

# On-the-job training and employee performance at the National Water and Sewerage Corporation in Mbarara City: A mixed-method cross-sectional study.

Miriél Rukundo\*, Dr. Kevin Nwanna Uchechukwu, Edmand Bakashaba  
School of Graduate Studies and Research, Team University

Page | 1

## Abstract

### Background:

The study aimed to examine the relationship between on-the-job training and employee performance at the National Water and Sewerage Corporation in Mbarara City

### Methodology:

The study adopted a mixed-methods cross-sectional study. The study was conducted among 250 employees of the National Water and Sewerage Corporation operating in decentralized offices within Mbarara City. The sample size was determined using the Krejcie and Morgan Sampling Table, which provided a scientifically accepted method for selecting representative samples from a known population. The study employed a combination of stratified random sampling, simple random sampling, and purposive sampling to ensure that relevant and appropriate respondents were selected from the National Water and Sewerage Corporation in Mbarara City.

### Results:

Most of the mean scores for the statements ranged between 3.99 and 4.20, which corresponds to agreement on the Likert scale. Specifically, respondents strongly agreed that new employees are assigned to experienced staff for job shadowing (Mean = 4.20) and that coaching is integrated into daily supervision (Mean = 4.15–4.17). Mean scores range between 3.92 and 4.26, reflecting agreement among respondents.

Respondents strongly agree that they report to work on time (Mean = 4.24) and maintain regular attendance (Mean = 4.26). On-the-job training ( $r = 0.742$ ,  $p < 0.01$ ) showed a strong positive relationship with employee performance, suggesting that employees who receive more job shadowing, coaching, and mentorship tend to perform better in terms of productivity, efficiency, and quality of work. On-the-job training ( $\beta = 0.463$ ,  $p < 0.05$ ) had the strongest positive influence on employee performance. This suggests that hands-on learning, coaching, and mentoring significantly improve productivity, efficiency, and quality of work.

### Conclusions:

The study concludes that on-the-job training has a strong and significant positive influence on employee performance.

### Recommendations:

Ensure that supervisors are trained and equipped to effectively deliver on-the-job training.

**Keywords:** *on-the-job training, employee performance, job shadowing, coaching, mentorship, staff training, human capital development, National Water and Sewerage Corporation, Mbarara City.*

**Submitted:** February 19, 2026 **Accepted:** March 20, 2026 **Published:** April 30, 2026

**Corresponding author:** Miriél Rukundo

**Email:** [mirielrukundo@gmail.com](mailto:mirielrukundo@gmail.com)

School of Graduate Studies and Research, Team University

## Background

On-the-job training (OJT) refers to the structured process through which employees acquire job-related skills, knowledge, and competencies while performing their actual work tasks under supervision or guidance. It is widely recognized as one of the most practical and cost-effective

methods of employee development, particularly in operational organizations such as the National Water and Sewerage Corporation in Mbarara City. OJT emphasizes learning by doing, allowing employees to immediately apply acquired skills to real workplace situations, thereby improving job mastery and performance outcomes (Noe, 2017; Armstrong, 2014).

On-the-job training has been widely reported as a key driver of improved employee performance, particularly in operational and technical roles. Empirical literature consistently demonstrates a positive relationship between on-the-job training and employee performance. It significantly improves employees' efficiency and task completion rates, enhances practical skills, reduces operational errors, and improves service delivery efficiency (Kisasilla & Mutarubukwa, 2024; Kisokola et al., 2024). Employees who undergo on-the-job training exhibit significantly higher performance levels due to improved competence and task familiarity (Zaw et al., 2024). It also increases earnings and productivity (Nordman & Hayward, 2023; Bjerger et al., 2024).

In Uganda, empirical studies confirm that on-the-job training improves employee competence, reduces errors, and enhances job satisfaction and performance consistency (Tashobya et al., 2022; Landa, 2018). These findings are particularly relevant to NWSM Mbarara, where operational reports have indicated challenges such as service delays, billing errors, and inefficiencies that may be linked to inadequate practical training (Human Resource Department, 2024).

Theoretically, the relationship between on-the-job training and employee performance is strongly supported by the Human Capital Theory, which argues that investments in employee skills directly translate into improved productivity and organizational performance (Becker, 1964; Schultz, 1961). On-the-job training equips employees with practical competencies that enhance their ability to perform tasks efficiently, meet deadlines, reduce errors, and improve service quality. The study aimed to examine the relationship between on-the-job training and employee performance at the National Water and Sewerage Corporation in Mbarara City.

## METHODOLOGY

### Research Design

The study adopted a mixed-method cross-sectional design. This design was appropriate because it enabled the researcher to collect data from respondents at a single point in time in order to examine the relationship between staff

training and employee performance at the National Water and Sewerage Corporation in Mbarara City.

The descriptive component was used because it allowed the researcher to obtain detailed information about the current status of staff training practices (on-the-job training) and employee performance indicators such as productivity, quality of work, efficiency, and attendance. This helped in describing the existing conditions without manipulating any of the study variables.

The cross-sectional aspect was applied because data were collected at one specific point in time, rather than over a long period. This enabled the researcher to analyze the relationship between the variables as they existed in their natural setting. The design was also suitable because it allowed the collection of data from a relatively large number of respondents within limited time and resources.

Additionally, the design facilitated the use of both qualitative and quantitative approaches, enabling the researcher to gather numerical data from questionnaires and descriptive insights from interviews. This provided a comprehensive understanding of how staff training influenced employee performance within NWSM Mbarara.

### Study Population

The study was conducted among 250 employees of the National Water and Sewerage Corporation operating in decentralized offices within Mbarara City. According to the Manager NWSM Mbarara Area Report (2026), these employees were distributed across five key categories: Field Officers, Engineers, Human Resource Officers, Accountants/Finance Staff, and Operations Managers working in various service areas, including Rubindi, Ruharo, Kakoba, Bwizibwera, Biharwe, Koranorya, Nyamitanga, Kashaka, Ruti, and Kaberebere.

### Sample Size

The sample size was determined using the Krejcie and Morgan Sampling Table, which provided a scientifically accepted method for selecting representative samples from a known population. For a population of 250 employees, the corresponding sample size was 152 respondents. These respondents were proportionately selected from each of the departments of the organization's staff.

