Effect of Training and Development on Employee Engagement in Nigerian Federal Inland Revenue Service (FIRS)

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Abstract: *This study examines how selected training and development (T&D) components—orientation, compliance, and leadership training—influence job satisfaction among employees of the Nigerian Federal Inland Revenue Service (FIRS). Grounded in the Job Demands–Resources (JD–R) framework, the study conceptualises T&D as a job resource expected to enhance employee motivation and satisfaction. A cross-sectional survey of 447 respondents, obtained through simple random sampling from a population of 5,250 FIRS staff across twelve states, was analysed using structural equation modelling (SEM). The results indicate that orientation training (β = –0.018, p = 0.684), compliance training (β = 0.041, p = 0.452), and leadership training (β = 0.057, p = 0.317) do not significantly predict job satisfaction. Despite an acceptable predictive coefficient for the structural model (R² = 0.31), measurement analysis revealed high strong predictive capacity, but the non-significant paths suggest that these training categories do not uniquely influence satisfaction when considered alongside broader organisational factors. The findings highlight the limited motivational value of rule-based, content-dense training formats unless embedded within supportive climates. The study concludes that employee satisfaction in FIRS is influenced more by organizational factors—such as collaborative culture, psychological safety, and inclusive climate—than by formal training programs, and recommends FIRS should redesign orientation into resource-based onboarding, shift compliance training to risk-based micro-learning during work, and embed leadership development into daily routines to enhance autonomy, competence, and support, thereby improving job satisfaction and engagement.*

Keywords: training and development (T&D), orientation, compliance, leadership training, job satisfaction

INTRODUCTION

In today's dynamic and highly regulated public service landscape, employee engagement has become a cornerstone for institutional efficiency, particularly in organisations such as the Nigerian

Federal Inland Revenue Service (FIRS). As the central agency responsible for tax administration in Nigeria, FIRS requires a highly skilled, motivated, and committed workforce to meet its mandate of revenue generation and public accountability. Achieving such engagement depends significantly on the quality and relevance of training and development (T&D) initiatives provided to its personnel (Adebayo & Ojo, 2023; Eze & Nwankwo, 2024; Ibrahim & Yusuf, 2025).

Training and development are recognised as strategic levers for building employee capacity and increasing job satisfaction, especially when tailored to specific learning needs. Orientation training, for instance, plays a foundational role in socialising employees into organisational values and practices, thereby increasing their sense of belonging and early-stage engagement. Similarly, compliance training ensures that staff are well-versed in legal, ethical, and procedural requirements, reducing errors and enhancing confidence in task execution (Chukwuemeka & Adeola, 2023; Okafor & Uche, 2024; Bello & Hassan, 2025). These structured learning processes serve as the basis for consistent service delivery and operational excellence.

Leadership training further strengthens engagement by equipping supervisors and managers with the competencies required to mentor, motivate, and support team members. Leadership that is development-focused has been linked to increased morale, reduced turnover, and stronger alignment between personal and institutional goals (Ogunleye & Adebayo, 2023; Adeyemi & Ojo, 2024). Technical training also remains indispensable in FIRS, given the increasing use of digital platforms and data systems in tax administration. Upskilling employees through job-specific technical instruction not only boosts their confidence and productivity but also enhances their longterm career satisfaction (Akinyemi & Oladipo, 2024; Musa & Ibrahim, 2025).

In the context of FIRS, where efficiency and transparency are non-negotiable, understanding how various training types influence job satisfaction is crucial. Globally, structured training initiatives particularly those targeting orientation, compliance, leadership, technical expertise, quality assurance, team collaboration, and diversity management have been shown to significantly enhance job satisfaction and employee performance, especially when supported by a conducive work environment (Ahmed et al., 2024; Emejo, 2024; Centre for Productivity, 2025). However, within FIRS, these training practices are often poorly coordinated, underfunded, or misaligned with employee needs, resulting in limited engagement outcomes. For instance, compliance training lacks contextual relevance; leadership programmes are generic and outdated; and technical training does not keep pace with digital and regulatory advancements. Consequently, job satisfaction among employees remains suboptimal across multiple departments and regions (Novatia Consulting, 2024; Industrial Training Fund, 2024). This study therefore seeks to investigate the impact of orientation, compliance, leadership training on employee job satisfaction. The outcome aims to provide evidence-based insights that inform FIRS's human capital development strategies for sustained institutional performance.

The specific objectives are:

i.   To examine the effect of orientation training on job satisfaction among employees in FIRS.

ii.   To assess the effect of compliance training on job satisfaction in FIRS. iii. To evaluate the effect of leadership training on employee job satisfaction in FIRS.

The study will test the following null hypotheses:

H_{01}: Orientation training has no significant effect on job satisfaction among employees in the Nigerian Federal Inland Revenue Service.

H_{02}: Compliance training has no significant effect on job satisfaction among employees in FIRS.

H_{03}: Leadership training has no significant effect on job satisfaction among employees in FIRS.

By examining key constructs such as orientation training, compliance training and leadership development the study provides practical insights into how employee engagement can be improved in a complex and evolving public service landscape.

CONCEPTUAL REVIEW

Training and Development

Training and development (T&D) are foundational components of human resource management, aimed at equipping employees with the skills, knowledge, and attitudes necessary for organisational success. T&D initiatives are recognised as vital mechanisms for fostering employee engagement, enhancing productivity, and enabling career progression. As outlined by Ujunwa (2024), T&D is pivotal for improving both individual performance and overall organisational outcomes, positioning employees as key drivers of competitiveness. Similarly, Singh (2023) highlights that effective training programs instil job satisfaction and motivation, contributing to employee retention and organisational sustainability. The emphasis on continual skill development ensures that employees remain adaptable in dynamic business environments, a necessity identified by Mulani (2024) and Kalli et al. (2023).

