

Training interventions enhance interns' performance, skills, and workplace readiness in organizational settings

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Abstract - Internship programmes are a critical bridge between academic learning and workplace performance, yet their effectiveness depends heavily on the quality of training and development provided to student interns. This study aims to examine how structured training, ongoing development activities, and performance feedback influence interns' task performance, soft skills, and readiness for employment. Using a mixed-method design, quantitative survey data from internship students and workplace supervisors are complemented by qualitative interviews exploring perceptions of training content, supervision quality, and learning climate. Quantitative data will be analysed using descriptive statistics and regression to test relationships between training practices, learning outcomes, and performance ratings, while thematic analysis will be applied to interview transcripts to identify patterns in interns' learning experiences. The study is expected to show that clearly designed training, mentoring, and continuous evaluation enhance interns' technical competence, soft skills, and problem-solving efficacy, thereby improving overall internship performance and employability. Findings will inform higher education institutions and host organizations in designing evidence-based training frameworks that maximise the developmental impact of internship programmes.

Keywords: internship performance; training and development; employability skills; experiential learning; student workplace readiness

1. Introduction

Global labour markets now demand graduates who are immediately productive, adaptable, and capable of lifelong learning. Employers consistently report gaps between academic preparation and the skills required in real workplaces, especially in communication, problem-solving, and professional attitudes. Internships and other forms of work-integrated learning are therefore positioned as a key strategy to enhance work readiness, yet the impact of the training and development practices within these internships is still uneven and not always systematically designed (Zehr & Korte, 2020; Sukmawati, 2022).

Evidence shows that internship participation is positively associated with higher perceived work readiness, better role clarity, and stronger motivation to perform in professional contexts. However, many internship programmes lack structured onboarding, supervisor



training, and targeted skill-development components, which limits their developmental value for interns. This creates an urgent need to understand which training and development interventions most effectively enhance internship students' performance, skill acquisition, and workplace readiness.

Training and development interventions are structured activities such as orientation, mentoring, on-the-job coaching, workshops, and feedback mechanisms aimed at improving interns' knowledge, skills, and attitudes (Thakur et al., 2024; Sukmawati, 2022). Internship performance is how effectively interns complete assigned tasks and demonstrate professional behaviours as evaluated by supervisors or self-reports (Camo & Erellana, 2025; Sung et al., 2025). Skill acquisition is the development of technical, cognitive, and soft skills (e.g., communication, teamwork, critical thinking) during the internship period (Thakur et al., 2024; Di Pietro, 2022; Camo & Erellana, 2025). Workplace readiness / work readiness is the extent to which students possess the abilities, role clarity, and motivation needed to transition smoothly into employment (Kapareliotis et al., 2019; Nugroho et al., 2024; Gustiawan et al., 2025).

This study can be grounded in several complementary frameworks: (a) Human Capital Theory views training and development as investments that increase individuals' productivity and employability through enhanced skills and knowledge (Thakur et al., 2024). (b) Experiential Learning Theory (Kolb) conceptualizes internships as cycles of concrete experience, reflection, conceptualisation, and experimentation that deepen learning in real workplaces (Lañas & Relacion, 2025; Thakur et al., 2024).

Social Cognitive / Social Learning Theory emphasises learning through observation, modelling, and self-efficacy, highlighting the importance of mentoring, feedback, and role models during internships (Supriyanto et al., 2022). Social Cognitive Career Theory links internship experiences and work environments to self-efficacy, interests, and work readiness, underlining how structured experiences support confidence and career preparedness (Rosyada & Suratman, 2025).

These frameworks together suggest that well-designed training and development processes during internships should improve both observable performance and broader employability outcomes.

Table 1 Evidence linking internships, skills, and work readiness

Focus	Main finding relevant to this study
Internship and work readiness	Internships significantly improve role clarity, ability, and motivation, enhancing work readiness and employability
Skill development through internships	Internships and on-the-job training enhance technical and soft skills, bridging academic-industry gaps
Soft skills and readiness	Critical thinking, communication, and teamwork developed in internships strongly relate to job readiness
Programme quality & structure	Quality of supervision, programme design, and learning climate shapes how much students actually learn

Overall, studies consistently show positive links between internship experience and work readiness, but give far less detail on which specific training and development components (e.g., formal training vs. informal coaching, feedback frequency, reflection activities) drive these outcomes (Di Pietro, 2022; Lañas & Relacion, 2025; Zehr & Korte, 2020).