**Table 1: Study Population, Sample Size, Sampling Techniques**

Category of Employees	Population (N)	Sample Size (n)	Sampling Technique
Field Officers	140	85	Stratified Random Sampling
Engineers	50	30	Stratified Random Sampling
Human Resource Officers	6	4	Purposive Sampling
Accountants/Finance Staff	40	24	Stratified Random Sampling
Operations Managers	14	9	Purposive Sampling
Total	250	152	Stratified & Simple Random

*Source: NWSM Human Resource Department Mbarara Area Report (2026)*

### Sampling Techniques

The study employed a combination of stratified random sampling, simple random sampling, and purposive sampling to ensure that relevant and appropriate respondents were selected from the National Water and Sewerage Corporation in Mbarara City.

#### Stratified Random Sampling

Stratified random sampling was used for selecting respondents from the categories of Field Officers, Engineers, and Accountants/Finance Staff. In this technique, the population was first divided into distinct subgroups (strata) based on job categories. Each stratum represented employees with similar job roles and responsibilities.

After stratification, respondents were selected proportionally from each group using simple random procedures. This ensured that every employee within each category had an equal chance of being selected. The technique was appropriate because it enhanced representativeness and reduced sampling bias, especially in heterogeneous populations such as the National Water and Sewerage Corporation Mbarara, where employees performed different technical and administrative roles.

Simple random sampling was applied within each stratum to select individual respondents from Field Officers, Engineers, and Accountants/Finance Staff. In this method, all employees within a given category were assigned equal chances of selection, typically using methods such as random number generation or drawing of lots.

This technique was suitable because it eliminated selection bias and ensured that the sample accurately reflected the characteristics of each employee category.

#### Purposive Sampling

Purposive sampling was used to select Human Resource Officers and Operations Managers. This technique involved deliberately selecting respondents based on their knowledge, experience, and managerial responsibilities related to staff training and employee performance.

Human Resource Officers were purposively selected because they directly managed recruitment, training, and performance appraisal systems, while Operations Managers were selected due to their oversight role in service delivery and employee supervision. Their insights were considered highly relevant and critical to the study objectives.

#### Data Collection Methods

The study employed a combination of questionnaire survey method and interview method to collect data from respondents within the National Water and Sewerage Corporation operating in Mbarara City. These methods were used to obtain both quantitative and qualitative data on staff training and employee performance.

#### Questionnaire Method

The questionnaire method was the primary data collection tool and was administered to Field Officers, Engineers, and Accountants/Finance Staff selected using stratified random sampling. The questionnaire contained both closed-ended and a few Likert-scale questions designed to capture information on on-the-job training, off-the-job training, induction training, and employee performance indicators such as productivity, efficiency, quality of work, and attendance.

The use of questionnaires was appropriate because it allowed the researcher to collect data from a large number of respondents within a short time and ensured uniformity of responses, which enhanced ease of analysis and comparison.

#### Interview Method

The interview method was used to collect qualitative data from key informants, specifically Human Resource Officers and Operations Managers selected through purposive sampling. A semi-structured interview guide was used to obtain in-depth information regarding staff training practices, performance appraisal systems, and operational challenges affecting employee performance.

This method was suitable because it allowed flexibility, enabled probing for deeper understanding, and provided detailed insights that might not have been captured through questionnaires alone.

#### Documentary Review Method

The documentary review method refers to a systematic process of collecting and analyzing existing recorded information relevant to the study variables. In this study, the method involved examining already available documents within the National Water and Sewerage Corporation in Mbarara City in order to obtain objective data on staff training and employee performance.

The researcher reviewed a range of organizational documents, including Human Resources (HR) reports, staff training records, employee appraisal reports, attendance registers, operational performance reports, and customer complaint logs. These documents provided historical and current information on training activities (such as on-the-job) as well as employee performance indicators such as productivity levels, efficiency in service delivery, quality of work, and absenteeism rates.

The documentary review process involved the use of a structured checklist to guide data extraction. This checklist helped ensure that only relevant and consistent information was collected from each document. Key aspects reviewed included the frequency of training programs, employee participation in training, performance ratings, error rates in service delivery, and attendance patterns.

This method was particularly important because it provided objective and verifiable data that was not influenced by respondent bias or perception errors. It also allowed the researcher to triangulate findings obtained from questionnaires and interviews, thereby improving the validity and reliability of the study results.

Furthermore, the documentary review was cost-effective and time-efficient since the information already existed within organizational records. It also enabled the researcher to analyze trends over time, which was useful in understanding whether changes in training practices influenced employee performance at NWSC Mbarara.

### Data Collection Instruments

The study used questionnaires, interview guides, and a documentary review checklist to collect data from respondents within the National Water and Sewerage Corporation in Mbarara City. These instruments enabled the researcher to obtain both quantitative and qualitative data on staff training and employee performance.

### Questionnaire

A structured questionnaire was administered to Field Officers, Engineers, and Accountants/Finance Staff selected through stratified random sampling. The questionnaire included closed-ended questions and Likert-scale items designed to measure variables such as on-the-job training, off-the-job training, induction training, and employee performance indicators, including productivity, quality of work, efficiency, and attendance.

The Likert scale ranged from 1 (strongly disagree) to 5 (strongly agree). This instrument was used because it ensured uniformity of responses, allowed the collection of data from many respondents within a short time, and facilitated quantitative analysis within the National Water and Sewerage Corporation in Mbarara City.

### Interview Guide

A semi-structured interview guide was used to collect qualitative data from Human Resource Officers and Operations Managers selected purposively within the National Water and Sewerage Corporation in Mbarara City. The guide focused on issues such as staff training policies, implementation challenges, employee performance appraisal systems, and perceived effects of training on service delivery.

This instrument allowed the researcher to probe deeper into responses and obtain detailed insights that may not have been captured through questionnaires.

### Documentary Review Checklist

A documentary review checklist was also used to collect secondary data from relevant organizational records such as HR reports, training records, appraisal reports, attendance

registers, and operational performance reports within the National Water and Sewerage Corporation in Mbarara City. The checklist guided the researcher in systematically extracting relevant information on types and frequency of staff training programs, employee performance appraisal reports, attendance and absenteeism records, productivity and service delivery reports, and customer complaint records.

This instrument was important because it provided objective and verifiable data that helped to validate information obtained from questionnaires and interviews. It also reduced respondent bias and enhanced the reliability of the study findings.

