

Assessment of Auchi Polytechnic Management Staff Understanding of 360-Degree Evaluation Techniques

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Abstract:

This study assessed the theoretical knowledge and practical readiness of management staff at Auchi Polytechnic regarding 360-degree (multi-rater) evaluation technique. The 360-degree feedback method, which solicits performance assessments from supervisors, peers, subordinates, and the individual staff member being evaluated, represents a significant departure from conventional top-down appraisal and is increasingly advocated as a holistic instrument for performance management and leadership development in higher education institutions. Despite its growing global adoption, its adoption in Nigerian polytechnics remains limited, with little empirical evidence on the readiness of institutional management to implement it. A quantitative survey design was employed, with data collected from 69 management staff comprising Heads of Department, Directors, Deputy Registrars, Deans, and some senior administrative staff. A structured questionnaire of 15 Likert-scale items measured three latent dimensions: theoretical knowledge, practical skill, and implementation readiness. Data were analysed using descriptive statistics: Cronbach's Alpha reliability testing, one-sample t-tests, chi-square analysis, one-way ANOVA, and Pearson correlation, with an overall instrument reliability of $\alpha = 0.791$. Findings revealed that respondents demonstrated above-neutral scores across all three dimensions; theoretical knowledge ($\mu = 3.773$), practical skill ($\mu = 3.478$), and implementation readiness ($\mu = 3.467$), all significantly exceeding the neutral midpoint ($p < 0.001$). However, a consistent knowledge-to-practice gap was identified, with rater selection and feedback form design emerging as the weakest procedural competencies. Prior general appraisal training did not significantly elevate 360-degree-specific knowledge ($\chi^2 = 0.946, p = 0.623$), and no significant difference in scores was observed across administrative positions ($F = 1.091, p = 0.374$). Staff voluntarily acknowledged the need for further hands-on training ($\mu = 3.96$), signalling a receptive institutional climate. The study recommends the development of a dedicated 360-degree training curriculum, a departmental pilot scheme, and a formal institutional policy framework to bridge the identified readiness gap.

Keywords: 360-Degree evaluation, performance appraisal, management staff, implementation readiness, Auchi Polytechnic

INTRODUCTION

Performance appraisal is a core human resource management function that provides feedback to employees, aligns individual effort with organizational goals, and informs decisions on promotion, training, and rewards (Owolabi & Makinde, 2020; London & Smitter, 2002). In tertiary institutions, effective appraisal is critical due to increased student enrollment, rising operational costs, inadequate government grants, and the challenge of brain drain. Traditional appraisal methods in Nigerian public institutions have relied heavily on “superior assessment” where only superior employee rate lower staff, with little or no input from ratee’s peers, subordinates, or self-assessment. This top-down approach has been criticized for bias, favoritism, and failure to capture the full scope of staff performance, especially in areas of teaching, research, and community service (Owolabi & Makinde, 2020; Bracken & Rose, 2011; Atwater & Waldma, 2008).

To address these limitations, the “360-degree performance evaluation technique” has gained global acceptance. It is a multi-source feedback system that collects performance data from appraisee’s supervisors, peers, subordinates, self, and sometimes clients/students, which provides a holistic and balanced view of competencies. Unlike single-rater systems, 360-degree feedback reduces bias and discrimination by distributing responsibility across multiple raters (London & Smitter, 2002). Studies show it enhances self-awareness, reveals strengths and development needs, and fosters a culture of continuous improvement and collegiality in higher education (Pulakos & O’Leary, 2011; Bretz, Milkovich, Read (1992). In Nigerian universities, the technique has been applied to evaluate lecturers on paper qualifications, publications, dressing, temperament, punctuality, morality, and community service, with results indicating average performance in some areas and poor performance in research and community service (Hazuka, Hezlett, & Schneider, (1993).

Despite its benefits, successful implementation of 360-degree evaluation requires management staff to possess the “theoretical knowledge” of the concept, “practical skills” to implement its processes, and “implantation readiness”. Knowledge includes understanding the principles, rater categories, and feedback process, while competencies involve skills in designing inclusive questionnaires, ensuring rater confidentiality, interpreting feedback data, and providing developmental coaching (London & Smitter, 2002). Researches in higher education indicate that when appraisal systems are perceived as fair, transparent, and participatory, staff motivation and performance improve (Owolabi & Makinde, 2002). Conversely, lack of training for appraisers can weaken appraisal efficacy and create gaps between expected and actual performance.

At Auchi Polytechnic, Auchi, Edo State, existing personal experiences on performance appraisal reveal that staff regard the exercise as routine, often associated with favoritism and nepotism. Stakeholders within the institution have recommended that the institution should search for and embrace an appraisal system like the 360-degree technique that is transparently conducted and provide instant feedback on strengths and weaknesses. However, there is limited empirical evidence on whether management staff at Auchi Polytechnic understand the 360-degree technique or possess the requisite competencies to implement it beyond traditional superior-based appraisal.

Given this shift toward multi-rater feedback and the Polytechnic’s need for a fair, transparent, and productivity-enhancing appraisal system, assessing the level of knowledge, practical skills (competencies) and implementation readiness of management staff of Auchi Polytechnic becomes imperative. This study is therefore designed to assess Auchi Polytechnic management staff’s level of knowledge, competencies, and implementation readiness of the 360-degree performance evaluation technique in the institution.

STATEMENT OF PROBLEM

Performance appraisal remains a critical HRM function for aligning employee performance with institutional goals, especially in tertiary institutions facing increased enrollment, funding constraints, and brain drain. However, appraisal practices in Auchi Polytechnic continue to rely on traditional superior-based assessment where only supervisors rate staff performance. Empirical studies in Nigerian higher institutions reveal that 29% of academic staff are appraised through superior assessment, while peer assessment is as low as 4.8% and subordinate assessment records 0% (Owolabi & Makinde, 2020). This single-source approach has been criticized for bias, favoritism, and failure to capture multi-dimensional competencies such as teamwork, leadership, and service delivery (Umuoro & Nwoko, 2017).

To address these shortcomings, the 360-degree performance evaluation technique, which has emerged as a globally accepted multi-source feedback system, should be embraced and encouraged. The technique gathers performance data from supervisors, peers, subordinates, self, and clients to provide balanced, developmental feedback and reduce rater bias (Atwater & Wildma, 2008). Research shows that 360-degree feedback enhances self-awareness, reveals strengths and development challenges, and fosters collegiality when implemented systematically. Studies conducted in higher education institutions in 2022 further confirm that developmental 360-degree models prioritize continuous improvement and capacity building over judgment alone, making them

suitable for institutions seeking sustainable professional growth (Pulakos & O’Leary, 2011; Bretz, Milkovich, Read (1992).