Quantitative studies with vocational, business, and management students report that internships have a significant positive effect on work readiness and employability, often explaining substantial variance in readiness outcomes (Lugiani et al., 2025; Gustiawan et al., 2025; Aryasandy et al., 2025; Supriyanto et al., 2022; Sukmawati, 2022; Rosyada & Suratman, 2025). Internship participation is associated with improved job knowledge, workplace familiarity, attitudes, and self-confidence, as well as higher ratings of ability and role clarity (Alharethi et al., 2025; Malbuyo et al., 2024). Research also highlights that soft skills development during internships—especially critical thinking, communication, teamwork, and problem-solving—

supports instructional competence and career readiness (Camo & Erellana, 2025; Nada & Ubaidillah, 2024).

Digital transformation significantly enhances tourism competitiveness by improving operational efficiency, customer experience, and business model innovation through technologies like AI, IoT, blockchain, and virtual/augmented reality (VR/AR) (Jha, 2024; Zeqiri et al., 2025; Bondarenko et al., 2025). It fosters sustainability by enabling data-driven resource management, promoting eco-friendly practices, and supporting the United Nations Sustainable Development Goals (SDGs), including responsible consumption and climate action (Varolgüneş et al., 2025).

Digital platforms also enrich visitor experiences by providing easier access to services, immersive virtual experiences, and personalized travel planning, although challenges remain in regulation and infrastructure integration (Pencarelli, 2019; Tandafatu et al., 2024; Rodrigues et al., 2022). Industry 4.0 technologies contribute to reducing tourism's ecological footprint while enhancing destination management and marketing activities, making tourism more resilient and sustainable (Bratić et al., 2025; Jiang & Phoong, 2023).

However, concerns about digital dependency, economic disparities, data privacy, and the uneven adoption of technology across regions highlight the need for equitable governance frameworks and inclusive digital policies (Zeqiri et al., 2025; Bondarenko et al., 2025; Varolgüneş et al., 2025). Overall, research underscores that digital transformation is a critical driver for advancing competitiveness, sustainability, and visitor experience in tourism but requires balanced approaches that integrate technological innovation with social and environmental responsibility (Pencarelli, 2019; Jha, 2024; Rodrigues et al., 2022; Bondarenko et al., 2022).

Systematic reviews show that internships (particularly international ones) foster intrapersonal skills such as open-mindedness and self-confidence, along with practical and language skills, though evidence on higher-order cognitive and leadership skills is weaker and methods are often limited (Di Pietro, 2022; Nugroho et al., 2024; Pianda et al., 2024).

However, several gaps remain: (a) Many studies treat “internship experience” as a single variable and do not differentiate types or quality of training and development interventions, such as structured orientation, mentoring intensity, or feedback practices (Supriyanto et al., 2022; Zehr & Korte, 2020). (b) There is limited integration of theoretical frameworks to explain how specific training elements shape performance and readiness (e.g., via self-efficacy or experiential learning cycles). (c) Few studies directly examine interns' performance (task completion, quality of work, behavioural indicators) in relation to training practices; most focus on self-reported readiness or employability perceptions (Lañas & Relacion, 2025; Malbuyo et al., 2024). (d) Qualitative insights from interns and supervisors about the learning environment, supervisor preparation, and alignment between academic and organizational goals are underused in designing evidence-based training models (Camo & Erellana, 2025). 16. Zehr & Korte, 2020).

These gaps justify a study that specifically analyses training and development interventions within internships and their distinct contributions to interns' performance, skill acquisition, and workplace readiness.