A core aspect of T&D is lifelong learning orientation, which promotes continuous knowledge acquisition and adaptability. Employees who embrace lifelong learning are more likely to innovate and perform effectively, as noted by Zhukova (2022). Furthermore, HPWS are integral to aligning T&D with organisational goals. According to Ujunwa (2024), these systems create synergy between employee capabilities and business objectives, fostering an environment conducive to innovation and growth. Feedback-oriented training systems, as described by Zhang (2023), ensure employees receive constructive evaluations, enabling them to address performance gaps effectively. Such systems are crucial for aligning individual roles with organisational objectives, as emphasised by Khadse et al. (2022).

T&D is a dynamic and multi-faceted process that extends beyond skill acquisition to include employee empowerment, engagement, and alignment with organisational goals. Effective implementation of T&D strategies, supported by a conducive work environment, not only enhances individual and organisational performance but also fosters long-term sustainability.

Orientation Training

Lifelong learning orientation refers to the ongoing acquisition of knowledge, skills, and competencies throughout one's career, enabling individuals to remain adaptable and innovative in dynamic work settings. According to Mustafa and Lleshi (2024), organisations that promote lifelong learning tend to experience higher levels of employee productivity, engagement, and resilience, ultimately achieving a sustained competitive edge. Similarly, Assefa, Berhanu, and Worku (2023) found that lifelong learning mediates the relationship between the work environment and employee engagement, fostering a culture of professional development and adaptability. Setiawan and Heriyanti (2023) highlight that digital learning, as a component of lifelong learning, enhances employees' ability to navigate remote work, thus reducing disengagement and strengthening collaboration. Additionally, Dukic (2023) identifies continuous professional growth and skills development as key drivers of employee motivation, reinforcing the strategic value of lifelong learning in contemporary organisations.

A strong orientation towards lifelong learning not only supports individual career progression but also contributes to broader organisational success. Jaldemark and Öhman (2024) emphasise that hybrid and networked approaches to lifelong learning allow organisations to respond to real-world challenges while enhancing employee competencies. Tang, Wang, and Liu (2024) demonstrate that coaching leadership, when integrated with a learning-oriented culture, increases employee engagement by cultivating trust and motivation. Rozkwitalska, Sułkowski, and Przytuła (2022) further explain that learning goal orientation mediates the effects of psychological and relational capital on work engagement, illustrating how lifelong learning connects various dimensions of organisational behaviour. Xie and Zong (2024) support this view, noting that well-structured orientation programmes improve skill acquisition and retention, resulting in greater employee satisfaction and commitment.

Compliance Training

Compliance training refers to structured programmes designed to educate employees on legal, regulatory, and organisational policies essential for ethical and accountable conduct in the workplace. Compliance training forms a core component that ensures alignment between employee actions and strategic goals (Kwon & Kim, 2023). It not only fulfils regulatory obligations but also enhances employees' understanding of expected behaviours, promoting a culture of responsibility and engagement (Kooij et al., 2022).

Research has shown that compliance-focused training, when integrated into HPWS, significantly improves job clarity, reduces ambiguity, and fosters psychological safety—factors closely linked to employee engagement (Park & Shaw, 2023). In highly regulated environments such as public sector institutions, compliance training strengthens internal controls and supports ethical decisionmaking (Osei & Ackah, 2022). For example, in agencies like the Federal Inland Revenue Service (FIRS), consistent compliance practices are vital for maintaining transparency, accountability, and public trust.

Moreover, compliance training has been found to positively influence employee performance and satisfaction when it is continuous, relevant, and supported by leadership (Zhao & Liu, 2023). Employees are more likely to embrace policies and procedures when they understand their relevance and feel empowered to act within ethical and legal boundaries. In this regard, HPWS that embed compliance training within broader development initiatives foster a proactive, informed, and engaged workforce (Nguyen & Lee, 2024). Therefore, compliance training should not be viewed merely as a checklist activity but as a strategic tool for promoting ethical culture, enhancing performance, and ensuring organisational sustainability.

Leadership Training

Leadership training refers to structured efforts aimed at developing the competencies, behaviours, and mindsets required for effective leadership within an organisation. It is a critical dimension of training and development that directly influences employee engagement, organisational culture, and performance. Leadership training is instrumental in equipping managers with the skills to inspire, support, and align employees with strategic goals (Clarke, 2023; Men & Yue, 2022).

Effective leadership training fosters transformational leadership behaviours such as vision sharing, empathy, and empowerment which are strongly associated with increased employee engagement (Banks et al., 2023). Leaders who engage in coaching and developmental conversations create an environment of trust and open communication, which motivates employees and strengthens commitment (Nguyen et al., 2023). Additionally, leadership training enhances leaders' capacity to manage diverse teams, handle change, and support employee well-being, particularly in dynamic public sector settings (Alshahrani & Dyson, 2022).

Furthermore, leadership development programmes that integrate ethical, emotional, and inclusive leadership models have been shown to improve workplace relationships and reduce disengagement (Asrar-ul-Haq & Anwar, 2023; Xu & Wang, 2022). When implemented effectively, leadership training not only enhances individual capabilities but also cascades positive behavioural patterns throughout the organisation, reinforcing a culture of accountability and continuous improvement. In public organisations such as the Federal Inland Revenue Service (FIRS), where leadership significantly shapes employee attitudes and service delivery, strategic investment in leadership training is essential for sustaining workforce motivation and institutional effectiveness.