Despite these benefits, effective implementation of 360-degree evaluation depends heavily on management staff’s conceptual knowledge of the technique, competencies to implement it, and level of management implementation readiness. Knowledge includes understanding the concept, rater categories, confidentiality, and feedback principles; while competencies involve how to design valid questionnaires (including distribution and retrieval), selecting raters, analyzing data, and providing constructive developmental coaching. Level of implementation readiness of management staff is also crucial – for example, management commitment to the transition.

At Auchi Polytechnic, Auchi, Edo State, no study, to the best of our knowledge, has assessed management staff knowledge, competencies, and readiness level to implement the 360-degree performance evaluation technique. This gap presents a serious problem; and without adequate knowledge, competencies and willingness to try a more objective method like the 360-degree perspective, attempts to introduce 360-degree feedback may result in resistance, misuse of feedback data, or reversion to biased appraisal practices. The institution may therefore continue to rely on the over-used and abused “top-down” that become ineffective.

It is against this background that this study seeks to assess Auchi Polytechnic management staff’s level of knowledge of, competencies, and level of implementation readiness of the 360-degree performance evaluation technique. The findings will identify awareness levels, competency gaps, and likely implementation challenges, thereby providing evidence-based recommendations for capacity building and improved appraisal practices.

SIGNIFICANCE OF THE STUDY

Performance appraisal remains central to achieving institutional goals, yet Auchi Polytechnic continue to rely on the traditional superior-based assessment where only supervisors provide ratings. Empirical studies in Nigerian higher institutions have shown that this single-source approach accounts for the bulk of appraisals while peer and subordinate feedback remain grossly underutilized, creating room for bias, favoritism, and incomplete evaluation of staff performance (Owolabi & Makinde, 2020; Umukoro & Nwoko, 2017). By examining management staff’s understanding of 360-degree feedback and their practical competencies, this study provides Auchi Polytechnic with evidence-based insight into whether the institution is prepared for a transition to a more balanced and developmental appraisal system.

In addition, the findings of this study will be particularly useful to the management of Auchi Polytechnic as it seeks to improve transparency and fairness in performance evaluation. Research indicates that the effectiveness of any appraisal system depends largely on the knowledge and skills of those implementing it, and that review efficacy is weakened when appraisers lack adequate training (Tornow, 1993). If management staff demonstrate low levels of knowledge or competency gaps, the institution can prioritize targeted capacity-building interventions before full implementation. This proactive step prevents resistance, misuse of feedback data, and reversion to biased practices, thereby protecting institutional resources and ensuring sustainable change. Furthermore, the study aligns with current trends in higher education that emphasize developmental appraisal models focused on continuous improvement rather than judgment alone.

For academic and non-academic staff who serve as appraisees, the significance of this study lies in its potential to promote a fairer appraisal culture. When employees perceive appraisal systems as transparent and participatory, their job satisfaction and performance tend to improve because they feel valued beyond the perspective of a single supervisor. This multi-source feedback reduces the perception of nepotism that many staff associate with current appraisal practices in the institution and fosters a culture of mutual accountability and collegiality.

The study also holds relevance for students and other service recipients of Auchi Polytechnic. In academic settings, students interact daily with lecturers and administrators, yet their feedback is rarely integrated into formal performance reviews. By assessing the implementation readiness of Auchi Polytechnic’s Management to

implement 360-degree evaluation, this research lays the groundwork for including student and subordinate perspectives in future appraisal processes.

Finally, beyond Auchi Polytechnic, this study contributes to the growing body of literature on modern performance appraisal practices in Nigerian polytechnics. With challenges such as brain drain, funding constraints, and demand for accountability facing tertiary institutions, there is urgent need for appraisal systems that are fair, credible, and developmental. The baseline data generated on knowledge, competencies, and readiness will serve as a reference for policymakers, HR practitioners, and researchers interested in reforming performance management in similar institutions. In this way, the study not only benefits Auchi Polytechnic but also advances scholarship on human resource development in the Nigerian education sector.

OBJECTIVES OF THE STUDY

The main objective of this study is to assess Auchi Polytechnic management staff's level of knowledge, competencies in implementing 360-degree performance evaluation technique, and the level of readiness of the institution's management to practice it. Specifically, the study will:

1. Determine the level of knowledge of Auchi Polytechnic management staff on the concept, principles, and operational requirements of 360-degree performance evaluation technique.
2. Assess the competencies of management staff in designing, administering, and interpreting feedback from 360-degree performance evaluation instruments.
3. Identify the challenges management staff face in implementing 360-degree performance evaluation technique in Auchi Polytechnic.
4. Examine the relationship between management staff's level of knowledge/competencies and their willingness to adopt 360-degree evaluation over traditional superior-based appraisal.

RESEARCH QUESTIONS

To guide the study, the following research questions were formulated:

1. What is the level of knowledge of Auchi Polytechnic management staff on the 360-degree performance evaluation technique?
2. To what extent do management staff possess the competencies required to implement 360-degree performance evaluation in the institution?
3. What challenges do management staff encounter in the implementation of 360-degree performance evaluation technique?
4. Is there a significant relationship between management staff's knowledge/competencies and readiness to adopt 360-degree evaluation instead of traditional appraisal methods?

HYPOTHESIS

Four hypotheses stated in null forms only were also tested in the study

1. H_{01} : The mean theoretical knowledge score of Auchi Polytechnic management staff regarding 360-degree evaluation does not significantly exceed the neutral level ($\mu \leq 3.0$).
2. H_{02} : The mean practical skill score of management staff regarding 360-degree evaluation does not significantly exceed the neutral level ($\mu \leq 3.0$).
3. H_{03} : The mean implementation readiness score of management staff does not significantly exceed the neutral level ($\mu \leq 3.0$).
4. H_{04} : There is no significant difference in theoretical knowledge scores between management staff who received prior appraisal system training and those who did not.

RESEARCH DESIGN

This study adopted a descriptive survey research design. The design was considered appropriate because the study sought to assess the current state of Auchi Polytechnic management staff's understanding of 360-degree evaluation techniques, their practical abilities to implement it, and level of implementation readiness without manipulating any variable. The design also allow for collection of data from a large population within a short time and provides opportunity to generalize findings to the entire population (Sounder, et al, 2019).

POPULATION OF THE STUDY

The population of the study comprised all management staff of Auchi Polytechnic, Auchi, Edo State. Specifically, it included Heads of Departments, Deans, Directors, Registrars, Bursars, Librarians, and Heads of Units who has at least five staff working directly under them. Records obtained from the Establishment Unit of the institution showed there are eight Deans, 52 heads of department, and eight directors. The Rector, deputy rectors, librarians, bursar, and some principal staff in the Establishment unit were also surveyed.

The inclusion criterion of "at least five staff" was adopted because 360-degree evaluation requires multiple raters, and heads with fewer subordinates may lack sufficient rater categories to implement the technique meaningfully.