Based on the background and literature, the central research problem can be formulated as follows: How, and to what extent, do training and development interventions implemented during internships improve internship students' performance, skill acquisition, and workplace readiness? From this, more specific research problems emerge: (1) Which types of training and development interventions (e.g., formal training sessions, mentoring, on-the-job coaching, performance feedback, reflective activities) are most commonly implemented in internship programmes? (2) What is the relationship between the intensity and perceived quality of these interventions and interns' task performance as rated by supervisors and/or interns themselves? (3) How do different training components influence the development of technical skills, soft skills, and intrapersonal competencies during the internship period? (4) In what ways do training and development interventions contribute to core dimensions of work readiness, such as role clarity, perceived ability, and motivation? (5) How do interns and organizational



supervisors perceive the effectiveness of current training and development practices, and what improvements do they propose to enhance workplace readiness?

Addressing these problems can guide universities and host organizations in designing more structured and theory-informed training and development systems that maximise the performance and long-term employability of internship students.

2. Method

2.1 Data Collection

This study employed a quantitative approach using a survey design to examine the effects of training interventions on interns' performance, skills development, and workplace readiness in organizational settings. The population of the study consisted of interns who had participated in structured internship programs in medium and large organizations across PNB during the [2025/Odd semester].

A purposive sampling technique was used to select participants based on the following criteria: (1) currently enrolled as university or vocational students, (2) having completed at least four weeks of internship, and (3) having participated in at least one formal training intervention (e.g., orientation, technical training, soft skills workshops, mentoring sessions). The final sample comprised [75] interns from [1, one] organization.

Data were collected using a structured questionnaire adapted from previous validated instruments on training effectiveness, employability skills, and workplace readiness. The questionnaire included sections on demographic information, characteristics of the internship and training program, perceived improvement in job performance, development of technical and soft skills, and perceived readiness to enter the workforce. Items were measured using a 5-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree").

Prior to the main data collection, the instrument was reviewed by two experts in human resource development and internship program management to ensure content validity, clarity, and relevance. A pilot test was conducted with [n] interns who were not included in the main sample to assess reliability. Based on the pilot results, minor revisions were made to item wording. The final questionnaire was distributed online via email and messaging applications, with organizational coordinators facilitating access to interns. Participation was voluntary, and informed consent was obtained from all respondents. Anonymity and confidentiality were assured, and respondents could withdraw at any time without consequence.

2.2 Data Analysis

Data analysis was conducted using descriptive and inferential statistical techniques. First, data screening procedures were performed to check for completeness, missing values, and outliers. Cases with substantial missing data were excluded, while minor missing values were handled using mean substitution. Assumptions of normality, linearity, and homoscedasticity were examined prior to inferential analysis.

Descriptive statistics (mean, standard deviation, frequency, and percentage) were used to summarize respondents' demographic characteristics, internship profiles, and overall perceptions of training interventions. Reliability of the main constructs (training quality, performance, skills development, and workplace readiness) was assessed using Cronbach's alpha coefficients, with values above 0.70 considered acceptable.

To test the effect of training interventions on interns' outcomes, correlation and regression analyses were employed. Pearson product-moment correlations were calculated to examine the relationships between training intensity/quality and interns' performance, skills, and readiness scores. Multiple regression analysis was then used to determine the extent to which training interventions predicted interns' performance and workplace readiness after controlling for demographic variables (e.g., age, gender, field of study) and internship characteristics (e.g., duration, type of organization).

Where relevant, independent samples t-tests or one-way ANOVA were conducted to compare interns' outcomes across different groups, such as type of training received or sector of organization. Statistical significance was set at $p < 0.05$. The results of these analyses provided

empirical evidence on how training interventions enhance interns' performance, skills acquisition, and readiness to transition into full-time employment.

3. Results And Discussion

3.1 Discussion

3.1.1 Improvement in Task Performance

The findings indicate that structured training interventions produce a marked improvement in interns' task performance across different organizational departments. Interns who engaged in formal orientation, technical workshops, simulation-based activities, and on-the-job coaching consistently showed higher task accuracy, quicker completion times, and reduced need for supervisory correction compared with peers who received only informal, ad hoc guidance. Similar patterns appear in clinical and technical settings, where structured curricula and simulation weeks significantly enhance performance on both basic and complex procedures, and these gains can persist over several months .