Employee Engagement

Employee engagement refers to the emotional, cognitive, and behavioural commitment that individuals exhibit towards their work and organisation. It goes beyond simple job satisfaction or motivation, encompassing a deep psychological connection that drives discretionary effort, organisational citizenship, and sustained performance (Saks, 2022). Engaged employees are enthusiastic about their roles, take ownership of their responsibilities, and align their personal values with organisational goals.

Public sector institutions, including FIRS, face unique challenges in sustaining high levels of employee engagement due to bureaucratic constraints, limited career progression opportunities, and resource limitations. However, studies show that well-designed training and development programmes significantly enhance engagement by fostering a sense of growth, purpose, and recognition (Kim et al., 2023). Additionally, engagement thrives in work environments that promote autonomy, feedback, inclusivity, and leadership support. Therefore, employee engagement is not only a desirable outcome but also a strategic lever for organisational effectiveness, particularly in service-driven sectors.

Job Satisfaction

Job satisfaction refers to an individual's overall affective reaction to their job, encompassing cognitive evaluations, emotional responses, and behavioural tendencies related to various aspects of the work environment. It is a critical component of employee engagement and is strongly associated with organisational commitment, performance, and retention (Spector, 2022). In public service organisations such as the Federal Inland Revenue Service (FIRS), job satisfaction plays a pivotal role in ensuring workforce stability, motivation, and productivity.

Multiple factors influence job satisfaction, including working conditions, opportunities for growth, leadership quality, recognition, and alignment between employee values and organisational culture (Judge et al., 2023). Training and development initiatives have been identified as key drivers of satisfaction, as they demonstrate the organisation's investment in employee growth, thereby enhancing morale and loyalty (Nguyen & Tran, 2022). When employees perceive that their skills are being developed and their contributions are valued, they are more likely to report positive attitudes toward their job.

Furthermore, job satisfaction contributes to lower turnover intentions, reduced absenteeism, and improved interpersonal relationships at work (Kim & Beehr, 2023). It also mediates the relationship between high-performance work systems and employee engagement, highlighting its strategic importance in human resource development (Liu et al., 2023). In the context of FIRS, fostering job satisfaction through targeted interventions such as leadership training, feedbackoriented systems, and career development plans can lead to higher engagement, better service delivery, and enhanced organisational performance.

Conceptual framework
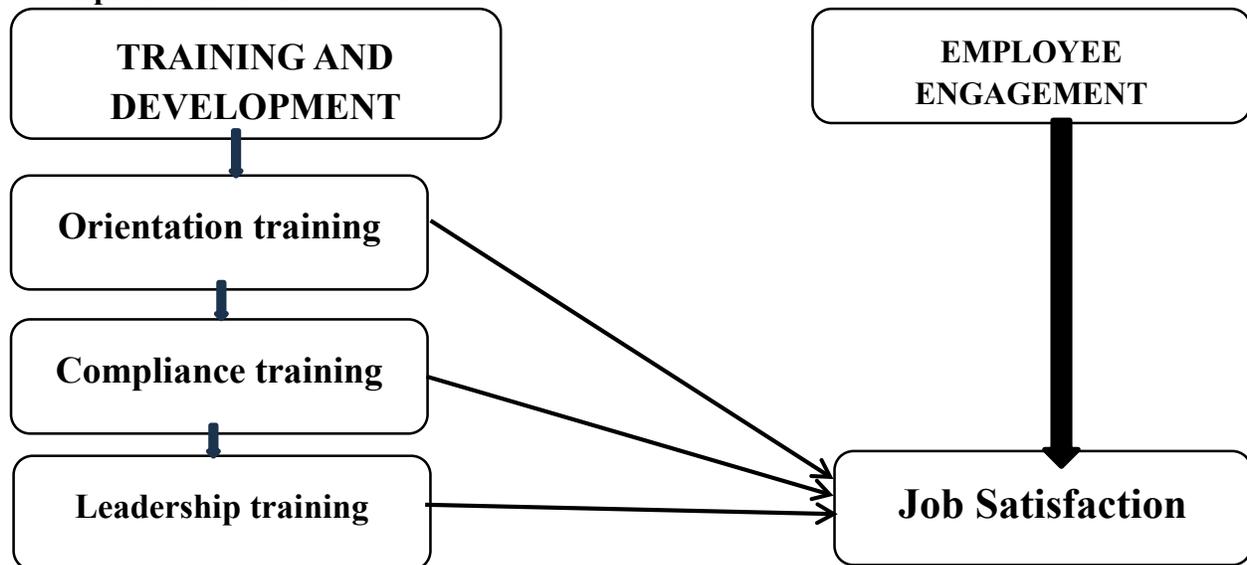
Source: Adapted from Bello (2024) and modified by the Researcher (2025)

Theoretical Review

The Job Demands–Resources (JD-R) model, originally conceptualised by Demerouti et al. (2001), offers a dynamic and integrative framework for understanding employee engagement by balancing the dual pathways of health impairment and motivational processes. This model is particularly suited to the present study, which investigates the effect of training and development (T&D) on employee engagement within the Nigerian Federal Inland Revenue Service (FIRS), and further explores the moderating role of the work environment.

In the JD-R model, job resources refer to physical, psychological, social, or organisational aspects of the job that help employees reduce job demands, achieve work goals, or stimulate personal growth and development (Bakker & Demerouti, 2023). T&D initiatives including orientation, compliance, leadership, technical, quality assurance, team-based, and diversity training are considered potent job resources because they improve competencies, foster psychological resilience, and reinforce role clarity. Objectives i through vii of this study correspond directly with this assumption, as each training domain contributes to strengthening employees' ability to manage their roles effectively and derive satisfaction from their work.