SAMPLE AND SAMPLING TECHNIQUE

Due to the manageable size of the population, the study employed a census sampling technique. All management staff who met the inclusion criterion were included. This approach eliminates sampling error and ensures that the views of every relevant manager within the Polytechnique are captured.

INSTRUMENT FOR DATA COLLECTION

A structured questionnaire titled "360-Degree Evaluation Understanding and Readiness Questionnaire" (360-DEURQ) was used for data collection. The instrument was divided into four sections, viz:

Section A: Demographic information of respondents such as age, highest qualification, designation, department, years of management experience, and number of staff supervised, etc.

Section B: Knowledge of the concept of 360-degree evaluation. Items measured awareness of concept, rater categories, benefits, and limitations of the technique using a 5-point Likert scale: Strongly Agree = 5, Agree = 4, Neutral = 3 Disagree = 2, Strongly Disagree = 1.

Section C: Competencies to implement 360-degree evaluation. Items assessed include: skills in designing instruments, selecting raters, interpreting feedback, and giving developmental feedback.

Section D: Level of management readiness to implement 360-degree evaluation in Auchi Polytechnic. Items measured institutional support, resource availability, staff willingness, and perceived barriers to implementation.

Validity and Reliability of Instrument

To ensure content validity, the draft questionnaire was given to two experts in Human Resource Management, Test and Measurement from Auchi Polytechnic for face and content validation. Their corrections on wording, clarity, and relevance of items were incorporated before final administration.

For reliability, a pilot test was conducted on 10 management staff and another 10 management's staff in a neighboring polytechnic not included in the study. Table I show the reliability analysis.

Table I: Cronbach's Alpha Reliability Coefficients

Dimension	Items*	N Items	A
Theoretical Knowledge	AESP, CDTA, MEEP, RAHF, ODRP, OCCT	6	0.660
Practical Skill	KSFF, SFEP, UCMA, KODE, EIDE	5	0.747
Implementation Readiness	APMS, FIEM, PIUY, WAHR	4	0.510
All 15 Likert Items (Overall)		15	0.791

Source: Author's computation using SPSS. $\alpha \geq 0.70$ = acceptable; $\alpha \geq 0.60$ = marginally acceptable in exploratory research (Nunnally, 1978).

- See Table III, Column One the meaning of these abbreviation.

The overall Cronbach's Alpha of $\alpha = 0.791$ for all 15 items confirms acceptable internal consistency of the instrument as a whole. The practical skill sub-scale achieved the strongest reliability ($\alpha = 0.747$), while the implementation readiness sub-scale produced a marginally lower coefficient ($\alpha = 0.510$), which is not unusual for short scales (4 items) in exploratory institutional research. These values support the validity of proceeding with composite score analysis for each dimension.

METHOD OF DATA COLLECTION

Data for this study were collected through the administration of the structured questionnaire. The instrument was administered personally by the researcher with the assistance of seven other research assistants. The assistants, who are also academic staff, were recruited from each school in the institution. They were briefed by the researchers prior to data collection. To ensure consistency and accuracy in data collection, the briefing session covered the purpose of the study, ethical considerations, content of the questionnaire, and procedures for distribution and retrieval.

The target respondents were Deans, Heads of Departments, Directors, Registrars, Bursars, Librarians, and other Heads of Units in Auchi Polytechnic who supervise at least five staff. The researcher and the seven research assistants distributed the questionnaires directly to respondents in their offices across the various schools, directorates, and administrative units. This personal administration method was adopted to ensure high response rate and to provide respondents with immediate clarification on any item they found unclear. Table II show the response rate of questionnaire.

Table II: Response Rate of Questionnaires

Category	Number of Questionnaires	Percentage
Questionnaires Distributed	80	100
Questionnaires Retrieved	69	86.3
Questionnaires Not Retrieved	11	13.7
Total	80	100.0

Source: Authors' field work

As indicated in the table, out of 80 copies of the 360-DEURQ questionnaire distributed, 69 were successfully retrieved within the four-week data collection period. This gives a response rate of 86.3%, which is considered very good for survey research according to Babbie (2010), who noted that response rates above 70% are adequate for analysis and generalization. To ensure that only valid and usable data were included in the final analysis of the study, all retrieved questionnaires were checked for completeness and proper filling before being coded for analysis.

METHOD OF DATA ANALYSIS

Data collected were coded and analyzed using Statistical Package for Social Sciences (SPSS) Version 27. Demographic data were analyzed using frequencies and percentages. Research questions on knowledge, competencies, and readiness were answered using mean and standard deviation. A criterion mean of 2.50 was adopted on the 5-point scale; mean scores ≥ 2.50 indicated agreement/high level while mean scores < 2.50 indicated disagreement/low level. This statistical approach provided clear interpretation of management staff's current state regarding 360-degree evaluation.

SCOPE AND DELIMITATION OF THE STUDY

This study is limited to Auchi Polytechnic, Auchi, Edo State, Nigeria. It focuses specifically on management staff comprising HODs, Deans, Directors, Registrars, Bursars, Librarians, and other heads of units in both academic and administrative departments. The study assesses only three variables: 1) Level of knowledge of 360-degree performance evaluation technique, 2) Competencies in implementing the technique, and 3) level of readiness to implement it. Data was collected using structured questionnaires during the 2025/2026 academic session.

DELIMITATION OF THE STUDY

The study is delimited in the following ways:

Geographical delimitation: Findings cannot be generalized to all Nigerian polytechnics or universities, as appraisal culture differs across institutions.

Population delimitation: Only management staff are covered. Views of junior staff, academic staff without managerial roles, and students are excluded, though they are key raters in 360-degree feedback.

Conceptual delimitation: The study does not measure actual performance of staff or test-run 360-degree implementation. It only assesses knowledge and competencies required for implementation.

Methodological delimitation: The study adopts survey design with quantitative data. Qualitative insights from interviews/focus groups are not included.

These delimitations were set to keep the study focused, manageable, and within time/cost constraints.

LITERATURE REVIEW

Conceptual Review

Systematic review of literature shows 360-degree evaluation, also termed multi-source feedback, is a performance appraisal method where feedback is solicited from supervisors, peers, subordinates, and clients to assess an employee's competencies and behaviors (Bracken, Timmreck, & Church, 2001). Unlike traditional top-down appraisal, the 360-degree approach integrates multiple perspectives, thereby reducing single-rater bias and improving content validity (Smither, London, & Reilly, 2005). Meta-analytic evidence indicates that 360-degree feedback improves managerial performance when followed by coaching and goal-setting, with average effect sizes ranging from $d = 0.34$ to 0.50 (Smither et al., 2005).