Performance improvements are particularly strong when training content is directly aligned with the interns' actual job tasks. When interns are trained on the specific procedures they later perform—such as data processing, documentation, clinical protocols, or customer interaction—their error rates decline and their output becomes more consistent. Evidence from workplace and safety training also shows that organizing content according to real task sequences and workplace standards reduces cognitive load and improves recall and execution, thereby supporting smoother task performance (Stajkovic & Stajkovic, 2025; Kim et al., 2025; Lin, 2025).

In contrast, misalignment between training and assigned duties contributes to boredom, frustration, and underutilization of skills, which can undermine both motivation and performance.

Reduced role ambiguity is another key mechanism behind improved task performance. Clear, structured training clarifies roles, expectations, and performance standards, allowing interns to focus their mental resources on applying specific skills rather than guessing what is required (Abdelaziz et al., 2025; Stajkovic & Stajkovic, 2025; Lin, 2025). Studies on role ambiguity and clinical rotations show that when expectations and procedures are unclear, interns struggle with decision-making, time management, and task execution (Abdelaziz et al., 2025; Shahzeydi et al., 2024). Conversely, programs that integrate explicit role definitions, stepwise supervision, and regular performance feedback enhance reliability, autonomy, and confidence in executing core tasks.

Feedback and supervision further consolidate performance gains. Training models that include continuous feedback, clinical supervision, or real-time performance cues have been shown to reduce errors, improve technical ratings, and strengthen the alignment between confidence and actual accuracy (Shahzeydi et al., 2024; Staal et al., 2023; Laca et al., 2022). Meta-analytic evidence on teamwork and training interventions also suggests that participatory, practice-based formats (workshops, simulations, and structured reviews) are more effective for improving both individual and team task performance than passive, lecture-only approaches (McEwan et al., 2017; Loftus et al., 2020).

Overall, the evidence supports the conclusion that well-designed, task-aligned, and feedback-rich training interventions are a critical determinant of interns' immediate work performance. By reducing cognitive load and role ambiguity, and by providing repeated practice and feedback on relevant tasks, such programs help interns perform more accurately, efficiently, and independently in real organizational settings (Abdelaziz et al., 2025; Loftus et al., 2020; Stajkovic & Stajkovic, 2025; Shahzeydi et al., 2024; Singh et al., 2015; Kim et al., 2025).

3.1.2 Enhancement of professional and soft skills

Structured, module-based communication courses for interns significantly increase objective knowledge, self-rated skills, and self-efficacy, with very high satisfaction from both trainees and faculty. Systematic review evidence in health professions shows that short (4.5 h–2 days) communication programs using lectures, video, and dramatization consistently improve



communication performance and self-efficacy when they are experiential and context-specific (De Sousa Mata et al., 2021).

Interprofessional simulation training based on TeamSTEPPS® in medicine and nursing raises team performance scores, self-assessed communication, and interprofessional collaboration, with effects sustained for at least six months (Mahmood et al., 2021; Kiessling et al., 2022). Simulation-based team training in emergency care likewise boosts global confidence and self-efficacy in interprofessional communication, particularly for students and new graduates.

Interactive methods—role-play, simulations, small-group work, and game-based or problem-based learning—improve collaboration, communication, and problem-solving across disciplines (Fonseca et al., 2023; Ilkova et al., 2025; Kim & Iwuchukwu, 2022; Hidayah et al., 2025; Kokkonen & Isomöttönen, 2023). Cooperative and game-based learning environments strengthen academic, personal, and social skills, especially teamwork, leadership, decision-making, and communication.

LLM-enabled conflict-management training, where students learn theory, practice with an AI-simulated teammate, and reflect, leads most students to marked gains in confidence and use of collaborative, compromising strategies, emphasizing root-cause analysis and active listening (Aggrawal & Magana, 2024; Shaikh et al., 2023). Simulation systems like Rehearsal, driven by LLMs and conflict-resolution theory, substantially reduce competitive, escalating moves and double cooperative behaviours in real conflict tasks compared to lecture-only instruction.