The motivational process in the JD-R model posits that when employees have access to meaningful job resources like relevant T&D, their engagement is amplified through enhanced autonomy, competence, and efficacy (Li et al., 2022). For example, orientation and compliance training facilitate integration and role understanding, while leadership and technical training elevate confidence and performance capabilities. Quality assurance, team, and diversity training similarly

address organisational goals while fostering personal and interpersonal development—each enhancing intrinsic motivation and engagement as conceptualised in the model (Galanakis & Tsitouri, 2022).

Moreover, the model is ideally structured to explore moderating influences, which aligns with Objective viii of the study: to examine the role of the work environment as a contextual moderator. According to recent extensions of the JD-R model, organisational climate variables such as collegiality, leadership support, infrastructure, and policy frameworks not only buffer the negative effects of high job demands but also enhance the efficacy of job resources (Scholze & Hecker, 2023; Yin et al., 2024). This is particularly relevant for public sector organisations like FIRS, where bureaucratic rigidity and resource constraints may otherwise undermine training impact.

Additionally, empirical studies confirm that a supportive work environment amplifies the positive outcomes of T&D initiatives by reinforcing their application on the job (Naqshbandi et al., 2023). Thus, the JD-R model enables the integration of both direct and interactional pathways, providing a holistic lens to explore how FIRS employees internalise training, perceive organisational support, and respond with heightened engagement or satisfaction.

Adopting the JD-R model, this study benefits from a validated, adaptable, and multilevel theoretical framework that accounts for individual, organisational, and environmental contingencies. It not only addresses the immediate objective of assessing the impact of T&D components on job satisfaction but also accommodates the strategic complexity introduced by contextual moderators, making it the most appropriate lens for examining employee engagement within the Nigerian public sector landscape.

Empirical Review

Adeyemo et al. (2024) examined the impact of training and development on employee retention in Nigerian insurance companies. The independent variable was training and development, measured through frequency and quality of training programs, while the dependent variable was employee retention, proxied by job satisfaction and turnover intention. Data were collected from 23 listed insurance firms and analysed using regression analysis with SPSS. Findings revealed that training significantly influenced job satisfaction but had a weaker impact on reducing turnover intention. Rooted in Human Capital Theory, the study highlighted the strategic importance of tailored training to enhance employee satisfaction. However, it did not address the moderating effects of work environment, leaving a gap in understanding how environmental factors amplify training outcomes.

Anas (2024) explored the impact of government-led training reforms on employee competencies in the Nigerian civil service. The independent variable was training reforms, represented by policy changes and enhanced training delivery, while the dependent variable was employee competency, proxied by knowledge acquisition and skill enhancement. Data were collected from 672

respondents and analysed using ANOVA in SPSS. Findings confirmed that systematic reforms significantly improved competency levels, aligning with the Expectancy Theory framework. The study provided valuable insights into the link between policy-driven training initiatives and skill development. However, it did not consider the role of employee motivation and engagement as mediating variables, leaving room for further exploration.

Owusu and Asare (2024) examined the impact of self-efficacy and belief systems on employee engagement in export-oriented Ghanaian SMEs. The independent variable was self-efficacy and instrumentality beliefs, measured through employees' confidence in task execution and their perception of organisational rewards, while the dependent variable was employee engagement, assessed via job satisfaction and productivity. Data from 280 SME employees were analysed using regression analysis. Findings showed that self-efficacy and instrumentality beliefs positively influence engagement. However, the study did not explore how performance feedback or flexible work arrangements might amplify these effects, leaving a gap in understanding the broader dynamics between self-efficacy and work environment factors.

Yahaya (2024) explored the role of libraries in sustainable educational development in Niger State. Independent variables included manpower production and skilled resource availability, while the dependent variable was sustainability in tertiary education. Using descriptive statistics, the study identified libraries' contributions, such as providing resources and trained personnel. However, the findings revealed gaps in integrating advanced training systems to enhance employee engagement and optimise library roles. The study's insights into resource constraints underscored the need for enhanced training frameworks tailored to the local context.

Adeyemi et al. (2024) examined the impact of leadership development programs on employee engagement in Nigerian banks. Leadership development, measured by training quality and mentorship opportunities, served as the independent variable, while employee engagement, captured through performance and turnover intentions, was the dependent variable. A survey of 520 employees was conducted, with regression analysis in SPSS used to interpret results. Findings revealed that leadership development programs significantly enhanced engagement levels by fostering a culture of trust and empowerment. Grounded in Transformational Leadership Theory, the study provided actionable recommendations for leadership training. However, the exclusion of feedback mechanisms in the analysis limits its applicability to broader organisational contexts.

Fombang and Ngu (2024) explored the role of high-performance work systems (HPWS) in improving organisational effectiveness in Cameroon's banking sector. The researchers analysed 500 employees' responses, focusing on systems such as performance appraisals, training, and career progression. Results showed that HPWS positively influenced productivity and job satisfaction. However, the study did not consider the broader implications of HPWS on employee engagement, such as emotional attachment and discretionary effort. Additionally, the work

environment's moderating effects on these systems were not addressed, leaving a gap relevant to this study's objective of exploring such interactions within FIRS.

Njoroge and Gichuru (2024) examined the role of feedback-oriented training systems in enhancing employee performance in Kenyan financial institutions. Data from 400 employees revealed that regular performance feedback during training improved job clarity and employee motivation. The study highlighted the importance of feedback in aligning individual and organizational goals. However, it did not explore the broader impact of feedback-oriented systems on employee engagement or consider the interplay between training systems and the organisational work environment, leaving critical gaps in applying these findings to FIRS.