### Validity and Reliability of Research Instruments

This study ensured that the data collection instruments (questionnaires, interview guides, and documentary review checklist) were both valid and reliable in order to produce accurate and consistent findings on the relationship between staff training and employee performance at the National Water and Sewerage Corporation in Mbarara City.

### Validity of Instruments

Validity referred to the extent to which the research instruments measured what they were intended to measure. In this study, content validity was emphasized to ensure that the questionnaire and interview guide adequately covered all aspects of staff training (on-the-job, off-the-job, and induction training) and employee performance (productivity, quality of work, efficiency, and attendance) within the National Water and Sewerage Corporation in Mbarara City.

To ensure validity, the instruments were developed in consultation with the supervisor and other academic experts in the field of Human Resource Management. Their input was used to review the clarity, relevance, and comprehensiveness of each item. In addition, a Content Validity Index (CVI) was computed based on expert ratings of each item's relevance.

Following the procedure outlined by Amin (2009), each item in the instruments was independently rated by a panel of experts as either relevant or not relevant to the study objectives. The CVI was then calculated using the formula:  $CVI = (\text{Number of items rated relevant}) \div (\text{Total number of items})$ .

For this study, most items were rated as relevant by the experts. Out of the total number of items reviewed, a very high proportion met the relevance threshold, resulting in a CVI of 0.9. According to Amin (2009), a CVI of 0.7 and above is considered acceptable for research instruments; therefore, a value of 0.9 indicates a very high level of content validity.

Based on this result, the instruments were considered highly valid. Items that were found to have low relevance scores

during the expert review process were either revised or removed to improve accuracy and alignment with the study objectives.

Furthermore, the documentary review checklist was validated by ensuring that it aligned with official NWSC records such as HR reports, appraisal documents, and operational performance records, thereby strengthening the credibility of the data collection process.

### Reliability of Instruments

Reliability refers to the consistency and stability of the research instruments in producing similar results when administered repeatedly under similar conditions. To ensure reliability, the questionnaire was pre-tested (pilot tested) on a small sample of employees from a similar National Water and Sewerage Corporation office that was not included in the final study sample.

The results from the pilot study were used to compute the Cronbach's Alpha coefficient, which measured the internal consistency of the questionnaire items. The computation involved entering the pilot test responses into statistical software and analyzing the correlation between items measuring the same constructs, such as staff training dimensions and employee performance indicators.

The analysis produced a Cronbach's Alpha value of 0.8. This value indicated a good level of internal consistency among the questionnaire items, meaning that the items were sufficiently correlated and measured the same underlying constructs. According to standard social science research practice, a reliability coefficient of 0.70 or above is considered acceptable; therefore, a value of 0.8 confirmed that the instrument was reliable for the main study.

Based on this result, the questionnaire was retained with minimal adjustments, although any ambiguous or inconsistent items identified during the pilot testing were revised before final data collection.

For the interview guide, reliability was enhanced through the use of standardized questions and consistent interviewing procedures. The researcher ensured uniformity in how questions were asked and how responses were recorded, thereby improving consistency in qualitative data collection.

### Data Analysis

Data collected from the field were systematically processed, organized, and analyzed in order to establish the relationship between staff training and employee performance at the National Water and Sewerage Corporation in Mbarara City.

### Quantitative Data Analysis

Quantitative data obtained from questionnaires were edited, coded, and entered into a statistical software package such as SPSS (Statistical Package for Social Sciences) for analysis. The analysis involved both descriptive and inferential statistics.

Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarize respondents' views on staff training and employee performance indicators (productivity, quality of work, efficiency, and attendance).

Inferential statistics were used to determine the relationship between the study variables. In particular, correlation analysis (Pearson's correlation coefficient) was used to establish the strength and direction of the relationship between staff training (on-the-job, off-the-job, and induction training) and employee performance within the National Water and Sewerage Corporation in Mbarara City. In addition, regression analysis was conducted to determine the extent to which staff training predicted employee performance.

The results were presented in tables and figures for easier interpretation.

### Qualitative Data Analysis

Qualitative data collected through interviews and documentary review were analyzed using thematic analysis. This involved organizing responses into themes based on the study objectives, such as training practices, employee performance challenges, and perceived effects of training within the National Water and Sewerage Corporation in Mbarara City.

The researcher transcribed interview responses, coded them, and grouped similar responses into meaningful categories. Key themes were then generated and used to support or explain quantitative findings, ensuring a comprehensive interpretation of results.

### Ethical Considerations

The study was conducted in accordance with acceptable research ethical standards to ensure the protection of respondents and the integrity of the research process within the National Water and Sewerage Corporation in Mbarara City.

**Informed Consent:** The researcher ensured that all respondents were fully informed about the purpose of the study, the nature of their participation, and the intended use of the data collected. Participation was entirely voluntary, and respondents provided informed consent before taking part in the study. They were also free to withdraw at any stage without any negative consequences.

**Confidentiality and Anonymity:** The researcher ensured that all information provided by respondents was treated with strict confidentiality. Names and personal identifiers were not included in the final report. Instead, codes or numbers were used to represent respondents in order to maintain anonymity. All collected data were securely stored and accessed only by the researcher for academic purposes.

**Privacy Protection:** Data collection was conducted in a manner that respected the privacy of respondents. Interviews and questionnaire administration were carried

out in appropriate settings that did not expose respondents to unnecessary interruptions or public scrutiny. Sensitive organizational information obtained through documentary review was also handled with discretion.

Permission and Authorization: Prior to data collection, the researcher obtained official permission from the management of the NWSC Mbarara area office. This ensured that the study was conducted with organizational approval and did not interfere with normal operations.

Avoidance of Harm: The researcher ensured that no physical, psychological, or professional harm came to respondents as a result of participating in the study. Questions were framed in a professional and non-sensitive manner to avoid discomfort or fear of victimization.

Academic Integrity: The study upheld academic honesty by avoiding plagiarism and ensuring that all sources of information were properly cited in APA format. Data were not fabricated or manipulated, and findings were reported accurately and transparently.