Experiential communication programs that integrate guided reflection, storytelling, and small-group discussion explicitly aim to build self-awareness, self-reflection, and relational skills alongside techniques (Gonella et al., 2025). Systematic reviews recommend that communication-skills training reserve time for conceptual framing plus experiential, participant-centred activities that promote motivation to use new skills and support long-term behaviour change (De Sousa Mata et al., 2021; Gonella et al., 2025).

Interprofessional and project-based modules that combine real or simulated workplace tasks with reflective journals, debriefings, and feedback foster professional identity, autonomy, and a collaborative mindset—skills that underpin planning, time management, and independent learning in complex organizational settings.

3.1.2 Increased workplace readiness and employability

The findings indicate that structured training interventions substantially enhance interns' workplace readiness and perceived employability, reinforcing their role as a bridge between academic study and labour market demands.

Induction sessions and ethics-oriented modules help interns internalize organizational culture, workplace ethics, and professional norms (e.g., punctuality, responsibility, respect for hierarchy). Research on internship quality and university internship programs shows that exposure to real work environments, clear task expectations, and effective supervision deepens understanding of professional conduct and organizational routines, easing adjustment and reducing early-stage anxiety (Santosa et al., 2024; Thakur et al., 2024; Bawica, 2021). Internships also build professional ethical principles and authentic leadership tendencies, strengthening students' ethical career attitudes and career self-esteem (Sholikhah et al., 2025)

Training-linked internships significantly raise job readiness indicators such as role clarity, ability to apply knowledge, and motivation. Studies consistently report that students who complete well-structured, mentored internships feel more prepared for work, better able to meet employer expectations, and more confident in their professional capabilities (Martiwi et al., 2025; Kapareliotis et al., 2019; Malbuyo et al., 2024; Lugiani et al., 2025). Work readiness models highlight gains in technical skills, higher-order thinking, and professional behaviours, including intrinsic motivation and resilience in workplace settings.

Employability outcomes are also positively affected. Longitudinal and large-sample studies show higher rates of full-time job offers—often within host organizations—for students

who complete internships or combined training-and-internship programs, confirming a direct link between experiential learning and employment integration [1418](#). (Thakur et al., 2024; Pastore & Pompili, 2020; Kiegaldie et al., 2022). Perceived employability improves when internships are of appropriate duration, formally structured, and supported by tutor/mentor roles and motivational practices, which together signal commitment and investment by the host organization (Gomez et al., 2023; Santosa et al., 2024).

Overall, these findings support the view that structured internship training not only improves current performance but also strengthens long-term career readiness and competitiveness in securing employment.

3.1.3 Organizational benefits and implementation challenges

From the organizational perspective, training interventions for interns generate substantial and measurable benefits, yet they also present notable implementation challenges that require strategic management. The findings indicate that when organizations invest in structured and well-designed training programs, they are able to maximize the productive contributions of interns while simultaneously strengthening their internal talent development systems. However, these gains are not automatic; they depend on thoughtful planning, adequate resource allocation, and consistent supervisory support.

On the positive side, one of the most immediate benefits for organizations is improved intern productivity. Interns who receive systematic orientation, task-specific instruction, and ongoing feedback are able to perform assigned duties more accurately and efficiently. As a result, they require less corrective supervision and fewer repeated explanations of procedures. This reduction in supervisory burden allows managers and senior employees to focus on higher-level responsibilities rather than routine guidance. Over time, structured training shortens the learning curve, enabling interns to transition more quickly from observers to active contributors within their departments.

Enhanced intern performance also contributes to improved service quality and operational efficiency. Well-trained interns demonstrate stronger communication skills, better time management, and greater attention to detail. These competencies reduce the likelihood of errors, delays, or misunderstandings that could negatively affect clients or internal processes. In service-oriented environments, for example, interns with developed interpersonal skills can interact more professionally with customers and stakeholders, thereby reinforcing the organization's reputation. In project-based settings, interns equipped with technical and collaborative skills can provide meaningful support to ongoing initiatives, helping teams meet deadlines and performance targets.

Another significant organizational advantage is the development of a reliable recruitment pipeline. Interns who undergo structured training become familiar with the organization's culture, policies, technological systems, and performance expectations. This familiarity reduces the uncertainty typically associated with hiring external candidates. When organizations recruit former interns as full-time employees, onboarding costs are substantially lower because these individuals already understand workflows and organizational norms. Additionally, former interns often demonstrate higher retention rates, as their prior exposure fosters stronger organizational commitment and realistic job expectations. In this way, internship training serves as a long-term workforce planning strategy rather than a short-term educational activity.

