Development of a Coaching Program on Leadership for Selected Personnel in a Healthcare Environment

Mark Jeembs M. Pineda, RN, PBT(ASCPi), MHPEd[1,2]

[1]*National Teacher Training Center for the Health Professions, University of the Philippines Manila, Manila, Philippines*
[2]*Tondo Medical Center, Manila, Philippines*

ABSTRACT

Objectives. This study aimed to develop and evaluate the effectiveness of a coaching program for enhancing leadership skills among selected personnel at Tondo Medical Center (TMC). Specifically, it sought to: (1) assess the current levels of self-awareness, knowledge, leadership behavior, and leadership skills among the coachees in the Department of Pathology and Laboratory; (2) design a relevant and transformative coaching program on leadership based on the results of the needs assessment; (3) measure the changes in self-awareness, knowledge, leadership behavior, and leadership skills of the coachees after the coaching intervention; and (4) determine the overall effectiveness of the coaching program formulated for the study. The program utilized the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model, focusing on improving self-awareness, knowledge, behavior, and leadership skills.

Methods. A quasi-experimental design was employed, incorporating pre- and post-test assessments to measure changes in leadership skills. The study was conducted in the Department of Pathology, which was purposively selected as the study site. Participants were randomly assigned to either the experimental group (n = 34), which underwent a structured coaching intervention, or the control group (n = 24), which did not receive the intervention. Data were analyzed using descriptive statistics, normality tests, and the Wilcoxon Signed-Rank Test to determine the program's impact on leadership development.

Results. Post-test evaluations demonstrated significant improvements in leadership skills among participants in the experimental group. Self-awareness scores increased from 2.9 to 4.86 ($Z = -4.88$, $p < 0.05$), and leadership skills showed the most significant improvement, increasing from 2.9 to 4.96 ($Z = -4.92$, $p < 0.05$). Knowledge and behavior also exhibited notable gains. The Wilcoxon Signed-Rank Test confirmed statistically significant changes ($p < 0.05$) in the experimental group, whereas the control group showed only minimal improvements, with slight changes in leadership skills ($Z = -2.01$, $p = 0.04$) and insignificant differences in other variables.

Conclusion. The coaching program proved highly effective in enhancing participants' leadership skills, including self-awareness, confidence, and professional growth. Participants rated the program's structure and delivery positively, with an overall mean satisfaction score of 4.91 (SD = 0.27). These findings underscore the potential of structured coaching programs to enhance

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Corresponding author:
Mark Jeembs M. Pineda, RN, PBT(ASCPi), MHPEd
National Teacher Training Center for the Health Professions
3rd Floor, Joaquin Gonzales Hall
University of the Philippines Manila
Taft Avenue, Ermita, Manila 1000, Philippines
Email: mmpineda3@up.edu.ph
ORCiD: https://orcid.org/0009-0005-2395-9905

leadership competencies in healthcare settings. Recommendations include expanding the program to other institutions, incorporating advanced content, and conducting long-term evaluations to assess sustained impacts.

Keywords: coaching, leadership, healthcare professionals, quasi-experimental design

INTRODUCTION

In the dynamic landscape of healthcare, effective leadership is crucial for patient satisfaction and institutional success. However, many hospital administrators have raised concerns about the lack of structured leadership development and succession planning in healthcare institutions.[1,2] Healthcare institutions often express dissatisfaction with their leadership pipelines, emphasizing the need for structured development programs.[3,4] Coaching has emerged as a viable solution, offering a structured approach to skill enhancement and performance improvement. Unlike mentoring, coaching focuses on specific performance areas and immediate concerns.[5]

Improving staff learning and development through coaching emphasizes short-term goals, such as enhancing employee performance, fostering teamwork, and refining essential skills.[5] Evidence from Theebom et al. highlighted that coaching contributes positively to individual performance, workplace well-being, and organizational outcomes, supporting its application in healthcare settings.[4] Similarly, Anderson emphasized that coaching can enhance accountability and goal attainment when integrated into institutional frameworks.[6] These findings strengthen the rationale for exploring coaching as a leadership development tool in hospitals. However, coaching in healthcare also faces challenges, including inconsistencies in credentials, high costs, and difficulties in measuring effectiveness.[7] Traditional directive management styles further pose barriers to adopting coaching methodologies, as many healthcare institutions rely on hierarchical structures.[8]