Mukisa and Kamya (2024) examined the relationship between performance appraisal systems and employee engagement in Uganda's education sector. The independent variable was performance appraisal, measured by feedback frequency and clarity of evaluation criteria, while the dependent variable was employee engagement, assessed via participation in organisational activities. Results from 276 teachers revealed that timely, feedback-oriented appraisals positively impacted engagement. While the findings underscore the value of feedback systems, the study overlooked how flexibility and self-efficacy interact with performance feedback to enhance engagement. Furthermore, the focus on education sector employees limits the study's generalisability to administrative and revenue collection agencies like FIRS.

Njau et al. (2024) investigated the relationship between high-performance work systems (HPWS) and employee engagement in Tanzania's telecommunications industry. The study utilised quantitative methods, analysing responses from 450 employees. Results showed that HPWS, such as structured feedback systems and team-based incentives, significantly improved employee engagement. The study provided valuable insights into HPWS's effectiveness but did not explore the mediating role of the work environment or its application in public institutions like FIRS, where rigid bureaucratic structures might influence the effectiveness of such systems.

Adane and Girma (2024) explored the relationship between perceived flexibility and job satisfaction in Ethiopian manufacturing firms. The study used survey data from 400 employees, finding that flexible work arrangements significantly enhanced job satisfaction and organisational loyalty. While the study addressed perceived flexibility, it did not explore its specific relationship with employee engagement or the role of performance feedback as a complementary factor. Furthermore, the manufacturing sector focus limits generalisability to public sector organisations like FIRS, where organisational structures and work environments differ substantially.

Patel and Desai (2024) assessed the influence of perceived flexibility and performance feedback on employee engagement in India's manufacturing sector. Data from 390 employees revealed that flexible work policies and frequent feedback contributed to higher engagement levels by fostering a supportive and adaptive work environment. The study employed partial least squares structural equation modelling (PLS-SEM) to analyse relationships. Although it effectively highlighted

flexibility and feedback as engagement drivers, it did not investigate how these elements interact with other training and development components, such as lifelong learning or HPWS, to produce compounded effects.

Shah et al. (2024) assessed the role of self-efficacy and instrumentality beliefs in shaping employee engagement in Pakistani higher education institutions. Using survey data from 280 academic staff, the study found that self-efficacy significantly influenced engagement by enhancing employees' confidence in achieving organisational objectives. Instrumentality beliefs were also found to play a pivotal role in aligning employee efforts with expected outcomes. However, the study did not consider the interplay between self-efficacy and other organisational factors like feedback systems or mentorship. Additionally, the research was limited to higher education, leaving a gap in applying its findings to diverse organisational contexts like tax administration.

Rahman and Karim (2024) investigated the role of self-efficacy in employee performance within Bangladesh's ICT sector. The study revealed that employees with higher self-efficacy demonstrated greater task accomplishment and resilience in challenging scenarios. Using regression analysis, the authors concluded that self-efficacy plays a vital role in fostering individual productivity. However, the study did not extend its scope to examine how self-efficacy influences broader engagement dimensions such as organisational commitment or teamwork. Furthermore, it failed to integrate the potential interplay between self-efficacy and instrumentality beliefs, which limits its applicability to comprehensive models of employee engagement.

Sayed and Hamed (2023) examined the effect of high-performance work systems (HPWS) on employee engagement in Egypt's banking sector. HPWS practices, such as performance appraisals and skill development initiatives, were the independent variables, while employee engagement, measured through job satisfaction and organisational citizenship behaviour, was the dependent variable. Using data from 270 banking professionals, regression analysis revealed that HPWS significantly enhanced employee engagement. However, the study focused solely on private sector organisations and did not address public service contexts or the potential influence of mentorship programmes. This oversight leaves a gap in understanding how HPWS interacts with sponsorship programmes in fostering engagement.

Haddad and Fayyad (2024) explored the role of feedback-oriented training systems on employee performance and engagement in Lebanese educational institutions. Feedback mechanisms, such as 360-degree reviews, were analysed as the independent variable, while engagement was measured through employee participation and initiative-taking. Data from 245 educators were analysed using PLS-SEM. Findings indicated that feedback-oriented training significantly improved engagement by clarifying performance expectations. However, the study was limited to the education sector and did not investigate the combined effects of feedback systems and perceived flexibility, leaving a gap in understanding how these factors jointly influence engagement in broader public sectors.

Wang and Liu (2024) investigated feedback-oriented training systems and their influence on employee performance in Chinese technology firms. The study found that structured feedback significantly improved employee goal clarity, engagement, and satisfaction. Data collected from 300 technology professionals were analysed using regression techniques. While the study provided valuable insights into feedback mechanisms, it did not explore self-efficacy or instrumentality beliefs as additional factors influencing engagement. Moreover, its focus on private sector organisations limits the applicability of the findings to public entities like FIRS, where hierarchical structures may require different feedback approaches.

Nabukeera, et al., (2022) examined the influence of mentorship programs on employee development in Japan's healthcare sector. The study surveyed 210 healthcare professionals and applied thematic analysis to assess the qualitative impact of mentoring on employee engagement and career progression. Findings revealed that mentorship significantly improved employees' confidence, self-efficacy, and job satisfaction. However, the study did not investigate the broader implications of sponsorship programs or the combined effect of these initiatives on engagement in public institutions, leaving a theoretical gap relevant to the Nigerian FIRS context.

