.9% indicating high educational levels of respondents. Respondents that had above 10 years of work (31.4%) experience dominated the sample followed by those with 7–10 years of experience (27.9%). The largest group of respondents were area sales managers (35.7%). In total, the respondents were eligible and fit for the study.

Table 4.2. Descriptive statistics of major variables

Variable	N	Minimum	Maximum	Mean	SD
Coverage of Sales Techniques	140	1.00	5.00	2.996	1.304
Relevance and Updation of Training Materials	140	1.00	5.00	2.986	1.315
Smooth Integration of New Hires into Sales Team	140	1.00	5.00	3.009	1.304
Reception of Training Programs	140	1.00	5.00	3.017	1.299
Effectiveness of Sales Training Programs	140	1.00	5.00	3.044	1.262
Retention Rates of Sales Personnel	140	1.00	5.00	3.009	1.272

The descriptive statistics show that the means of the study variables are near the midpoint of the Likert scale. This indicates that participants have a tendency toward a neutral position with regard to training, onboarding and retention-related statements. The standard deviation values show a significant variation among the participants. This variation indicates a disparity among employees and their experiences with training and onboarding based on the firm and the designation.

Table 4.3. Measurement model reliability and convergent validity

Construct	Cronbach alpha	Composite reliability	AVE
Coverage of Sales Techniques	0.968	0.975	0.887
Effectiveness of Sales Training Programs	0.967	0.974	0.882
Reception of Training Programs	0.96	0.969	0.862
Relevance and Updation of Training Materials	0.954	0.966	0.876
Retention Rates of Sales Personnel	0.967	0.974	0.884
Role Clarity of Sales Personnel	0.833	0.882	0.601
Sales Productivity of Sales Personnel	0.819	0.874	0.583
Smooth Integration of New Hires into Sales Team	0.957	0.969	0.886

The measurement model shows adequate reliability and convergent validity. All of the Cronbach's alpha values were above the threshold of 0.70 and showed good internal consistency. Composite reliability values are above the acceptable limits. All AVE values are above 0.50, and the indicators explained sufficient variance of their related latent constructs. Therefore, the constructs were appropriate for assessing the structural model.

Table 4.4. Coefficient of determination

Endogenous construct	R^2	Adjusted R^2
Role Clarity of Sales Personnel	0.858	0.853
Sales Productivity of Sales Personnel	0.85	0.843
Retention Rates of Sales Personnel	0.037	0.023

The structural model accounts for 85.8% of role clarity variance and 85.0% of variance attributable to sales productivity. This indicates that the training and onboarding dimensions have strong explanatory power for role clarity and productivity outcomes. However, the model attributes only 3.7% of the variance of retention, indicating that retention is associated with other factors that go beyond the training-productivity relation articulated in this model.

Table 4.5. Structural path results

Path	β	t-value	p-value
CST -> Role Clarity	0.513	13.629	<0.001
CST -> Sales Productivity	0.338	5.691	<0.001

ESTP -> Role Clarity	0.451	10.921	<0.001
ESTP -> Sales Productivity	0.623	10.242	<0.001
RTP -> Role Clarity	0.099	2.934	0.003
RTP -> Sales Productivity	0.335	9.273	<0.001
RUTM -> Role Clarity	0.176	5.133	<0.001
RUTM -> Sales Productivity	-0.001	0.023	0.982
SINT -> Role Clarity	0.609	15.504	<0.001
SINT -> Sales Productivity	0.108	1.728	0.084
Role Clarity -> Sales Productivity	0.216	2.287	0.022
Role Clarity -> Retention	-0.278	2.279	0.023
Sales Productivity -> Retention	0.206	1.584	0.113

The path results demonstrate that training and onboarding practices impact sales productivity positively and significantly. Outcome-based sales training programs predict sales productivity the most, followed closely by sales training programs, as well as the reception of training programs. It can, therefore, be concluded that sales training programs that are relevant, provide practical training, and are well received by sales personnel yield better sales productivity. Role clarity positively impacts sales productivity. From the results, it can be deduced that clarity in the sales process, as well as sales targets and roles, incentivizes sales personnel to perform better.