In the Philippines, the Civil Service Commission (CSC), in its *CSC Coaching Guidebook*, frames coaching as voluntary, coachee-initiated process, indicating that an individual may act as a coach provided that the person to be coached has requested and consented to the coaching engagement.[9] However, workplace implementation remains unclear regarding coaching strategies for subordinates versus non-subordinates.[8] Senior healthcare professionals often hold leadership roles due to their expertise, typically directing rather than coaching their teams. While this managerial style may be effective for administrative tasks, it can hinder the adoption of coaching principles that emphasize empowerment.[8]

Some hospitals have implemented leadership development programs, such as Tondo Medical Center's (TMC) GROW model, to prepare future leaders. However, the effectiveness of these programs in the healthcare setting requires further evaluation. The Department of Pathology and Laboratory was purposively selected because it plays a critical role in hospital operations and is composed of a diverse workforce—including pathologists, nurses, medical technologists, aides, and administrative staff—making it an ideal setting to examine the applicability of a coaching program across different professional roles.

By assessing the immediate outcome of the structured coaching, this study seeks to enhance TMC's leadership development framework and improve institutional performance and patient care outcomes.[3,5,10] Specifically, the study aims to: (1) assess the current levels of self-awareness, knowledge, leadership behavior, and leadership skills among the coachees in the Department of Pathology and Laboratory at TMC; (2) design a relevant and transformative coaching program on leadership based on the results of the needs assessment; (3) measure the changes in self-awareness, knowledge, leadership behavior, and leadership skills of the coachees after the coaching intervention; and (4) determine the overall effectiveness of the coaching program developed for the study.

METHODS

Study Framework

The framework of this study is presented in Figure 1. First, the preliminary levels of self-awareness, knowledge, behavior, and leadership skills of the participants were appraised to provide a baseline for understanding the coachees.[1,2] These were then analyzed using the **ADDIE (Analysis, Design, Development, Implementation, and Evaluation) instructional design model**, a systematic framework originally developed in the 1970s and widely applied in training and educational settings.[3,11]

Through the ADDIE model, a structured coaching program was developed. The **Analysis** phase identified the specific leadership gaps of the participants. The **Design** and **Development** phases focused on formulating relevant coaching strategies, determining the quantity and type of training needed, and equipping selected coaches with skills and knowledge to provide effective coaching.[5,12] The **Implementation** phase involved delivering the coaching program, targeting the gaps in leadership skills, self-awareness, and knowledge identified at the preparatory stages[1,13,14] Finally, the **Evaluation** phase assessed the participants' levels of knowledge, behavior, self-awareness, and leadership skills after the intervention, with feedback loops integrated to refine and continuously improve the coaching process.[15-18]

Overall, the framework provided a cyclical and iterative approach, ensuring continuous development for both the coaches and the participants.[16,19] This alignment of needs assessment, structured design, implementation, and evaluation served as the foundation for determining the effectiveness of the coaching program in enhancing leadership skills.

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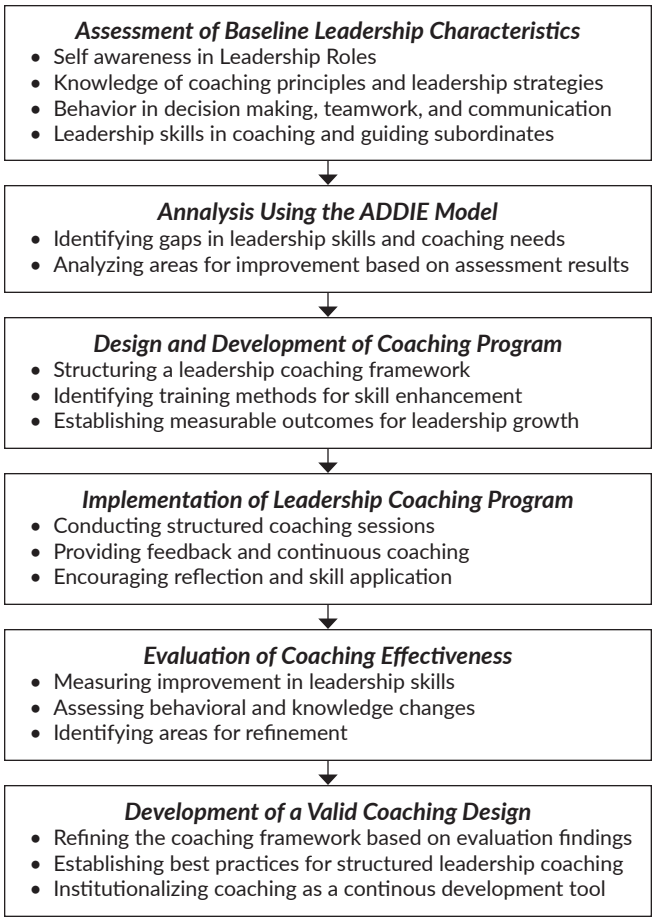

Figure 1. Conceptual framework for successful coaching.