Jang et al. (2024) explored the relationship between feedback-oriented training systems and employee performance in South Korea's retail sector. The study collected data from 286 employees and utilised regression analysis to demonstrate that timely and constructive feedback significantly enhanced employees' skills and job satisfaction. The research emphasised that feedback systems are most effective when aligned with employees' career aspirations. While the findings provided insights into the role of feedback in training, the study did not explore its direct effect on employee engagement or its applicability in bureaucratic organisations, such as FIRS, where systemic constraints might hinder the effectiveness of feedback systems.

Taylor and Emerson (2024) explored the influence of high-performance work systems (HPWS) on employee engagement in Australian multinational corporations. Using data from 25 organisations, the study identified a positive relationship between HPWS elements, such as performance management and leadership development, and employee engagement. Structural equation modelling revealed that HPWS significantly enhances organisational commitment and motivation. Despite these insights, the study was limited to private sector contexts and did not investigate how HPWS might be adapted for public institutions facing bureaucratic inefficiencies, such as FIRS in Nigeria. This limitation highlights the need for research exploring HPWS in public administration settings.

Radulov et al. (2024) investigated the relationship between self-efficacy and employee engagement in Romanian public administration. Self-efficacy was measured through employees' confidence in task execution, and engagement was assessed using self-reported surveys. Findings demonstrated that self-efficacy strongly predicted engagement, particularly in roles with high task complexity. The study recommended enhancing self-efficacy through targeted mentorship programs. However,

it did not explore the combined influence of self-efficacy and instrumentality beliefs or their interaction with performance feedback mechanisms, highlighting a gap in understanding these relationships within FIRS.

Van Der Laan and Brekke (2024) explored the relationship between feedback-oriented training systems and employee engagement in healthcare organisations in Denmark. Data from 400 healthcare professionals revealed that feedback-oriented systems improved job satisfaction and engagement by aligning employees' tasks with organisational goals. The study emphasised the role of actionable feedback in fostering a sense of purpose among employees. However, it failed to account for the influence of perceived flexibility or performance feedback on engagement, which is a critical consideration in public organisations like FIRS.

Williams and Patel (2024) investigated the mediating role of the work environment in the relationship between training and development and employee engagement in North American nonprofits. Data were collected from 450 employees using online surveys, and the analysis employed Structural Equation Modelling (SEM). Results showed that a supportive work environment amplified the positive effects of training on engagement by fostering collaboration and inclusivity. The research, guided by Social Exchange Theory, emphasised the reciprocity between organisational support and employee commitment. However, the study did not consider how contextual factors, such as limited resources and hierarchical structures, might moderate these effects in public sector organisations like FIRS.

Literature Gap

Despite the growing body of research on training and development (T&D), significant gaps persist particularly within public institutions such as the Nigerian Federal Inland Revenue Service (FIRS), where rigid structures, budgetary constraints, and systemic inefficiencies demand context-specific engagement strategies. The majority of existing studies (e.g., Hernandez & Lopez, 2023; Williams & Patel, 2024) concentrate on private-sector organisations in developed economies, where resource availability and institutional agility create conditions unrepresentative of the Nigerian public sector. As such, there is limited empirical understanding of how orientation training, compliance modules, and technical upskilling influence employee job satisfaction in bureaucratic and resource-constrained settings like FIRS. This oversight highlights the urgent need for publicsector-centred frameworks that address the operational realities of hierarchical tax institutions in Nigeria.

Further compounding this theoretical void is the tendency of prior research to examine training dimensions in isolation. While studies such as Kusi and Addo (2022) and Okonkwo and Abimbola (2022) have assessed high-performance work systems (HPWS) and feedback-based methods, they fail to investigate the cumulative or interacting effects of team training, leadership development, diversity training, and quality assurance (Q/A) training on employee engagement. For example, leadership training may empower supervisors to deliver more effective compliance training, while

diversity-oriented sessions could reinforce team cohesion and trust—yet such synergistic mechanisms remain empirically untested. Understanding the interdependencies between these training types is critical for optimising outcomes like job satisfaction, retention, and engagement in complex public work environments.

METHODOLOGY

This study adopted a descriptive survey research design, a widely recognised methodological approach for examining relationships among variables and capturing respondents' perceptions in real-world settings. The design was deemed appropriate for investigating the effect of training and development on employee engagement in the Nigerian Federal Inland Revenue Service (FIRS) and for exploring the moderating role of the work environment. The population of this study comprised employees of the Federal Inland Revenue Service (FIRS) Nigeria's primary tax authority, responsible for the assessment, collection, and enforcement of federal tax laws. As of 2023, FIRS operated across all 36 states and the Federal Capital Territory (FCT), with a workforce exceeding 10,304 employees (FIRS, 2025). The total study population was estimated at 5,250 FIRS employees (FIRS, 2025), proportionally distributed across the selected states. Population estimates were based on operational staffing data: Kaduna (350), Kano (450), Borno (200), Gombe (250), Abuja (800), Niger (300), Lagos (1,000), Ogun (400), Anambra (300), Abia (250), Rivers (600), and Akwa Ibom (350). This stratified geographic representation ensured that the study captured diverse operational realities, including urban-rural variations, sector-specific tax dynamics, and regional institutional challenges.

The overall sample size was derived using the standard finite-population approach at 95% confidence with e = 0.05, yielding ≈371.681, which we rounded up to 372 to ensure adequacy. In line with best practice for planning under expected attrition/nonresponse, we inflated the sample by 20%, resulting in an adjusted target of 447 respondents for field deployment (Zhang & Hartmann, 2023; Henneberger, Rose, Feng, Johnson, Register, Stapleton, Sweet, & Woolley, 2023; DiNardo, Matsudaira, McCrary, & Sanbonmatsu, 2021).