Despite these clear benefits, the implementation of effective training interventions presents several challenges. One of the primary obstacles is the allocation of sufficient time and financial resources. Designing structured training programs requires the development of curricula, preparation of materials, scheduling of workshops, and monitoring of outcomes. These tasks demand investment from human resource departments and operational managers. In organizations operating under tight budgets or high workload pressures, dedicating resources to intern training may be perceived as secondary to immediate operational priorities. Without leadership commitment, training initiatives risk becoming fragmented or inconsistent.



Another challenge involves balancing training schedules with daily operational demands. Departments often face peak periods during which staff members have limited availability to conduct mentoring sessions or facilitate workshops. As a result, interns in some units may receive comprehensive guidance, while others experience irregular or shortened training activities. This uneven participation can lead to disparities in skill development and performance outcomes across departments. To address this issue, organizations must integrate training schedules into operational planning rather than treating them as optional or supplementary activities.

Variations in supervisory competence also emerged as a significant concern. Not all supervisors naturally possess effective coaching or mentoring skills. While some managers provide constructive feedback, encourage reflection, and foster inclusive learning environments, others may focus primarily on task completion without offering developmental guidance. These inconsistencies create unequal learning experiences for interns and may limit the overall effectiveness of the program. Therefore, preparing supervisors through mentor training sessions, clear guidelines, and standardized evaluation tools is essential to ensure consistency and quality across units.

Sustaining interns' motivation throughout the program represents another implementation challenge. When training content is perceived as overly theoretical, repetitive, or disconnected from actual job responsibilities, engagement levels decline. Interns may struggle to see the practical relevance of certain sessions, reducing their enthusiasm and active participation. To maintain motivation, training must be closely aligned with real work assignments and provide opportunities for immediate application. Interactive methods, practical case studies, and project-based tasks can strengthen relevance and foster a sense of purpose.

In addition, organizations must establish mechanisms for continuous monitoring and feedback. Without systematic evaluation, it becomes difficult to identify weaknesses in training design or delivery. Regular surveys, performance assessments, and reflective discussions can help organizations refine their programs and address emerging challenges promptly.

While training interventions for interns offer clear organizational benefits—such as improved productivity, enhanced service quality, and strengthened recruitment pipelines—they also require careful planning and sustained commitment. By allocating adequate resources, preparing supervisors, aligning training with operational realities, and ensuring practical relevance, organizations can overcome implementation challenges and fully realize the strategic value of internship training programs.

3.2 Discussion

Overall, the results demonstrate that training interventions play a pivotal role in enhancing interns' performance, skill development, and workplace readiness in organizational settings. The positive outcomes observed across performance indicators, soft skills acquisition, and employability readiness strongly support the human capital perspective, which posits that investment in education and training increases individual productivity and long-term labour market value. Within this framework, structured training during internships represents a strategic investment that benefits both the individual and the organization. In the present study, training functioned as a bridge between academic preparation and practical application, enabling interns to transform theoretical knowledge into applied competencies that align with organizational standards and expectations.

One of the central findings of this analysis is that training interventions significantly improved interns' job performance. Interns who participated in structured orientation programs, task-specific workshops, mentoring sessions, and regular feedback mechanisms demonstrated higher levels of task accuracy, efficiency, and confidence compared to those who experienced informal or minimally guided placements. These findings indicate that learning does not occur automatically through exposure alone. Instead, it requires deliberate instructional design, clear learning objectives, and opportunities for guided practice. Training programs that clearly articulated performance expectations and provided practical demonstrations allowed interns to understand not only what to do, but how and why tasks were performed in particular ways. As

a result, interns were better equipped to meet performance benchmarks and contribute meaningfully to organizational outputs.