In higher education, adoption has increased due to demands for accountability and developmental appraisal of academic leaders (Seldin & Miller, 2009). However, studies in developing countries report low conceptual clarity. A survey of Nigerian public universities found that 62% of managers confused 360-degree feedback with 180-degree appraisal, limiting proper implementation (Owolabi & Makinde, 2020). This gap suggests that knowledge of the concept is a prerequisite for adoption in institutions like Auchi Polytechnic.

Competencies Required for 360-Degree Evaluation Implementation

Competency-based literature identifies rater and appraisee skills as critical implementation factors. Key rater competencies include knowledge of the whole gamut of 360 degree appraisal, competencies in applying it, behavioral observation, specificity in feedback, confidentiality, and freedom from halo/recency bias (London &

Smither, 2002). On the other hand, appraisees require feedback orientation, emotional regulation, and action-planning skills to translate ratings into development (London & Smither, 2002).

Systematic reviews conclude that lack of rater training is the most cited barrier to valid 360-degree data (Pulakos & O’Leary, 2011). Organizations that provide 4–8 hours of training show higher inter-rater reliability and lower rating inflation (Bretz, Milkovich, & Read, 1992). In African tertiary institutions, evidence remains sparse, but available studies report that Heads of Department often lack training in delivering and receiving multi-source feedback, leading to resistance and mistrust (Umukoro & Nwoko, 2017; Owolabi & Makinde, 2020). This aligns with the general finding that competency deficits undermine psychometric quality and acceptance (Seldin & Miller, 2009).

Management Readiness for 360-Degree Evaluation Implementation

Organizational readiness for change theory posits that implementation success depends on change commitment and change efficacy (Weiner, 2009). Readiness is shaped by perceived benefits, leadership support, organizational culture, and prior change experience (Armenakis, Harris, & Mossholder, 1993). For 360-degree evaluation, readiness specifically involves managers’ willingness to receive upward feedback and cede some control over appraisal (Tornow, 1993).

Empirical studies show mixed readiness in public sector organizations. While managers acknowledge developmental benefits, fear of criticism and loss of authority reduce behavioral commitment (Hazucha, Hezlett, & Schneider, 1993). A meta-analysis of 24 studies found readiness correlated ($r = .41$) with actual implementation behaviors (Weiner, 2009). In Nigerian context, Owolabi and Makinde (2020) reported moderate attitudinal readiness among university managers but low readiness in terms of resource allocation and policy alignment. This attitude-behavior gap underscores the need to assess readiness at Auchi Polytechnic before rollout.

Summary of Literature and Research Gaps

The systematic review confirms three core prerequisites for 360-degree evaluation: 1) clear conceptual understanding, 2) rater/appraiser competencies, and 3) organizational readiness (Bracken et al., 2001; Weiner, 2009). Most studies are situated in corporate firms and Western universities, with limited evidence from Nigerian polytechnics (Owolabi & Makinde, 2020). Specifically, no Scopus-indexed study has assessed Auchi Polytechnic management staff on the three variables jointly. This gap justifies the current study, which will provide institution-specific data to guide policy on performance appraisal reform.

DATA ANALYSIS

Demographic Profile of Respondents

Table 1 and Figure 1 summarised the demographic characteristics of the 69 management staff who participated in the survey.

Table 1: Demographic Characteristics of Respondents (N = 69)

Variable	Category	Frequency	Percentage
Position	Head of Department (HOD)	39	56.5%
	Director	11	15.9%
	Deputy Registrar	15	21.7%
	Dean	2	2.9%
	Others (Rector, Librarian, etc.)	2	2.9%
Age	41–50 years	24	34.8%
	50+ years	44	63.8%
	31–40 years	1	1.4%
Highest Qualification	Master Degree	33	47.8%

	Doctorate	25	36.2%
	First Degree	11	15.9%
Years at Auchi Polytechnic	20+ years	38	55.1%
	16–20 years	18	26.1%
	11–15 years	10	14.5%
	6–10 years	2	2.9%
Previous Appraisal Training	Yes	49	71.0%
	No	19	27.5%
Received 360° Feedback Personally	No	32	46.4%
	Not Sure	18	26.1%
	Yes	19	27.5%

Source: Author's computation from SPSS survey dataset (N = 69), Auchi Polytechnic, 2026.

The demographic profile of respondents reveals a predominantly senior and experienced management cohort. Over 98% of respondents were aged 41 years and above, and more than 55% had served at the institution for over 20 years. This is a double-edged finding: while the depth of institutional experience provides a strong organisational foundation for implementing new systems, it may also imply entrenched appraisal habits and resistance to departing from traditional top-down evaluation methods — a concern well-documented in change management literature (Bracken & Rose, 2011). Encouragingly, 84% of respondents hold at least a Master's degree, indicating a high capacity to engage with the theoretical underpinnings of 360-degree evaluation. Not surprising, data show only 27.5% of respondents have personally experienced receiving 360-degree feedback, underlining the limited institutional exposure to the technique.

Descriptive Statistics and Item Analysis

Table 3 presents the mean and standard deviation for each of the 15 Likert-scale items, grouped by dimension. Scores are on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

Table III: Descriptive Statistics for All Likert Item (N = 69)

Code	Item (Abbreviated)	Mean	Std Dev	Interpretation
THEORETICAL KNOWLEDGE				
AESP	360° collects multi-source feedback from supervisor, peers, self, etc.	3.783	1.174	Agree
CDTA	Can explain difference between top-down and 360° appraisal	3.551	0.814	Agree
MEEP	Purpose is development, not pay or promotion	3.841	0.994	Agree
RAHF	Rater anonymity ensures honest feedback	3.870	1.162	Agree
ODRP	360° reduces bias in performance ratings	4.029	0.985	Agree
OCCT	Only leadership/teamwork competencies are suitable for 360°	3.565	1.182	Agree
	Knowledge Composite Mean	3.773	0.645	
PRACTICAL SKILL				
KSFF	Knows key sections in a 360° feedback form	3.275	0.820	Neutral-Agree
SFEP	Can select appropriate raters for a fair process	3.304	1.047	Neutral-Agree

UCMA	Can provide constructive feedback from aggregated 360° results	3.551	0.932	Agree
KODE	Knows common problems in 360° evaluation	3.406	0.944	Agree
EIDE	Understands ethical considerations (confidentiality, misuse)	3.855	0.928	Agree
	Practical Skill Composite Mean	3.478	0.661	
IMPLEMENTATION READINESS				
APMS	Institution has sufficient training resources	3.319	1.300	Neutral-Agree
FIEM	Confident to implement pilot in 6 months	3.464	0.933	Agree
PIUY	Has a plan to introduce 360° feedback this year	3.130	0.803	Neutral
WAHR	Would need additional hands-on training before use	3.957	0.898	Agree
	Readiness Composite Mean	3.467	0.637	
	OVERALL COMPOSITE MEAN	3.593	0.507	

Source: Author's computation. Scale: 1.00–1.80 = Strongly Disagree; 1.81–2.60 = Disagree; 2.61–3.40 = Neutral; 3.41–4.20 = Agree; 4.21–5.00 = Strongly Agree.