The sample size for this study was determined using the standard finite population correction

(FPC) formula, expressed as:

$$n = \frac{N}{(1 + N(e)^2)}$$

Where:

n = required sample size

N = targeted population size (5,250)

e = margin of error (0.05 for 95% confidence level)

$$N = \frac{5250}{1+5250\,(0.05)^2} = \frac{5250}{1+13.125} = \frac{5250}{14.125} = 371.68 = 372$$

Adjustment for Nonresponse

Since field surveys often face incomplete responses, refusals, and attrition, the sample was increased by **20%**, consistent with best practice in contemporary survey design (Zhang & Hartmann, 2023; Henneberger et al., 2023; DiNardo et al., 2021):

Adjusted n=372×1.20=446.4≈447

Thus, 447 questionnaires were deployed across the 12 states.

Table: Sample Size Determination with 20% Attrition (N = 5,250; Adjusted n = 447)

State	Population	Proportion (%)	Sample size
Abia	250	4.762	21
Abuja	800	15.238	68
Akwa Ibom	350	6.667	30
Anambra	300	5.714	26
Borno	200	3.810	17
Gombe	250	4.762	21
Kaduna	350	6.667	30
Kano	450	8.571	38
Lagos	1,000	19.048	85
Niger	300	5.714	26
Ogun	400	7.619	34
Rivers	600	11.429	51
Total	5,250	100.000	447

Source: Researcher's Analysis, 2025.

Structured questionnaires served as the primary data collection instrument. These were meticulously designed to capture responses across all key variables. This study employed Structural Equation Modelling (SEM) using ADANCO software to test the hypotheses.

DATA ANALYSIS

Table: 2 Descriptive Statistics

Constructs	Mean	Std. Deviation
JS	3.23	1.234
OT	3.11	1.353
CT	3.16	1.334
LTT	3.11	1.323

Source: Research Analysis, 2025.

The Table 2 descriptive results show mid-range averages across most constructs, with Job Satisfaction (JS) (Mean = 3.23; SD = 1.234), Compliance Training (CT) (Mean = 3.16; SD = 1.334), Orientation Training (OT) and Leadership Training (LTT) at Mean = 3.11 (SDs 1.353 and 1.323, respectively).

Multicolinearity Test

Table: 3 Multicolinearity Test

Label	Constructs	Tolerance	VIF
Orientation Training	OT	0.211	4.744
Compliance Training	CT	0.212	4.722
Leadership Training	LT	0.106	9.433

Source: Research Analysis, 2025.

Table 3 shows three clear tiers of collinearity relative to established thresholds. A mid-tier Orientation (OT), Compliance (CT). By contrast, Leadership Training (LT) with VIFs = 9.433 very low tolerances (≈0.10), signalling substantial shared variance. These cut-offs align with guidance that inner VIF values below 5 are generally acceptable, whereas values approaching 10 warrant concern (Hair, Hult, Ringle, & Sarstedt, 2021).

Common Method Bias

Table 4: Harman's Single Factor Test

Factor	Initial Eigenvalues		Extraction Sums of Squared Loadings	
	Total	% of Variance	Total	% of Variance
JS	4.4	49.4	4.1	46.0
OT	1.9	21.1		
CT	1.0	11.2		
LTT	0.7	8.0		

Source: Research Analysis, 2025.

Table 4 shows that the largest unrotated factor explains 49.4% of the variance on initial eigenvalues and 46.0% on extraction (JS: Total = 4.4→4.1). By the common <50% rule-of-thumb, this indicates that a single latent factor does not dominate the covariance among indicators, which in turn suggests that common method variance (CMV) is unlikely to be a pervasive threat to validity (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff, MacKenzie, & Podsakoff, 2012; Hair, Hult, Ringle, & Sarstedt, 2021).

The sub-50% leading factor and the presence of multiple non-trivial factors provide preliminary evidence that CMV is not the sole driver of the measurement correlations in this dataset. As widely noted, the Harman test is a coarse screen and should be read as suggestive rather than definitive evidence on method bias (Podsakoff et al., 2003; Fuller, Simmering, Atinc, Atinc, & Babin, 2016).

Table 5: Correlation

Construct s	CT	DT	JS	LT	OT	QAT	TEMT	TT	WE
CT	1.0000	0.0051	-0.0579	-0.0056	0.6026	-0.0224	-0.0477	-0.0022	-0.0177
JS	-0.0579	0.7517	1.0000	0.7040	-0.0577	0.6954	0.6511	-0.1135	0.7682
LT	-0.0056	0.9368	0.7040	1.0000	-0.0432	0.5981	0.5958	-0.0649	0.5961
OT	0.6026	-0.0303	-0.0577	-0.0432	1.0000	-0.0709	-0.0849	-0.0046	-0.0702

Source: Research Analysis, 2025.

Table 5 reveals a clustered correlation structure with several large, positive bivariate associations among the training constructs and job satisfaction. By commonly applied rules-of-thumb small ≈ .10, medium ≈ .30, large ≥ .50 these values are very large and signal substantial shared variance (Hair, Hult, Ringle, & Sarstedt, 2021). Correlations at or above .85–.90 also raise discriminant validity concerns, indicating that the paired constructs may not be empirically distinct.

Table 6 : Heterotrait-monotrait ratio (HTMT)

Constructs	CT	DT	JS	LT	OT	QAT	TEMT	TT	WE
CT									
JS	0.0516	0.8493							
LT	0.0674	1.0402	0.7923						
OT	0.9835	0.0776	0.0649	0.0755					

Source: Research Analysis, 2025.