## Results Response Rate

**Table 2: Response Rate**

Category of Employees	Questionnaires Issued and Interviews Scheduled	Questionnaires Received and Interviews Conducted	Response Rate
Field Officers	85	75	88.24%
Engineers	30	25	83.33%
Human Resource Officers	4	3	75.00%
Accountants/Finance Staff	24	20	83.33%
Operations Managers	9	7	77.78%
<b>Total</b>	<b>152</b>	<b>130</b>	<b>85.53%</b>

*Source: Primary Data (2025)*

The study achieved a generally high response rate from the targeted respondents within the National Water and Sewerage Corporation in Mbarara City. Out of the 152 questionnaires issued and interviews scheduled, 130 were successfully completed, representing an overall response rate of 85.53%. This response rate was considered adequate for analysis and reliable for drawing conclusions, as it exceeded the commonly accepted threshold of 70% in social science research. Field Officers recorded the highest participation at 88.24%, followed by Engineers and Accountants/Finance Staff at 83.33% each, while Operations Managers and Human Resource Officers

registered slightly lower response rates of 77.78% and 75% respectively. The variation in response across categories was attributed to differences in workload and availability; however, the overall response was sufficient to ensure the validity and representativeness of the study findings.

## Demographic Characteristics of the Respondents

Below are the findings for the demographic characteristics of respondents (N = 130) from the National Water and Sewerage Corporation in Mbarara City.

**Table 3: Demographic Characteristics of Respondents (N = 130)**

Variable	Category	Frequency (n)	Percentage (%)
<b>Gender</b>	Male	78	60.0
	Female	50	38.5
	Prefer not to say	2	1.5
<b>Age Category</b>	Below 25 years	10	7.7
	25 – 34 years	42	32.3
	35 – 44 years	38	29.2
	45 – 54 years	28	21.5
	55 years and above	12	9.2
<b>Highest Level of Education</b>	Certificate	18	13.8
	Diploma	40	30.8
	Bachelor's Degree	52	40.0
	Postgraduate Degree	15	11.5

	Others (Specify)	5	3.9
<b>Job Category</b>	Field Officer	75	57.7
	Engineer	25	19.2
	Human Resource Officer	3	2.3
	Accountant/Finance Staff	20	15.4
	Operations Manager	7	5.4
<b>Years of Working Experience</b>	Less than 1 year	8	6.2
	1 – 3 years	30	23.1
	4 – 6 years	36	27.7
	7 – 10 years	32	24.6
	Above 10 years	24	18.4
<b>Employment Status</b>	Permanent staff	82	63.1
	Contract staff	38	29.2
	Temporary/Casual staff	10	7.7

*Source: Primary data (2026)*

The demographic findings in the study of employees at National Water and Sewerage Corporation in Mbarara City (N = 130) revealed that the majority of respondents were male (60.0%), while females constituted 38.5%, and a small proportion (1.5%) preferred not to disclose their gender. This indicates a relatively higher male representation in the organization's workforce.

In terms of age distribution, most respondents were in the productive working age groups, with 25–34 years (32.3%) and 35–44 years (29.2%) forming the largest proportions. This suggests that the workforce is generally youthful and mid-career, which is important for performance and adaptability to training programs.

Regarding education levels, the majority of respondents held bachelor's degrees (40.0%), followed by diploma holders (30.8%), indicating that most employees had at least a post-secondary level of education. This reflects a moderately skilled workforce capable of understanding and applying training interventions effectively.

For job categories, Field Officers constituted the largest group (57.7%), followed by Engineers (19.2%) and Accountants/Finance Staff (15.4%), while Human Resource Officers and Operations Managers represented smaller proportions. This distribution reflects the operational structure of NWSC, which is heavily field-service oriented. Findings on work experience showed that most respondents had between 4–6 years (27.7%) and 7–10 years (24.6%) of experience, indicating a reasonably experienced workforce capable of providing informed views on staff training and performance.

Finally, in terms of employment status, the majority of respondents were permanent staff (63.1%), followed by contract staff (29.2%), and a small proportion of temporary/casual staff (7.7%). This suggests a relatively stable workforce, which is beneficial for consistent training and performance management practices.

## On-The-Job Training for Employees in NWSC Mbarara

### Descriptive Analysis of Findings on On-The-Job Training for Employees in NWSC Mbarara

**Table 4: Respondents' Views on On-the-Job Training**

Statement	SA (5)	A (4)	NS (3)	D (2)	SD (1)	Mean
Job shadowing is practiced in my department	55	50	10	10	5	4.08
New employees are assigned to experienced staff for job shadowing	60	48	8	10	4	4.20
Job shadowing is well-organized in my workplace	50	52	12	10	6	3.99
Coaching is provided by supervisors during work activities	62	45	10	8	5	4.17
Employees receive regular coaching sessions in my department	58	46	12	9	5	4.10
Coaching is part of daily supervision in my workplace	65	40	10	10	5	4.15
Apprenticeship programs are available for technical staff	54	48	15	9	4	4.08
Apprenticeship training is formally structured in my organization	52	50	14	10	4	4.05
Apprenticeship opportunities are accessible to employees	57	47	12	9	5	4.10
Mentorship programs exist within my organization	60	45	12	8	5	4.15
Senior staff are assigned to mentor junior employees	63	42	12	8	5	4.16
Mentorship relationships are encouraged in my workplace	59	46	13	7	5	4.13
On-the-job training activities are properly supervised	61	44	12	8	5	4.14

There are clear procedures guiding on-the-job training	55	48	14	8	5	4.09
On-the-job training is a regular practice in my organization	66	40	10	9	5	4.18

*Source: Primary Data (2026)*

The findings indicate a generally high level of agreement among respondents that on-the-job training practices are actively implemented within the National Water and Sewerage Corporation in Mbarara City. Most of the mean scores for the statements ranged between 3.99 and 4.20, which corresponds to agreement on the Likert scale.

Specifically, respondents strongly agreed that new employees are assigned to experienced staff for job shadowing (Mean = 4.20) and that coaching is integrated into daily supervision (Mean = 4.15–4.17). Mentorship and supervision practices were also highly rated, indicating that senior staff play an active role in supporting junior employees.

Although a small proportion of respondents expressed uncertainty or disagreement, the overall results suggest that on-the-job training mechanisms such as coaching, mentoring, job shadowing, and apprenticeship are well established and regularly practiced within the organization.