Figure 2: Mean Scores for All 360-Degree Evaluation Items

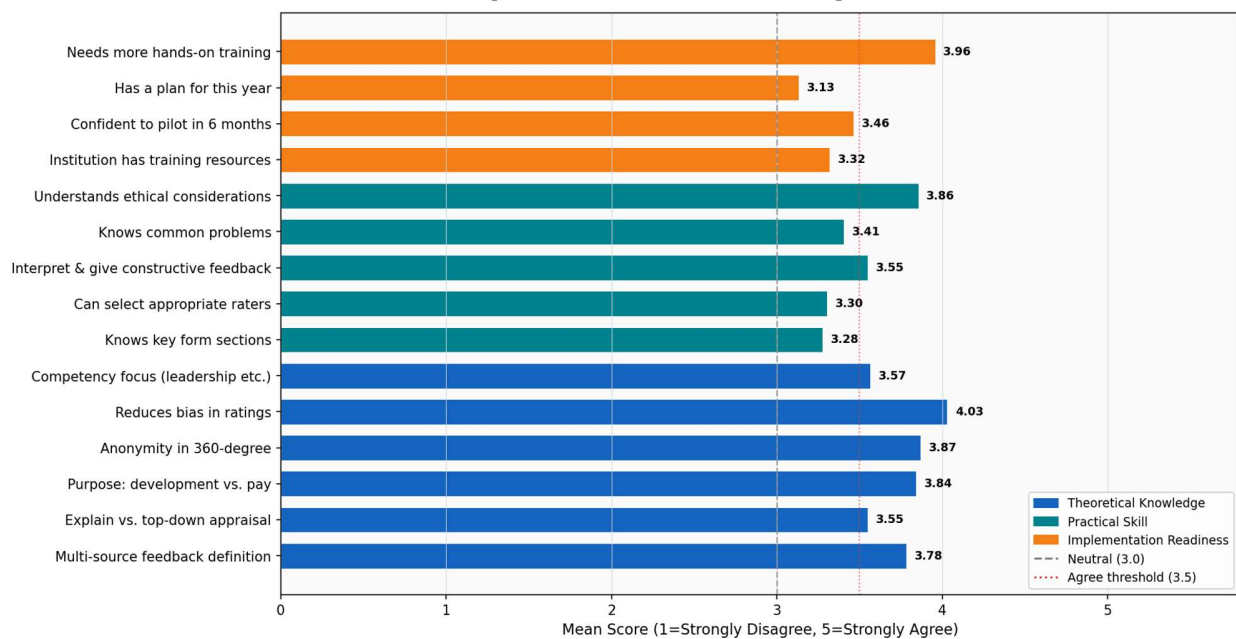


Figure 2: Mean Scores for All 15 Likert Items, Colour-Coded by Dimension. Dashed line = neutral (3.0); dotted line = agree threshold (3.5). Source: Survey data, 2025.

The item-level analysis reveals several important patterns. Among the **theoretical knowledge** items, the highest-scoring item is ODRP ("360° reduces bias in performance ratings", $\mu = 4.03$), indicating that respondents most strongly associate 360-degree evaluation with its bias-reduction advantage. The lowest-scoring theoretical knowledge item is CDTA ("Can explain the difference between traditional top-down appraisal and 360° feedback", $\mu = 3.55$), suggesting that while general awareness exists, the ability to **articulate the definitional distinction** remains somewhat weaker.

Within the **practical skill** dimension, the two lowest-scoring items are KSFF ("Knows the key sections in a 360° feedback form", $\mu = 3.28$) and SFEP ("Can select appropriate raters", $\mu = 3.30$). Both fall at the boundary of neutral and agree, pointing to a specific procedural knowledge gap: staff understand the concept but are less confident about **operationalising** it in practice.

The most notable finding in the **readiness** dimension is WAHR ("*Would need additional hands-on training*", $\mu = 3.96$), which is the second-highest scoring item across the entire instrument. This signals a clear and voluntary acknowledgement by management staff themselves that additional practical training is a prerequisite for effective implementation - a finding that directly informs the recommendations section.

Composite Dimension Score Analysis

Composite scores were computed for each of the three dimensions by averaging the relevant item scores. Table IV summarises the composite score statistics and Figure 3 provides a visual comparison.

Table IV: Composite Score Summary by Dimension

Dimension	Mean	Std Dev	Min	Max	Cronbach α	Category
Theoretical Knowledge	3.773	0.645	1.33	5.00	0.660	Agree
Practical Skill	3.478	0.661	1.80	4.80	0.747	Agree
Implementation Readiness	3.467	0.637	1.50	4.50	0.510	Agree
Overall Composite	3.593	0.507	2.00	4.73	0.791	Agree

Source: Author's computation. Mean > 3.40 corresponds to the "Agree" response category on a 5-point Likert scale.

Figure 3: Composite Scores and Knowledge Item Distribution

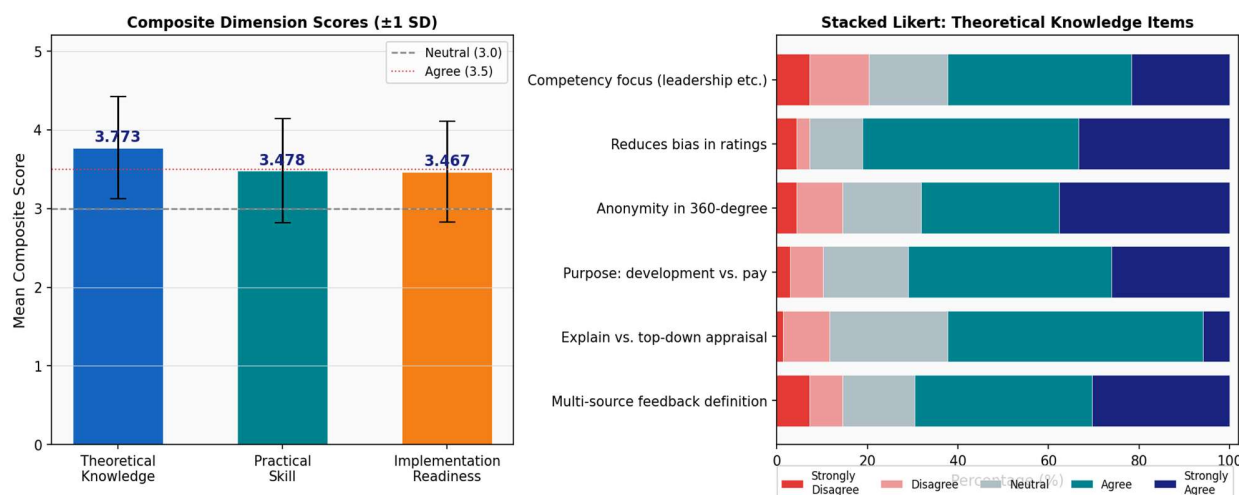


Figure 3: Left: Composite dimension means with ± 1 SD error bars. Right: Stacked Likert distribution for theoretical knowledge items. Source: Survey data, 2026.