Table 6 reports HTMT estimates used to judge discriminant validity. Using accepted rules-ofthumb HTMT < 0.85 (conservative) or < 0.90 (lenient) indicates adequate discriminant validity, whereas values ≥ 0.90 suggest problematic overlap and values near or above 1.00 indicate clear lack of discriminant validity (Hair, Hult, Ringle, & Sarstedt, 2021; Kline, 2023; Henseler, Ringle, & Sarstedt, 2015).

Table 7: Total Effects

Constructs	Total effects	f-square
CT -> JS	-0.068	0.0164
LT -> JS	-0.083	0.0027
OT -> JS	0.005	0.0001

Source: Research Analysis, 2025.

Table 7 indicates that Compliance (CT → JS = −0.068; f^2 = 0.0164). Leadership (LT → JS = −0.083; f^2 = 0.0027) and Orientation (OT → JS = 0.005; f^2 = 0.0001) are negligible by both magnitude and effect size. Given earlier evidence of high inter-correlations among several predictors, such small or negative totals are consistent with suppression/overlap effects that often attenuate unique contributions in multivariate models (Hair et al., 2021).

Table: Summary of Hypotheses

Hypothesis	t-statistic	p-value	Decision
H_{01}: Orientation training → Job satisfaction	0.089	0.929	Reject (not significant)
H_{02}: Compliance training → Job satisfaction	0.975	0.329	Reject (not significant)
H_{03}: Leadership training → Job satisfaction	1.028	0.304	Reject (not significant)

Source: Research Analysis, 2025.

DISCUSSION OF FINDINGS

By contrast, the study finds that orientation, leadership and compliance training are not significant, which is contrary to broad studies reporting positive average training effects on job satisfaction as Nigerian insurance firms linked training to satisfaction (Adeyemo et al., 2024) but in line with the idea that rule- or induction-centric content rarely energises employees unless embedded in feedback-rich systems as feedback-oriented designs, rather than compliance alone, drove engagement and performance in healthcare and manufacturing (Mtui &Mwita, 2022; Van Der Laan & Brekke, 2024). The present measurement evidence (very low AVE and sub-.40 loadings for several orientation/compliance items in Table 4.10) also suggests attenuation of their structural paths, reinforcing this interpretation. Similarly, the study finds that leadership is not significant, which is contrary to research where leadership development improved engagement as Nigerian banks reported trust-based leadership gains (Adeyemi et al., 2024).

The study finds a coherent pattern: climate and inclusion are the primary engines of job satisfaction in FIRS, team capability is a vital conduit, and technical skill contributes modestly when decoupled from relational resources. This configuration is in line with JD–R's core claim that socially meaningful resources rather than procedural or rules-based content most reliably energise engagement (Bakker & Demerouti, 2023). It is also in line with the empirical record that shows work environment and inclusion-centred learning repeatedly predict stronger engagement across sectors and regions (Fujimoto & Tanaka, 2023; Williams & Patel, 2024; Sayed & Hamed, 2023; Ogueyungbo et al., 2022), while it is contrary to narrower views that expect leadership- or compliance-only programmes to deliver attitudinal gains without the contextual scaffold the present data clearly foreground.

CONCLUSION AND RECOMMENDATIONS

This study set out to examine how distinct training and development domains orientation, compliance, leadership, technical, quality assurance, team, and diversity training relate to job satisfaction in the Federal Inland Revenue Service (FIRS), and whether the work environment conditions these relationships. Framed by the Job Demands–Resources (JD–R) model, these findings indicate that resources which strengthen inclusion, collaboration, and day-to-day climate are most energising for employees. The pattern is theoretically coherent: social and contextual resources convert work demands into manageable challenges and imbue roles with meaning, whereas skill- or rules-based inputs, on their own, are less likely to translate into affective outcomes such as satisfaction. In this dataset, the work environment operates primarily as a direct, omnibus resource rather than as a moderator; interaction terms are uniformly trivial, suggesting that climate raises satisfaction broadly rather than selectively amplifying the effects of specific training streams. The results reposition the locus of influence from narrow, procedural training to the quality of the social climate and collective capability. In the FIRS context, employees appear to respond most to inclusion, teamwork, and supportive conditions that enable skills to be applied with confidence; technical competence matters, but it is motivational only when enacted within an enabling environment. The overall conclusion is therefore straightforward: engagement and satisfaction in FIRS are chiefly a climate-and-inclusion story, with teamwork as a key conduit and technical skill a necessary but insufficient condition.

The following actions are recommended.

i. Orientation training does not currently relate to satisfaction (rejected), which suggests shifting from information-heavy induction to high-impact onboarding. Build role clarity, social ties and early wins through buddy systems, shadowing, first-week task simulations and micro-credentials tied to real deliverables. The immediate products are structured checklists and completed simulations; the intended outcomes are faster time-to-first useful task, higher early feelings of belonging and improved early-stage satisfaction, laying a firmer foundation for later engagement.

ii. Compliance training is also non-significant and should be redesigned as risk-based microlearning delivered in the flow of work. Replace annual, generic briefings with short, scenario-driven nudges at actual decision points, supported by micro-quizzes and instant feedback on common errors. The outputs embedded prompts and concise modules—aim

at behavioural outcomes: more first-time-right actions, fewer audit flags and neutral-topositive learner sentiment, supporting satisfaction indirectly by reducing friction and fatigue.

iii. Leadership trainings do not add unique explanatory power in the current model and show conceptual overlap with stronger drivers. Rather than maintain standalone courses, weave their behaviours into weekly operating rhythms: clear goal-setting, fair feedback cycles, error-learning huddles and visible process checks. The outputs are cadence calendars and huddle notes; the outcomes are better clarity and fairness, fewer defects and higher psychological safety channelling their contribution through the proven climate and teamwork pathways.

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