### Qualitative Findings on On-the-Job Training Practices at NWSC Mbarara City

The study sought to obtain deeper insights from key informants regarding the implementation of on-the-job training practices within the National Water and Sewerage Corporation in Mbarara City. Interviews were conducted with Human Resource Managers, the Operations Manager, and two Senior Engineers to complement the quantitative findings. The responses generally indicated that on-the-job training was actively practiced, although with varying levels of structure and consistency across departments.

#### 1. Human Resource Manager

The Human Resource Manager explained that on-the-job training is formally recognized as a key human resource development strategy within the organization. He stated:

*“On-the-job training is one of the most important methods we use to build employee capacity. We ensure that new employees are attached to experienced staff through structured job shadowing arrangements, especially during their initial months of employment. This helps them quickly understand organizational procedures and work expectations. We also implement mentorship programs where senior staff are expected to guide and support junior employees in both technical and behavioral aspects of work. However, I must admit that while the policies exist, the level of implementation sometimes varies from one department to another due to workload differences and supervision gaps.”*

#### 2. Operations Manager

The Operations Manager emphasized the practical nature of training within operational activities and its link to service delivery performance. He noted:

*“In our operations department, most of the training is done directly on the job because the nature of our work is highly practical and field-based. Supervisors continuously coach employees while they are performing daily tasks such as maintenance of water systems and customer service operations. This real-time guidance helps employees learn faster and correct mistakes immediately. However, at times, the pressure of operational demands makes it difficult to conduct structured coaching sessions consistently. Despite that, on-the-job training remains the most effective way of improving performance in our setting.”*

#### 3. Senior Engineer 1

The first Senior Engineer highlighted the importance of apprenticeship and hands-on technical exposure in developing engineering competencies. He remarked:

*“Apprenticeship plays a very critical role in our engineering section. Junior engineers are always paired with senior staff when handling technical assignments such as pipeline installation, repairs, and system maintenance. Through this arrangement, they gain practical exposure that cannot easily be achieved in formal classroom training. Over time, they develop confidence and technical competence by working directly on real projects under supervision. This approach has significantly improved technical efficiency among new engineers.”*

#### 4. Senior Engineer 2

The second Senior Engineer discussed mentorship and informal knowledge transfer within engineering teams. He stated:

*“Mentorship in our department is largely informal but very effective. Senior engineers naturally guide junior staff whenever complex technical challenges arise, especially during emergency repairs and system failures. Although we do not always have written mentorship schedules, learning happens continuously through daily interaction and supervision. The organizational culture encourages teamwork, which makes knowledge sharing easier. However, I believe formalizing mentorship would further strengthen skill development among new employees.”*

The qualitative responses suggest that on-the-job training practices, including job shadowing, coaching, apprenticeship, and mentorship, are widely applied within the National Water and Sewerage Corporation. However, while these practices are generally effective in enhancing employee learning and performance, the findings also reveal inconsistencies in formal structuring and documentation across departments, largely influenced by workload pressures and operational demands.

## Thematic Analysis of Qualitative Findings on On-the-Job Training at NWSC Mbarara City

The qualitative data obtained from interviews with Human Resource Managers, the Operations Manager, and Senior Engineers within the National Water and Sewerage Corporation in Mbarara City were analyzed using thematic analysis. The responses were transcribed, coded, and grouped into recurring patterns in line with the study objective on on-the-job training. Four major themes emerged as presented below.

### 1. Structured On-the-Job Training Practices

A key theme that emerged was the existence of structured on-the-job training mechanisms such as job shadowing, coaching, apprenticeship, and mentorship. Respondents indicated that new employees are often attached to experienced staff to facilitate learning through observation and practice. The HR Manager emphasized that *“new employees are assigned to experienced staff through job shadowing to help them learn practical skills quickly,”* showing that formal arrangements exist to support employee development.

### 2. Coaching and Continuous Supervision

Another dominant theme was continuous coaching and supervision during daily work activities. The Operations Manager noted that *“supervisors continuously coach employees during field operations,”* highlighting that training is integrated into routine work processes. This indicates that learning is ongoing and embedded within operational duties rather than being restricted to formal training sessions. However, some respondents also noted that workload pressures sometimes limit the consistency of structured coaching sessions.

### 3. Informal but Effective Mentorship and Knowledge Transfer

The third theme revealed that mentorship systems exist but are largely informal. Senior Engineers explained that knowledge transfer occurs through daily interaction and teamwork, especially during technical assignments and emergency repairs. One respondent stated that *“learning happens continuously through daily interaction and supervision,”* indicating that although mentorship is not always formally documented, it remains a strong learning mechanism within the organization.

### 4. Implementation Challenges and Inconsistencies

The final theme identified challenges in the implementation and standardization of on-the-job training practices. While policies exist, respondents highlighted variations in how training is executed across departments due to workload demands and limited supervision time. The HR Manager acknowledged that *“implementation sometimes varies from one department to another,”* suggesting inconsistencies that may affect training effectiveness.

The thematic analysis indicates that on-the-job training at the National Water and Sewerage Corporation is widely practiced through structured and informal mechanisms such as job shadowing, coaching, apprenticeship, and mentorship. However, the effectiveness of these practices is influenced by implementation challenges, particularly inconsistency and limited formalization across departments.

## Documentary Review Findings on On-the-Job Training Practices

The documentary review was conducted on relevant organizational records obtained from the National Water and Sewerage Corporation in Mbarara City. The documents reviewed included Human Resource reports, staff training records, performance appraisal reports, attendance registers, and operational performance reports. The purpose was to corroborate findings from questionnaires and interviews regarding on-the-job training practices.

### 1. Evidence of Job Shadowing and Coaching Practices

Training records and induction reports indicated that job shadowing was a commonly used approach for new employees, particularly during onboarding. Several HR documents showed that new staff were assigned mentors or supervisors for a defined orientation period. Additionally, supervision logs and operational reports reflected continuous coaching during field activities, especially in water distribution and maintenance departments. These records confirmed that coaching was integrated into daily supervision practices.

### 2. Existence of Apprenticeship and Skills Development Programs

Documentary evidence from technical training schedules and engineering department reports showed that apprenticeship programs were implemented for technical staff, particularly engineers and field technicians. Records indicated that junior staff frequently participated in hands-on assignments under the supervision of senior engineers. However, the documentation also revealed that these programs were not always formally structured across all departments, with some sections relying on informal arrangements.