The composite analysis confirms that management staff at Auchi Polytechnic demonstrate **above-neutral awareness and agreement** across all three dimensions. Theoretical knowledge scores highest ($\mu = 3.773$), reflecting that conceptual familiarity with 360-degree evaluation - its definition, purpose, and advantages is reasonably established across the management cadre. Practical skill ($\mu = 3.478$) and implementation readiness ($\mu = 3.467$) trail behind by approximately 0.3 points, a gap that, while statistically meaningful, indicates not a lack of awareness but a **readiness-knowledge asymmetry**: staff understand the method in principle better than they feel equipped to apply it in practice.

The standard deviation for theoretical knowledge (SD = 0.645) indicates meaningful variability in knowledge levels across respondents, with some staff scoring as low as 1.33 and others achieving the maximum of 5.00. This range suggests that knowledge is not uniformly distributed likely reflecting differences in educational background, prior training exposure, and personal study of human resources literature.

Hypothesis Testing

Four hypotheses were formulated and tested to provide structured inferential answers to the study's objective. All tests are conducted at the 5% level of significance ($\alpha = 0.05$).

Hypothesis One: Theoretical Knowledge

H₀₁: The mean theoretical knowledge score of Auchi Polytechnic management staff regarding 360-degree evaluation does not significantly exceed the neutral level ($\mu \leq 3.0$).

H₁₁: The mean theoretical knowledge score significantly exceeds the neutral level ($\mu > 3.0$).

Table V: One-Sample t-Test for Theoretical Knowledge (Test value = 3.0)

Statistic	Value	Df	p-value (2-tail)	Decision
Sample Mean (μ)	3.773			
Std Deviation	0.645			
t-statistic	9.947	68	0.0000	
p-value (one-tail)	< 0.0001			Reject H ₀₁

Source: Author's computation. Critical t-value at $df=68$, $\alpha=0.05$ (one-tail) = 1.668.

With $t(68) = 9.947$ and $p < 0.0001$, **H₀₁ is rejected**. Management staff possess theoretical knowledge of 360-degree evaluation that is **significantly above the neutral midpoint**. The knowledge gap, however, lies not in complete ignorance but in uneven depth some conceptual items (notably the definition of multi-source feedback and the developmental purpose) score more consistently than procedural nuances.

Hypothesis Two: Practical Skill

H₀₂: The mean practical skill score of management staff regarding 360-degree evaluation does not significantly exceed the neutral level ($\mu \leq 3.0$).

H₁₂: The mean practical skill score significantly exceeds the neutral level ($\mu > 3.0$).

Table VI: One-Sample t-Test Practical Skill (Test value = 3.0)

Statistic	Value	Df	p-value (2-tail)	Decision
Sample Mean (μ)	3.478			
Std Deviation	0.661			
t-statistic	6.012	68	0.0000	
p-value (one-tail)	< 0.0001			Reject H ₀₂

Source: Author's computation. Critical t-value at $df=68$, $\alpha=0.05$ (one-tail) = 1.668.

With $t(68) = 6.012$ and $p < 0.0001$, **H₀₂ is rejected**. Practical skill scores also significantly exceed neutral, though the margin above 3.0 is considerably **smaller (0.478 points)** compared to the knowledge margin (0.773 points). This confirms the knowledge-practice gap:.. That is, staff understand the 360-degree process better than they can operationalise it, consistent with Atwater and Bracken (2019) who distinguish between conceptual familiarity and procedural competence in multi-rater feedback systems.

Hypothesis Three: Implementation Readiness

H₀₃: The mean implementation readiness score of management staff does not significantly exceed the neutral level ($\mu \leq 3.0$).

H₁₃: The mean implementation readiness score significantly exceeds the neutral level ($\mu > 3.0$).

Table VII: One-Sample t-Test — Implementation Readiness (Test value = 3.0)

Statistic	Value	Df	p-value (2-tail)	Decision
Sample Mean (μ)	3.467			
Std Deviation	0.637			
t-statistic	6.093	68	0.0000	
p-value (one-tail)	< 0.0001			Reject H_{03}

Source: Author's computation. Critical t-value at $df=68$, $\alpha=0.05$ (one-tail) = 1.668.

H_{03} is rejected ($t = 6.093$, $p < 0.0001$). While statistically, implementation readiness is above neutral, the **PIUY** item ($\mu = 3.13$ "Has a plan to introduce 360° feedback this year") barely clears the neutral mark. This item captures concrete behavioural intention the weakest link in the readiness chain and signals that while general willingness exists, it has not yet crystallised into actionable implementation plans for most departments.

Hypothesis Four: Effect of Prior Training on Knowledge

H₀₄: There is no significant difference in theoretical knowledge scores between management staff who received prior appraisal system training and those who did not.

H₁₄: Management staff with prior appraisal training have significantly higher theoretical knowledge scores.

Table VIII: Chi-Square Test — Prior Training (PTS) vs. Knowledge Level Category

Group	Knowledge < 3.5	Knowledge ≥ 3.5	Total
Had Training (PTS = Yes)	11	38	49
No Training (PTS = No)	6	13	19
Total	17	51	68

Source: $\chi^2 = 0.946$, $df = 2$, $p = 0.623$. Author's computation.

Figure 4: One-Sample t-Test Results by Dimension ($H_0: \mu \leq 3.0$)

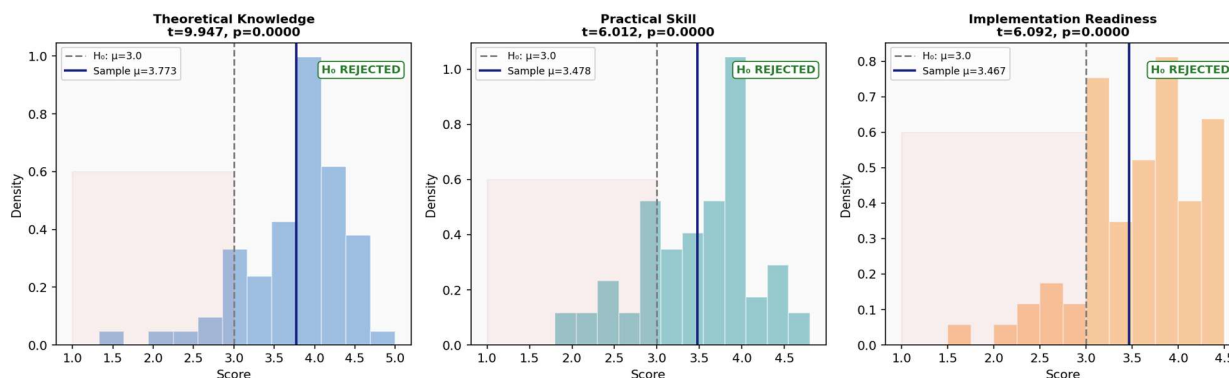


Figure 4: One-Sample t-Test Results — Distribution of Scores vs. Neutral (3.0) for each Dimension. Green label = H_0 Rejected.