Study Design

This quasi-experimental pre-test and post-test study developed and evaluated a coaching program for selected Human Resources for Health (HRH) staff in a tertiary hospital's Department of Pathology and Laboratory. Following a needs assessment, the researcher developed and implemented the program. Participants were purposively selected based on experience and leadership roles, and then randomly assigned to either the coaching or control group. Pre- and post-test data were collected from both groups using a modified Leadership Skills Questionnaire (LSQ) and Leadership Behavior Description Questionnaire (LBDQ).

The coaching intervention incorporated workshops, one-on-one and group coaching, and practical exercises, targeting self-awareness, knowledge, leadership behavior, and leadership skills. The control group continued with standard professional development activities. Comparative analysis of pre-and post-test results assessed the program's effectiveness in enhancing leadership capabilities.

The unit of analysis in this study was the individual participant.

Population and Sampling, and Study Setting

Purposive sampling was conducted, and the TMC Department of Pathology and Laboratory was selected due to its critical role in hospital operations and the need to develop personnel for leadership positions. The department consisted of 57 medical professionals, including doctors, nurses, technicians, and administrative staff. The coaching intervention targeted all 57 staff members who participated as coaches and coachees in the study. The sample size of 57 represented the total population of the department. While no a priori power analysis was performed, a post-hoc power analysis was later conducted to assess the adequacy of the sample size, confirming sufficient power for detecting medium effect sizes.

The department head and section heads were selected as coaches for their expertise and leadership experience, guiding junior staff as future leaders of the department. Participants were randomly assigned into two groups: 34 in the experimental group and 23 in the control group.

Coaching sessions were conducted onsite in a private and comfortable room within the hospital, ensuring a conducive environment for open discussions.

Development of Coaching Program and Data Collection Procedure

Phase 1 – Needs Assessment

A questionnaire was developed to assess baseline self-awareness, knowledge, leadership behavior, and leadership skills among coachees. It incorporated adapted and original items from validated leadership tools such as the Leadership Skills Questionnaire (LSQ) and Leadership Behavior Description Questionnaire (LBDQ), grounded in Goleman's emotional intelligence framework and Northouse's leadership theories.[13,14]

The questionnaire consisted of 40 items across three sections, rated on a 5-point Likert scale. Part I captured baseline characteristics, Part II measured post-coaching changes, and Part III assessed program effectiveness. Kirkpatrick's training evaluation model guided the tool's structure.[19]

Validation was conducted by five leadership experts who assessed clarity, relevance, and construct alignment. Multiple revisions refined the tool, ensuring validity. Pilot testing with 10 nurses at Tondo Medical Center confirmed its reliability and usability. The final instrument exhibited strong internal consistency (Cronbach's alpha: 0.83–0.99) across all constructs.

Phase 2 – Designing of the Coaching Program

The development of the coaching program was guided by the ADDIE model and was developed to address gaps identified in Phase 1. The program was designed to support continuous leadership development, empowering healthcare professionals to navigate complex work environments effectively.

The Analysis phase identified leadership challenges such as communication, decision-making, and team management, shaping the program's objectives.

The Design phase was structured around the four key modules: self-awareness, knowledge, leadership behavior, and leadership skills. This phase used case studies, role-playing, and discussions grounded in adult learning principles.

The Development phase involved the creation of expert-reviewed materials, including a coaching manual to serve as reference, and training materials and guides such as workbooks and interactive exercises, to enhance critical thinking and teamwork.

The Implementation phase developed the structured coaching sessions to be followed by trained coaches, ensuring a personalized yet flexible approach.

The Evaluation phase included formative and summative assessments, including real-time feedback and self-assessments, to determine the effect of the implementation on the self-awareness, knowledge, leadership behavior, and leadership skills of participants, and to refine the program. Assessment of the perception of participants regarding the content and structure of the program was also included to determine acceptability of the program.

Phase 3 – Training of Coaches

The researcher conducted a 120-minute coaching training session at TMC, equipping five preselected section heads—Consultant Pathologists, Medical Technologists, and Blood Bank Nurses—to serve as coaches. Their leadership experience minimized the need for extensive training.

The training of coaches was performed with a structured schedule to facilitate their understanding of necessary concepts. The training included the overview of the program's objectives, explanation of the four constructs (self-awareness, knowledge, behavior, and skills), and their alignment with coaching tools, practical guidance on specific coaching and facilitating skills, and other logistical concerns. An open discussion to address any questions or concerns was held between the author and the coaches.