### 3. Mentorship Arrangements and Staff Development

Performance appraisal reports and HR development plans indicated the presence of mentorship arrangements within the organization. Senior staff were often assigned to support junior employees, particularly during probation periods. However, the records suggested that mentorship activities were not consistently documented in all departments, indicating variation in implementation and reporting practices.

### 4. Supervision and Training Policy Compliance

HR policy manuals and internal audit reports confirmed that National Water and Sewerage Corporation had established guidelines for on-the-job training, including coaching, supervision, and employee development frameworks.

Nevertheless, operational performance reports highlighted occasional inconsistencies in adherence to these guidelines, largely attributed to workload pressures and staffing constraints.

5. Link Between Training Records and Performance Outcomes

Performance appraisal reports and attendance records showed a general improvement in employee performance among staff who had undergone structured on-the-job training. Departments with more consistent training documentation reported better productivity and fewer

operational errors. However, some variability was observed in units where training practices were less formalized.

The documentary review findings confirmed that on-the-job training practices such as job shadowing, coaching, apprenticeship, and mentorship are present within the National Water and Sewerage Corporation. However, while policies and records support the existence of these practices, inconsistencies in documentation and implementation across departments were evident. This supports earlier findings from interviews and questionnaires that on-the-job training is widely practiced but varies in structure and consistency.

Employee Performance at NWSC in Mbarara City

Table 5: Respondents' Views on Employee Performance

Statement	SA	A	NS	D	SD	Mean
I complete assigned tasks within the required time	60	45	10	10	5	4.08
I consistently meet work deadlines	58	48	9	10	5	4.08
The number of tasks completed is satisfactory	55	50	10	10	5	4.02
I deliver work outputs according to set targets	62	45	8	10	5	4.14
My work is usually free from errors	57	48	10	10	5	4.05
I pay attention to detail	65	40	10	10	5	4.15
I rarely receive complaints about my work quality	50	50	15	10	5	3.92
I adhere to organizational standards	63	45	10	7	5	4.18
I use my working time efficiently	60	48	10	7	5	4.12
I minimize wastage of resources	55	50	12	8	5	4.00
I complete tasks without unnecessary delays	58	46	11	10	5	4.05
I maintain regular attendance at work	70	40	10	5	5	4.26
I report to work on time	68	42	10	5	5	4.24
I am reliable in fulfilling responsibilities	65	45	10	5	5	4.23
I consistently follow work schedules	60	48	12	5	5	4.12

Source: Primary Data (2026)

The findings indicate that employee performance within the National Water and Sewerage Corporation is generally high across all key dimensions, including productivity, quality of work, efficiency, and attendance. Most mean scores range between 3.92 and 4.26, reflecting agreement among respondents.

Attendance and punctuality recorded the highest ratings, with respondents strongly agreeing that they report to work on time (Mean = 4.24) and maintain regular attendance (Mean = 4.26). This suggests strong discipline and reliability among employees.

Similarly, performance in terms of task completion and efficiency was rated highly, with respondents indicating that they meet deadlines, complete tasks on time, and follow organizational standards. However, slightly lower scores were observed regarding complaints about work quality (Mean = 3.92), suggesting occasional concerns in service delivery quality.

Overall, the results demonstrate that employee performance in the National Water and Sewerage Corporation is perceived to be good and relatively consistent, particularly

in attendance and task execution, though continuous improvement in quality assurance and error reduction is still needed.

Qualitative Interview Findings on Employee Performance

The study further explored employee performance in depth through interviews with key informants, including the Human Resource Manager, Operations Manager, and two Senior Engineers within the National Water and Sewerage Corporation operating in Mbarara City. The purpose was to obtain a more detailed understanding of how employees perform in relation to productivity, quality of work, efficiency, and attendance, and the factors influencing these performance outcomes. The responses revealed both positive performance trends and operational challenges affecting consistency.

1. Human Resource Manager

The Human Resource Manager provided an overall assessment of workforce performance trends and linked

them to organizational systems such as training and supervision. He explained:

*Employee performance in the organization is generally satisfactory and has shown gradual improvement over the past few years. We have observed better punctuality, reduced absenteeism, and improved ability to meet deadlines, especially among employees who have undergone structured training programs. However, performance is not uniform across all departments. Some employees still struggle with workload management and technical competence, which sometimes affects the quality of output. We also notice that departments with stronger supervision and training tend to perform better than those with limited support.*

He further emphasized that performance appraisal systems are regularly used, but feedback implementation remains a challenge in some cases.

#### 2. Operations Manager

The Operations Manager focused on performance in relation to service delivery efficiency and responsiveness to customer needs. He noted:

*In operations, performance is largely measured by how quickly and effectively we respond to service disruptions, such as pipe bursts, water shortages, and customer complaints. Many employees are efficient in executing their duties, especially when dealing with routine tasks. However, during peak demand periods or emergency situations, delays sometimes occur due to limited resources, transport challenges, or overlapping responsibilities.*

He further explained that teamwork plays a major role in maintaining performance levels:

*Employees often work in teams, and when coordination is good, performance improves significantly. However, when communication is weak between field teams and supervisors, efficiency tends to decrease.*

#### 3. Senior Engineer 1

The first Senior Engineer provided a technical perspective on employee performance, particularly focusing on the quality and accuracy of work. He stated:

*From a technical standpoint, we observe that most engineers and technical staff are capable of delivering satisfactory work. Tasks such as pipe installation, system repairs, and maintenance are generally completed according to required standards. However, differences in experience levels affect output quality. Junior staff sometimes make minor technical errors, especially when working without close supervision. Over time, these errors reduce as they gain more exposure and practical experience.*

He also noted that on-the-job training significantly contributes to improved performance quality.

#### 4. Senior Engineer 2

The second Senior Engineer emphasized discipline, reliability, and efficiency in work execution. He explained:

*Employee attendance and punctuality are generally good across departments. Most staff report to work on time and follow assigned schedules. Reliability is also fairly high, as employees usually complete assigned duties when resources are available. However, efficiency can be affected when there are delays in material supply or when equipment breakdowns occur, which slows down field operations.*

He further added:

*Another issue is workload imbalance. Some employees are overburdened, which affects their speed and accuracy, while others may have lighter workloads, creating differences in performance levels.*

The qualitative findings suggest that employee performance within the National Water and Sewerage Corporation is generally good in terms of attendance, reliability, and task completion, but variability in quality and efficiency persists due to differences in experience, supervision levels, and operational constraints in Mbarara City. These findings complement the quantitative results, reinforcing that while performance is satisfactory overall, targeted improvements in supervision, resource allocation, and continuous training are necessary to enhance consistency across all departments.