Source: Survey data, 2026.

The chi-square test yields $\chi^2(2) = 0.946$ ($p = 0.623$), which **fails to reject H_{04}** . There is no statistically significant association between prior appraisal training and knowledge classification above or below the 3.5 composite threshold. While descriptively, trained staff had a slightly higher mean knowledge score ($\mu = 3.816$ vs $\mu = 3.644$ for untrained staff), this difference is not significant. This counter-intuitive finding suggests that prior appraisal training at Auchi Polytechnic may have focused on conventional top-down appraisal rather than 360-degree methodology, and/or that self-directed learning and senior-level exposure have partially equalised knowledge across both groups.

Figure 5: Training Background and 360-Degree Experience

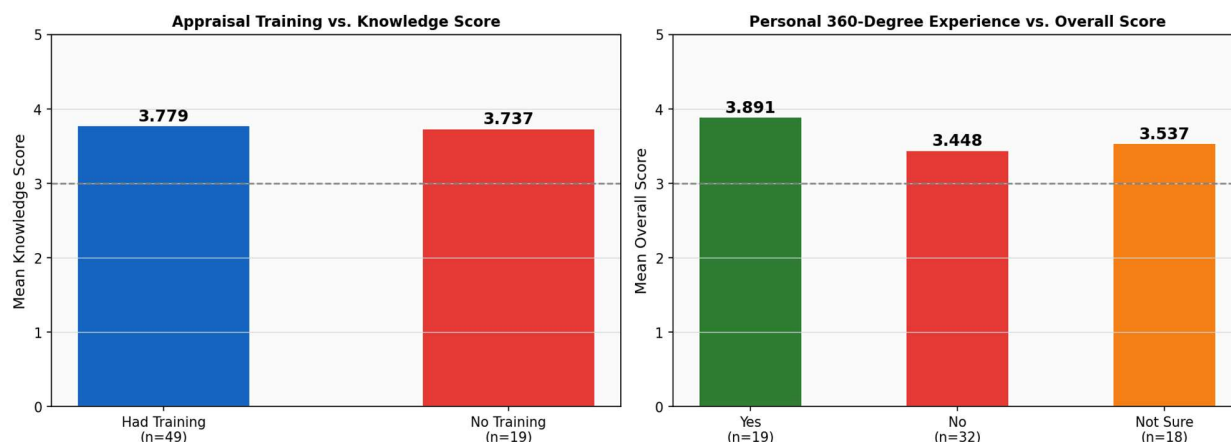


Figure 5: Mean Knowledge Score by Training Status (left) and Mean Overall Score by Personal 360° Experience (right). Source: Survey data, 2026.

Figure 5 (right panel) reveals that staff who have personally received 360-degree feedback (n=19) achieved the highest overall mean score ($\mu = 3.727$), compared to those who had not ($\mu = 3.531$) or were unsure ($\mu = 3.566$). This suggests that **experiential exposure** to 360-degree feedback as a recipient has a stronger positive influence on overall understanding than formal appraisal training alone, reinforcing the value of experiential learning in HR competency development (Kolb, 2015).

One-Way ANOVA: Position vs. Overall Score

Table IX: One-Way ANOVA on Administrative Position vs. Overall Composite Score

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.410	5	0.282	1.091	0.374
Within Groups	16.347	63	0.259		
Total	17.757	68			

Source: $F(5,63) = 1.091$, $p = 0.374$ (non-significant). Author's computation.

The one-way ANOVA ($F(5,63) = 1.091$, $p = 0.374$) reveals **no statistically significant difference** in overall 360-degree knowledge and readiness scores across administrative positions (HOD, Director, Deputy Registrar, Dean, Librarian, Deputy Rector). This finding suggests that knowledge of 360-degree evaluation is **uniformly distributed across the management hierarchy** neither senior leaders nor mid-level department heads are markedly more informed than the other. This is relevant for policy because it implies that a single standardised training programme, rather than rank-differentiated interventions, may be most efficient for institutional roll-out.

Correlation Analysis

Table 10: Pearson Correlation Matrix — Composite Dimension Scores

Dimension	Theoretical Knowledge	Practical Skill	Impl. Readiness
Theoretical Knowledge	1.000	0.464**	0.338**
Practical Skill	0.464**	1.000	0.411**
Implementation Readiness	0.338**	0.411**	1.000

Source: ** $p < 0.01$ (two-tailed). $N = 69$. Author's computation.

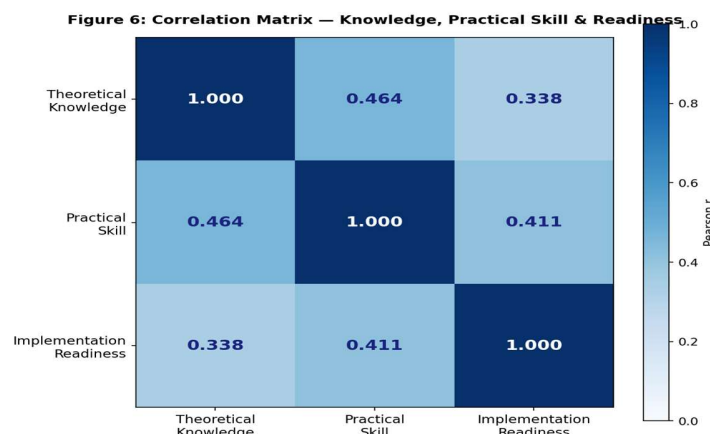


Figure 6: Pearson Correlation Heatmap on Theoretical Knowledge, Practical Skill, and Implementation Readiness. Source: Survey data, 2026.

All three composite dimensions are positively and significantly correlated with one another at the 1% level. The strongest correlation is between **theoretical knowledge and practical skill** ($r = 0.464$), suggesting that a stronger conceptual foundation is associated with greater procedural confidence - a logical relationship consistent with the knowledge-application continuum (Bloom, 1956). The weakest correlation is between **theoretical knowledge and implementation readiness** ($r = 0.338$), indicating that knowing about 360-degree evaluation and being institutionally ready to deploy it are more loosely coupled likely mediated by organisational factors such as resources, policy mandate, and leadership support that are external to individual knowledge capacity.