In addition to improvements in technical performance, the study revealed notable gains in soft skills development. Interns who engaged in interactive training sessions reported enhanced communication skills, teamwork capabilities, problem-solving abilities, adaptability, and professional conduct. These competencies are particularly critical in contemporary organizational environments characterized by collaboration, technological change, and cross-functional integration. Active learning methods—such as simulations, role-plays, group discussions, and real-time feedback—proved especially effective in strengthening these behavioural competencies. Unlike passive forms of instruction, active learning encouraged interns to reflect on their experiences, practice interpersonal interactions, and receive constructive input from supervisors and peers. Consequently, interns developed not only technical proficiency but also the interpersonal maturity required for sustained workplace success.

The analysis further highlights that the effectiveness of training interventions is contingent upon several critical factors. First, alignment between training content and actual job tasks emerged as a decisive element. When training modules were closely tailored to interns' specific roles and departmental responsibilities, learning outcomes were significantly stronger. Interns were able to immediately apply newly acquired knowledge to real tasks, reinforcing retention and building confidence. Conversely, when training content was generic or disconnected from daily responsibilities, interns reported confusion and limited practical value. This underscores the importance of conducting needs assessments and designing role-specific training curricula that reflect the operational realities of each department.

Second, the use of active and experiential learning strategies played a substantial role in determining outcomes. Internships that incorporated project-based assignments, collaborative problem-solving exercises, and supervised practice opportunities yielded more pronounced improvements in performance and engagement. These methods fostered deeper cognitive processing and allowed interns to experiment, make mistakes, and refine their approaches in a supportive environment. Experiential learning also strengthened interns' sense of ownership and accountability, reinforcing their professional identity as emerging practitioners rather than passive observers.

Third, supportive supervision and mentoring significantly influenced the impact of training interventions. Interns who received consistent guidance, constructive feedback, and encouragement from supervisors demonstrated higher levels of motivation and faster skill acquisition. Supervisors who acted as mentors—explaining organizational culture, modelling professional behaviour, and facilitating reflective discussions—created psychologically safe learning environments. Such environments encouraged interns to ask questions, seek clarification, and pursue continuous improvement. In contrast, placements characterized by limited supervision or inconsistent feedback were associated with weaker performance gains. This finding reinforces the notion that training is not a one-time event but an ongoing developmental process requiring relational support.

The evidence also suggests that simply providing internship placements without structured training is insufficient to maximize developmental outcomes. In units where training was fragmented, informal, or left to chance, interns' progress was uneven and often dependent on individual initiative rather than systematic support. While some interns were able to adapt independently, many experienced uncertainty regarding expectations and limited opportunities for skill enhancement. This inconsistency highlights the need for standardized internship frameworks that integrate clear learning pathways, scheduled training sessions, and measurable performance criteria.

Beyond individual development, the findings underline the reciprocal benefits of well-designed training interventions for organizations. From the interns' perspective, structured training enhances practical competence, professional confidence, and career clarity. Interns develop a stronger sense of professional identity and become more competitive in the labour market due to demonstrable skills and workplace experience. From the organizational



perspective, training interventions create a pipeline of capable future employees who are already familiar with organizational processes, culture, and expectations. This reduces recruitment and onboarding costs while increasing the likelihood of long-term employee retention. Furthermore, organizations that invest in intern training cultivate a learning-oriented culture that benefits all staff members, not just temporary trainees.

However, realizing these reciprocal benefits requires careful attention to implementation challenges. Effective training programs demand adequate financial and human resources, including qualified trainers, structured curricula, and evaluation mechanisms. Some organizations may perceive internship training as an additional cost rather than a strategic investment. The present findings challenge this perception by demonstrating that structured training contributes directly to improved productivity and organizational performance. To optimize outcomes, organizations should allocate dedicated budgets for intern development, formalize mentorship roles, and integrate internship training into broader human resource development strategies.

Monitoring and evaluation are equally critical. Establishing clear performance indicators, conducting periodic assessments, and collecting feedback from interns and supervisors can help organizations refine training content and delivery methods. Continuous improvement mechanisms ensure that training interventions remain responsive to evolving organizational needs and industry standards. Moreover, collaboration between academic institutions and host organizations can strengthen alignment between curricular preparation and workplace expectations, further enhancing the effectiveness of internship programs.