For role clarity, the most significant impact is positive. This emphasizes the value of ordered onboarding, mentoring, field exposure, and team integration. Role clarity is also significantly improved by coverage of sales techniques and the effectiveness of sales training. The relevance and updating of training materials have a statistically non-significant effect on sales productivity. Therefore, updated training materials alone will not improve productivity and sales coaching and fieldwork will be necessary. The smooth integration of new hires also does not have a significant direct effect on sales productivity at the 5% level, however, it strongly contributes to role clarity.

The retention results require careful consideration. Sales productivity has a small positive relationship with retention, so Hypothesis 6.3 is not supported at the 5% level. In the model, role clarity shows a significant negative influence on retention. This could point to the possibility that employees with high productivity and role clarity would become more marketable, and being more productive, would be more inclined to seek other career opportunities unless strong support for retention is provided by the organization. The low R^2 for retention indicates that retention could not be explained by productivity and role clarity alone. It would be important to include other factors like compensation, career improvement, support from leadership, recognition, and commitment to the organization in future models.

Table 4.6: HTMT Results for Discriminant Validity

	Coverage of Sales Techniques	Effectiveness of Sales Training Programs	Reception of Training Programs	Relevance and Updation of Training Materials	Retention Rates of Sales Personnel	Role Clarity of Sales Personnel	Sales Productivity of Sales personnel	Smooth Integration of New Hires into Sales Team
Coverage of Sales Techniques								
Effectiveness of Sales Training Programs	0.112							
Reception of Training Programs	0.036	0.030						
Relevance and Updation of Training Materials	0.048	0.066	0.056					
Retention	0.138	0.036	0.147	0.067				

Rates of Sales Personnel								
Role Clarity of Sales Personnel	0.549	0.396	0.146	0.243	0.137			
Sales Productivity of Sales personnel	0.426	0.738	0.417	0.117	0.069	0.873		
Smooth Integration of New Hires into Sales Team	0.075	0.072	0.051	0.033	0.040	0.713	0.290	

The discriminant validity results indicate most construct values are below the level of concern, suggesting the variables are sufficiently distinct from each other. The low associations among the construct of coverage of sales techniques, the reception of training programs, the relevance of training materials, and retention rates suggest these constructs measure distinct components of training and onboarding. However, some of the values do conflict with the above, with the highest pairwise value of (0.873) for role clarity and sales productivity, followed by (0.738) for effectiveness of sales training and sales productivity, and (0.713) for smooth integration and role clarity. While these results indicate strong relationships among the constructs, the results as a whole suggest the constructs remain acceptable and support the validity of the measurement model.