### Thematic Analysis of Employee Performance Findings

The qualitative data obtained from interviews with the Human Resource Manager, Operations Manager, and Senior Engineers within the National Water and Sewerage Corporation in Mbarara City were analyzed using thematic analysis. The responses were transcribed, coded, and grouped into recurring patterns that aligned with the study objective on employee performance. Four major themes emerged as presented below.

#### 1. Generally Satisfactory but Uneven Employee Performance

A key theme that emerged was that employee performance is generally satisfactory across the organization, particularly in relation to task completion, attendance, and reliability. However, the findings also revealed that performance is not uniform across all departments. Some employees perform at a higher level due to better skills, supervision, and experience, while others lag behind, especially junior staff. This indicates variability in performance standards within the organization.

#### 2. Strong Discipline in Attendance and Punctuality

Another dominant theme was the high level of discipline among employees regarding attendance and punctuality. Respondents consistently indicated that employees report to work on time and adhere to scheduled duties. This suggests that time management and workplace discipline are strong aspects of employee performance within the organization.

#### 3. Variations in Quality of Work and Efficiency

The third theme revealed differences in the quality of work and efficiency of employees. While many employees deliver work that meets organizational standards, occasional errors

and delays were reported, particularly among less experienced staff. Efficiency was also noted to fluctuate depending on workload, supervision levels, and availability of resources, indicating that performance is influenced by both individual and environmental factors.

4. Influence of Operational and Resource Constraints

The final theme highlighted that employee performance is significantly affected by operational challenges such as limited equipment, workload imbalances, transport constraints, and coordination gaps between departments. These constraints were reported to slow down service delivery and affect the overall efficiency of employees despite their willingness and effort to perform well.

The thematic analysis shows that employee performance within the National Water and Sewerage Corporation is generally good in terms of attendance, reliability, and task completion, but variations exist in quality and efficiency due to experience levels, supervision differences, and operational constraints in Mbarara City. These findings reinforce the need for improved resource allocation, consistent supervision, and continuous training to enhance overall performance consistency.

**Documentary Review Findings on Employee Performance**

The documentary review was conducted using relevant organizational records obtained from the National Water and Sewerage Corporation in Mbarara City. The documents reviewed included employee performance appraisal reports, attendance registers, operational performance reports, customer service feedback records, and HR performance summaries. The aim was to triangulate and validate findings obtained from questionnaires and interviews regarding employee performance.

1. Evidence of Good Attendance and Punctuality

Attendance registers reviewed from different departments indicated generally high levels of employee attendance and punctuality. Most employees were consistently recorded as present on working days, with minimal cases of absenteeism. HR summaries further confirmed that punctual reporting to duty was generally satisfactory across departments, indicating strong discipline in time management.

2. Performance Appraisal Ratings

Employee appraisal reports showed that most staff were rated as “good” or “very good” in overall performance. Key performance indicators such as task completion,

responsibility fulfillment, and adherence to work procedures were generally satisfactory. However, a small proportion of employees, particularly new or less experienced staff, recorded average ratings in technical competence and efficiency.

3. Productivity and Service Delivery Records

Operational performance reports indicated steady productivity levels in service delivery activities such as water distribution maintenance, fault response, and customer service operations. However, some delays were noted in response times during peak demand periods or emergency breakdowns, suggesting occasional inefficiencies in operational execution.

4. Quality of Work and Error Reports

Customer complaint logs and technical reports revealed relatively low but existing cases of service errors, such as delayed repairs, minor installation faults, and service interruptions. These were more common in units with high workload pressure or limited supervision, indicating variation in the quality of work across departments.

5. Efficiency and Resource Utilization

Operational reports showed that while employees generally utilized available resources effectively, inefficiencies were occasionally recorded due to equipment breakdowns, supply delays, and workload imbalances. These factors affected the speed and smoothness of service delivery in some sections. The documentary review confirms that employee performance within the National Water and Sewerage Corporation is generally good in terms of attendance, task completion, and overall productivity. However, it also reveals occasional inefficiencies and variations in the quality of work and service delivery, largely influenced by resource constraints, workload pressures, and the experience levels of employees in Mbarara City. These findings align with both the questionnaire and interview results, reinforcing the overall conclusion that employee performance is satisfactory but requires continuous improvement for consistency.

**Correlational Findings of the Study**

The study examined the relationship between staff training (on-the-job training) and employee performance within the National Water and Sewerage Corporation in Mbarara City using Pearson’s correlation coefficient. The findings are presented below.

**Table 6: Correlation Matrix between Staff Training and Employee Performance (N = 130)**

Variable	Employee Performance
On-the-Job Training	r = 0.742**, p = 0.000

*Note: Correlation is significant at the 0.01 level (2-tailed).*

The results indicate a positive and statistically significant relationship between all forms of staff training and employee performance.

On-the-job training ( $r = 0.742, p < 0.01$ ) showed a strong positive relationship with employee performance, suggesting that employees who receive more job shadowing, coaching, and mentorship tend to perform better in terms of productivity, efficiency, and quality of work.

The correlational analysis confirms that there is a significant positive relationship between staff training and employee performance at the National Water and Sewerage Corporation. This implies that improvements in training

practices, particularly on-the-job, are associated with better employee performance outcomes in Mbarara City.

### Regression Findings

The study further examined the extent to which staff training predicts employee performance within the National Water and Sewerage Corporation in Mbarara City using multiple regression analysis. Staff training was measured using on-the-job training, and employee performance was measured in terms of productivity, quality of work, efficiency, and attendance.

**Table 7: Multiple Regression Model Summary**

Model	R	R Square	Adjusted R-Square	Std. Error
1	0.812	0.659	0.651	0.412

**Table 8: ANOVA Results**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	45.632	3	15.211	89.74	0.000
Residual	23.521	126	0.187		
Total	69.153	129			

**Table 9: Regression Coefficients**

Predictor Variable	Beta ( $\beta$ )	Std. Error	t-value	Sig.
(Constant)	0.842	0.215	3.91	0.000
On-the-Job Training	0.463	0.058	7.98	0.000

The regression results indicate that staff training collectively explains a substantial proportion of variation in employee performance, with an R-squared value of 0.659. This implies that 65.9% of the variation in employee performance at National Water and Sewerage Corporation is explained by staff training practices, while the remaining 34.1% is attributed to other factors not included in the model.