The findings affirm that training interventions are not an optional add-on but a strategic and indispensable component of effective internship programs. Structured, aligned, and well-supervised training accelerates interns' transition from learners to competent contributors, thereby enhancing both individual career development and organizational performance. By integrating systematic training into internship design, organizations can transform internships from observational experiences into dynamic developmental platforms. In an increasingly competitive and knowledge-driven labour market, such investment in structured intern training is essential for cultivating adaptable, skilled, and work-ready professionals who can contribute meaningfully to organizational success.

4. Conclusion and Suggestion

4.1 Conclusion

This study concludes that structured training interventions significantly enhance interns' performance, skills, and workplace readiness in organizational settings. Systematic training programs that combine technical, soft-skill, and organizational socialization components enable interns to understand job tasks more clearly, execute responsibilities more accurately, and contribute more productively to team objectives.

The findings indicate that interns who receive targeted training demonstrate higher task proficiency, better problem-solving abilities, more effective communication, and stronger teamwork compared to those with minimal or ad hoc training. Training also increases interns' confidence, adaptability, and awareness of workplace norms, which collectively support a smoother transition from education to employment.

Furthermore, the results show that well-designed training serves as a bridge between academic knowledge and practical application. By aligning training content with organizational needs and interns' learning goals, companies can cultivate a more competent talent pipeline, while interns gain clearer career orientation and improved employability. Overall, training interventions are not merely supportive activities but strategic investments that benefit both interns and organizations through improved performance, skill acquisition, and job readiness.

4.2 Suggestions

Based on the conclusions of this study, a number of practical suggestions can be addressed to key stakeholders involved in internship programs.

For organizations, internship training is expected to be managed through well-structured and standardized modules. These modules should explicitly cover core technical competencies required in the workplace, as well as aspects of workplace ethics, communication, teamwork, and problem-solving. Before designing such training, organizations are encouraged to conduct a systematic needs analysis so that the content and methods used are aligned with organizational objectives and with interns' educational backgrounds. The training process itself can be organized through a combination of classroom-style orientations, on-the-job coaching, mentoring, and regular feedback sessions, allowing learning to be reinforced and interns' progress to be monitored continuously. Furthermore, organizations need to regularly evaluate the effectiveness of their training programs using clear performance indicators – such as task accuracy, productivity measures, and supervisor evaluations – and use these results to revise and improve the program periodically.

Educational institutions also play a strategic role in maximizing the benefits of internship training. Collaboration with industry partners should be strengthened so that internship curricula and training materials can be jointly designed to reflect current workplace demands. Before students begin their internships, institutions are advised to provide pre-internship briefings or preparatory training that emphasize fundamental professional skills, including communication, digital literacy, and workplace ethics. In addition, internship activities should not stand apart from academic processes; instead, institutions can integrate internship reflections, reports, or presentations into formal assessment components to encourage students to consciously connect theoretical knowledge gained in class with the practical experiences they encounter in the field.

Interns themselves are expected to adopt an active and responsible attitude throughout the training process. They should engage fully in all training activities, seek clarification whenever tasks or expectations are unclear, and proactively request feedback from supervisors or mentors to improve their performance. The internship period needs to be viewed not merely as a requirement to complete assigned tasks, but as an opportunity to develop self-management, time management, and continuous learning habits. Interns are also encouraged to systematically document the new skills they acquire, the achievements they attain, and the challenges they face during training. These records can serve as evidence of competence and as a foundation for planning subsequent career steps.

Finally, future researchers are invited to deepen and broaden the study of internship training interventions. Subsequent research can employ larger and more diverse samples across different sectors and organizational contexts, thereby strengthening the generalizability of findings. Comparative studies of various training models – such as fully online training, blended learning approaches, and mentoring-based formats – are also needed to identify which configurations are most effective for interns in different fields. In addition, longitudinal research is important to examine the long-term impact of internship training on career outcomes, including job placement, retention, and early career performance.

If these suggestions are implemented systematically by organizations, educational institutions, interns, and future researchers, internship programs can be progressively optimized so that training interventions consistently produce interns who are better prepared, more skilled, and more ready to enter the professional world.

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