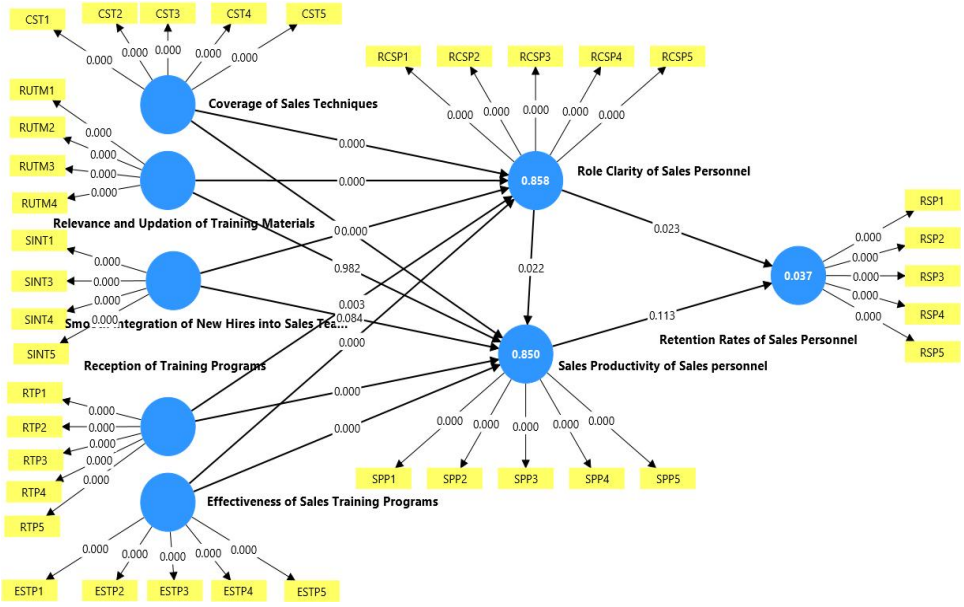


Figure 4.1: SmartPLS Structural Model for Training, Productivity, and Retention

The figure illustrates a structural equation model describing the connections between training-related factors and sales outcomes. Five separate constructs are shown: Coverage of Sales Techniques, Relevance and Updation of Training Materials, Smooth Integration of New Hires into Sales Team, Reception of Training Programs, and Effectiveness of Sales Training Programs. These constructs impact two primary mediating factors: Role Clarity of Sales Personnel and Sales Personnel's Productivity. The strongest model value is for Role Clarity of Sales Personnel (R^2 = 0.858), which shows that these training dimensions account for 85.8% of the variance for role clarity. Similarly, Sales Personnel's Productivity shows R^2 = 0.850, meaning that the training factors account for 85.0% of the variance on Sales Personnel's Productivity. These values show the model has a strong explanatory capability. However, Retention Rates of Sales Personnel indicates R^2 = 0.037, meaning role clarity and productivity explain 3.7% of retention variance. The effect path from role clarity is 0.023, while from sales productivity to retention it is 0.113, showing that sales productivity has a comparatively higher

effect on retention than role clarity. However, both effects are noted as weak. While training programs may enhance clarity and productivity, retention, in this case, may be contingent on other factors,

6. Discussion

The research findings indicate that training and onboarding practices help build robust sales teams in the pharmaceutical equipment sector. The sale of pharmaceutical equipment demands a unique set of skills like in-depth technical knowledge of equipment, the ability to demonstrate equipment, and handling customers along with negotiation skills and an understanding of the customer's needs. The results indicate that the training of sales personnel and their perceptions of sales training programs positively influence sales personnel's productivity. Therefore, sales training positively affects the productivity of sales personnel. The research findings also indicate that the onboarding practices improve clarity of the roles of sales personnel. The well-structured integration of sales personnel into sales teams clarifies to them the sales team's role, the hierarchy, the processes, the customers and what the organization expects of them. The results of the study indicate that the formal integration, mentoring, field exposure and team assistance of new personnel helps them to rapidly settle into their roles and perform optimally. The findings also indicate that training and onboarding practices of sales personnel are beneficial in improving the productivity and the role clarity of sales personnel.

However, retention-related findings are comparatively weaker. Training and onboarding improve clarity and productivity within the role, but do not help explain retention rates. The model shows training and onboarding explains only a small portion of the retention variance, meaning that retention is highly dependent on many other factors such as pay, other compensable benefits, recognition, opportunities for advancement and development, supervisory support, workload, job satisfaction, and commitment to the organization. Therefore, Hypothesis 2 is supported to a limited extent. The null hypothesis is partially accepted since training and onboarding as standalone measures do not substantively improve the retention rates. The results also show that sales productivity impacts retention positively, but the impact is insignificant. This implies that productive employees may not stay in the organization if the employees are not provided with rewards, career opportunities, recognition, and other developmental prospects. Therefore, Hypothesis 3 is not supported. The null hypothesis is accepted and the alternative hypothesis is rejected. The study also shows that training and onboarding are very good ways to enhance productivity and clarity in roles, while retention is a larger challenge in human resources.

including compensation, benefits, organizational culture, satisfactions, and opportunities for advancement.

Conclusion

This research focused on training and onboarding in relation to sales productivity and retention in the pharmaceutical equipment sector. Results indicate that training and onboarding positively shaped role clarity and sales productivity. The quality of sales training programs was the most significant predictor of sales productivity, while role clarity was best predicted by an effective onboarding process. These results indicate that complex sales require a high level of training and an ongoing need to integrate new hires. The study further notes that retention was weakly explained by the model, and sales productivity did not have a positive significant effect on retention. Thus, the study suggests that training and onboarding of personnel within the pharmaceutical equipment sales segment are extremely beneficial and improve productivity. Retention, however, requires a more comprehensive consideration of human resource functions, namely compensation and benefits, recognition and reward, career development, and supportive management.

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