Discussion of Findings

The central finding of this study is that Auchi Polytechnic management staff possess a **moderate to good level of theoretical knowledge** about 360-degree evaluation ($\mu = 3.773$), which significantly exceeds the neutral baseline, while practical skill ($\mu = 3.478$) and implementation readiness ($\mu = 3.467$) remain competent but lag behind producing what this study characterises as a **"knowledge-readiness asymmetry."** This pattern is consistent with what Atwater and Waldman (2008) describe as the "diffusion gap" in multi-rater feedback adoption in non-Western institutions: awareness precedes competence, and competence precedes institutional commitment.

The finding that the highest-scoring item across the entire instrument is ODRP ("*360° reduces bias in performance ratings*", $\mu = 4.03$) is particularly significant. It suggests that management staff are most persuaded by the **fairness argument** for 360-degree evaluation - a motivational lever that HR policy designers can exploit in designing the institutional case for adoption. Conversely, the lowest practical skill scores on rater selection (SFEP, $\mu = 3.30$) and feedback form structure (KSFF, $\mu = 3.28$) reveal that the **procedural mechanics** of 360-degree implementation are the least understood - a gap that structured workshop training can most directly address.

The non-significant chi-square result for prior appraisal training versus knowledge ($p = 0.623$) is counterintuitive but explicable. The appraisal training that 71% of respondents have received was almost certainly **not 360-degree-specific**; it likely covered conventional annual performance review procedures, which are structurally and practically different from multi-rater feedback. This finding cautions against conflating general HR training exposure with specific competency in newer evaluation methods, and underscores the need for a dedicated 360-degree capacity-building curriculum.

The consistent acknowledgement of the need for more training (WAHR, $\mu = 3.96$) is, paradoxically, one of the most positive findings in the data. In change management literature, **perceived training need** when voluntarily acknowledged by the target group is a predictor of successful change uptake (Kotter, 1996). Staff who recognise their own skills gaps are more receptive to learning interventions than those who are unaware of their deficiencies.

This "productive humility" among Auchi Polytechnic management staff creates a favourable implementation climate.

The absence of position-based knowledge differentials (ANOVA, $p = 0.374$) has a practical implication: it confirms that the institution can **design a single training programme** that spans all management levels, rather than developing separate modules for senior and mid-level staff. This reduces the cost and complexity of the capacity-building intervention required.

Conclusion

This study assessed the current level of theoretical knowledge and practical readiness of Auchi Polytechnic management staff ($N = 69$) regarding 360-degree evaluation techniques. The findings, supported by one-sample t-tests, chi-square analysis, one-way ANOVA, correlation analysis, and Cronbach reliability testing, lead to the following principal conclusions:

1. **Knowledge is above neutral but unevenly distributed.** Management staff understand the conceptual basis of 360-degree evaluation at an above-average level ($\mu = 3.773$, $p < 0.001$). However, the range (1.33 to 5.00) indicates significant individual variability.
2. **A knowledge-to-practice gap exists.** Practical skills ($\mu = 3.478$) and implementation readiness ($\mu = 3.467$) lag behind theoretical knowledge by approximately 0.3 points, with rater selection and feedback form design emerging as the most underdeveloped procedural competencies.
3. **Staff acknowledge their own readiness gaps.** The voluntary recognition that additional hands-on training is needed (WAHR, $\mu = 3.96$) signals a constructive and receptive institutional climate for a targeted 360-degree training programme.
4. **Prior general appraisal training is insufficient.** Having received prior appraisal system training does not significantly elevate 360-degree knowledge, confirming that general HR training history cannot substitute for specific 360-degree competency development.
5. **Institutional implementation is not yet planned.** The weakest item in the entire instrument is PIUY ($\mu = 3.13$ "Has a plan to introduce 360° feedback this year"), underscoring that while knowledge and general willingness exist, concrete implementation planning has not commenced.

Recommendations

On the basis of these conclusions, the following evidence-based recommendations are presented to the management of Auchi Polytechnic for implantation:

1. **Develop a Dedicated 360-Degree Training Curriculum**
The Establishment Unit should design and implement a structured, 360-degree-specific training programme for all management staff, encompassing:
 - (a) the design of multi-rater feedback instruments;
 - (b) the selection and briefing of appropriate raters;
 - (c) the interpretation and constructive use of aggregated feedback results; and
 - (d) the ethical protocols for ensuring confidentiality and preventing feedback misuse.Given that the ANOVA results show no knowledge differential by position, a single standardised module applicable across all management ranks is both sufficient and efficient. Training should be delivered in cohorts of 15–20 to allow interactive, practical exercises not passive lecture-style delivery.
2. **Leverage the High Self-Reported Training Need**
The high WAHR score ($\mu = 3.96$) reflecting voluntary acknowledgement of training need represents a prime motivational window for institutional intervention. The Polytechnic Rector's office should officially commission the training programme within the next academic year, capitalising on this receptive posture

before institutional priorities shift. A memo from the Rector endorsing 360-degree evaluation as a priority initiative would strengthen this momentum.

3. Pilot 360-Degree Evaluation in Selected Departments

Given that confidence to pilot is moderately present (FIEM, $\mu = 3.46$) but concrete planning is lacking (PIUY, $\mu = 3.13$), the Polytechnic should designate two to three volunteer departments as pilot sites for a 360-degree evaluation cycle in the 2025/2026 academic year. The pilot should be supervised by an HR specialist or external consultant, with a structured evaluation of the pilot process to generate contextualised lessons for institution-wide scale-up. Choosing volunteer departments reduces resistance and generates internal champions who can advocate for broader adoption.

4. Strengthen Institutional Infrastructure for 360-Degree Evaluation

The APMS item ("*The institution has sufficient training resources*", $\mu = 3.32$) falls at the low end of the agree range, indicating moderate concern about resource adequacy. The administration should audit and, where necessary, invest in the material infrastructure required to support 360-degree evaluation: software or digital platforms for anonymous rater response collection, administrative guidelines for managing multi-rater processes, and a designated HR officer trained in 360-degree administration.

5. Expose More Staff to 360-Degree Feedback as Recipients

The analysis showed that staff who have personally received 360-degree feedback score highest on overall knowledge and competence. The administration should, therefore, incorporate a 360-degree feedback experience as part of the training programme itself having participants both design and receive structured multi-rater feedback within a controlled training context. This experiential element will close the gap between conceptual knowledge and practical confidence more effectively than didactic instruction alone.

6. Establish a Policy Framework for 360-Degree Evaluation

For implementation to progress beyond pilot and into institutional practice, formal policy backing is essential. The Academic Board and Governing Council of Auchi Polytechnic should consider promulgating a Performance Management Policy that officially recognises 360-degree evaluation as a component of the annual staff appraisal cycle; specifies the roles and responsibilities of raters and ratees, and establishes confidentiality and grievance procedures. Without policy institutionalisation, individual training investments risk dissipating without systemic impact.

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