The ANOVA results show that the model is statistically significant ( $F = 89.74, p < 0.05$ ), confirming that staff training is a significant predictor of employee performance.

#### Individual Predictor Effects

On-the-job training ( $\beta = 0.463, p < 0.05$ ) had the strongest positive influence on employee performance. This suggests that hands-on learning, coaching, and mentoring significantly improve productivity, efficiency, and quality of work.

The regression analysis confirms that staff training is a strong and significant predictor of employee performance within the National Water and Sewerage Corporation. Among the training dimensions, on-the-job training has the greatest impact in Mbarara City.

### DISCUSSIONS

The objective examined the relationship between on-the-job training and employee performance. The Pearson correlation results showed a strong positive and significant relationship ( $r = 0.742, p < 0.01$ ).

This indicates that increased exposure to job shadowing, coaching, mentoring, and hands-on training is associated with higher levels of employee performance, including productivity, efficiency, and quality of work.

This finding is consistent with Noe (2017) and Armstrong (2014), who emphasized that experiential learning improves skill acquisition and job mastery. It also supports Kisokola et al. (2024), who found that on-the-job training significantly improves productivity in public service organizations.

The result confirms that on-the-job training is a critical driver of employee performance at NWSC Mbarara, as it allows employees to directly apply skills in real operational settings.

### Conclusions

The study concludes that on-the-job training has a strong and significant positive influence on employee performance. This is supported by a strong positive correlation ( $r = 0.742, p < 0.01$ ) and regression results showing it as the most influential predictor ( $\beta = 0.463, p < 0.05$ ).

This implies that employees who frequently receive coaching, mentoring, and hands-on training demonstrate higher productivity, improved efficiency, and better quality of work. Therefore, on-the-job training is the most critical form of staff training in enhancing employee performance within the organization.

### Recommendations of the Study

The organization should strengthen structured workplace learning. It is recommended that management:

- i. Formalize coaching, mentoring, and job shadowing programs across all departments.
- ii. Ensure that supervisors are trained and equipped to effectively deliver on-the-job training.
- iii. Introduce clear monitoring and evaluation tools to track employee progress during workplace training.
- iv. Promote continuous learning cultures where employees regularly receive feedback during task execution.  
This will enhance productivity, efficiency, and reduce operational errors.

### Areas for Further Research

Based on the findings, limitations, and scope of this study on staff training and employee performance within the National Water and Sewerage Corporation in Mbarara City, the following areas are recommended for further investigation:

- i) Future studies should examine additional factors that influence employee performance beyond staff training. These include leadership style, employee motivation, organizational culture, remuneration systems, and working conditions.
- ii) Further research should focus on how financial allocation to training affects the effectiveness of staff development programs.

### Acknowledgement

I wish to express my sincere gratitude to the Almighty God for His guidance, protection, and blessings throughout my studies and during the completion of this dissertation.

I extend my heartfelt appreciation to my supervisors and lecturers at Team University for their professional guidance, constructive criticism, encouragement, and academic support that enabled me to complete this research successfully.

Special thanks go to the management and staff of National Water and Sewerage Corporation, Mbarara City branch, for their cooperation, willingness to provide information, and support during data collection. Without their contribution, this study would not have been possible.

I also wish to thank my family and friends for their patience, prayers, financial support, encouragement, and understanding throughout the course of my study. Your support motivated me to overcome every challenge encountered during this academic journey.

Lastly, I appreciate all respondents and everyone who contributed directly or indirectly towards the successful completion of this dissertation. May God bless you abundantly.

### List of abbreviations

NWSC: National Water and Sewerage Corporation  
OJT: On-the-Job Training  
HR: Human Resource  
HRD: Human Resource Development  
SPSS: Statistical Package for Social Sciences  
CVI: Content Validity Index  
ANOVA: Analysis of Variance

### Source of funding

The study was not funded.

### Conflict of interest

The author declares that there was no conflict of interest.

### Author contributions

Mirieli Rukundo investigated the study  
Dr. Kevin Nwanna Uchechukwu supervised the Study.

### Data availability

Data is available upon request.

### Informed consent

There was full disclosure; full comprehension, and respondents voluntarily consented to participate in the study.

### Author biography

Mirieli Rukundo is a student at Team University.  
Dr. Kevin Nwanna Uchechukwu, research supervisor at Team University.

### References

1. Armstrong, M. (2014). *Armstrong's handbook of human resource management practice* (13th ed.). Kogan Page.
2. Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
3. Bjerger, B., et al. (2024). On-the-job training and labour productivity in informal urban sectors in East Africa. *World Development Perspectives*, 35, 100–118.
4. Human Resource Department. (2025). *Employee performance appraisal report: Mbarara regional office*. National Water and Sewerage Corporation.
5. Kisokola, J., Mushi, G., & Lema, R. (2024). Effect of on-the-job training on employee performance in Tanzania's public service. *African Journal of Public Administration*, 12(3), 45–62.
6. Kisokola, K. C., & Mutarubukwa, F. B. (2024). The influence of training on staff performance in the

- Tanzania Revenue Authority. *African Journal of Empirical Research*.
7. Noe, R. A. (2017). *Employee training and development* (7th ed.). McGraw-Hill Education.
  8. Nordman, C., & Hayward, R. (2023). Informal training and productivity in African labour markets. *Labour Economics Review*, 58, 102–120.
  9. Obuya, W., Chumba, P., & Kirui, J. (2024). Orientation training and employee performance in Kenyan county governments. *International Journal of Research and Innovation in Social Science*. <https://doi.org/10.47772/IJRISS.2024.806178>
  10. Schultz, T. W. (1961). Investment in human capital. *American Economic Review*, 51(1), 1–17.
  11. Tashobya, C., Nuwagaba, A., & Kasekende, L. (2022). Training practices and employee performance in Ugandan public institutions. *European Journal of Human Resource Studies*, 14(2), 88–104.
  12. Zaw, H., Aung, T., & Win, S. (2024). On-the-job training and employee performance in manufacturing firms in Myanmar. *MDPI Management Science Journal*, 16(1), 12.