The researcher reinforced the ADDIE model and coaching techniques with printed materials and follow-ups, ensuring consistency and smooth role transition for existing leaders.

Phase 4 – Coaching Intervention of Department Staff

The five trained section heads coached participants through a month-long coaching intervention that systematically developed leadership competencies. The program focused on one leadership construct per week to facilitate deep engagement with each concept.

The structured coaching process included weekly 60-minute one-on-one coaching sessions, group coaching, and practical exercises to reinforce learning. This approach ensured that leadership concepts were not only introduced but also reinforced through practical application, promoting long-term competency development among participants.

Each week in succession, the concepts of self-awareness, knowledge, leadership behavior, and leadership skills were taught. Discussions and guided assessments were more prominently employed in the first two weeks since these were more knowledge and theory based, while more practical exercises such as role-playing were more employed in the last two weeks since these were more concrete, involving behaviors and skills.

Data Processing and Analysis

Descriptive statistics, tests of normality, and the Wilcoxon Signed-Rank Test were employed to analyze changes in self-awareness, knowledge, leadership behavior, and leadership skills.

Given the small sample size, a normality test was conducted to test for non-normal distribution. Consequently, for non-normal distributions, the Wilcoxon Signed-Rank Test was used to compare pre-test and post-test scores.

All statistical analyses were conducted using IBM SPSS Statistics for Windows, Version 26.0 (IBM Corp., Armonk, NY, USA).

To facilitate a clearer interpretation, Likert scale responses (1 = Strongly Disagree to 5 = Strongly Agree) were converted to interval scale using a transmutation table (Table 1). This provided a structured approach to interpreting quantitative data, ensuring consistency in assessing participant responses.

Table 1. Verbal Interpretation of the Likert Scale

Scale	Mean Range	Verbal Interpretation
1	1.00-1.8	Very Low
2	1.81-2.60	Low
3	2.61-3.40	Moderate
4	3.41-4.20	High
5	4.21-5.00	Very High

Ethical Considerations

Participation was entirely voluntary, with coachees fully informed of the study's objectives, procedures, risks, and benefits. Written informed consent was obtained, ensuring that participants could withdraw at any time without consequences.

Confidentiality and privacy were strictly maintained. Data collected during pre-tests, coaching sessions, and post-tests were anonymized, and access was limited to the research team. Confidentiality agreements were signed to further protect participant identities.

Risks were minimal, primarily involving potential discomfort in discussing personal and professional matters during coaching. However, sessions were conducted in a supportive and confidential environment by experienced coaches. The study posed no conflicts of interest, and recruitment was conducted fairly and transparently.

This study complied with the 2017 Philippine Health Research Ethics Board (PHREB) guidelines, upholding respect for persons, beneficence, and justice, with any study modifications submitted for ethical review with approval code REC-2023-00045.

RESULTS

Analysis (A*DDIE*)

Ratings across all constructs in both the control and experimental groups were not normally distributed. The Shapiro-Wilk test results (Table 2) indicated a significant deviation from normality in both the control and experimental groups (p <0.001), necessitating the use of non-parametric tests. Wilcoxon Signed-Rank Test was employed to compare paired observations, ensuring robustness despite the non-normal data distribution.

Pre-test findings revealed moderate baseline levels across self-awareness, leadership knowledge, behaviors, and skills), with no significant differences between groups (p >0.05). This confirms comparability, ensuring that post-intervention changes can be attributed to the coaching program rather than pre-existing disparities.

Table 3 presents the pre-test results for self-awareness, knowledge, behavior, and leadership skills, showing no statistically significant differences between the control and experimental groups. The mean scores were nearly identical across variables (e.g., self-awareness: 2.8 vs. 2.9, z = -1.090, p = 0.276), and the Wilcoxon Signed-Rank Test yielded p-values greater than 0.05, confirming the groups' equivalence at baseline.

This baseline equivalence ensures that any post-test improvements can be attributed to the coaching intervention rather than pre-existing disparities, thus strengthening the internal validity of the study.

Design, Development, and Implementation (*A*DDI*E*)

A leadership coaching program was successfully designed and developed by the author, guided by the ADDIE model and informed by the pre-test findings. The program integrated adult learning principles and evidence-based leadership frameworks, incorporating techniques such as 360-degree feedback, SWOT analysis, and scenario-based activities. A comprehensive coaching manual, training materials, and structured session outlines were produced, aligning with the program's objectives. No significant deviations from the planned design and development process as described in the methodology were encountered.

The implementation phase proceeded as stated in the methodology, with full participation from all members of the intervention group throughout the four-week coaching period. Coaches trained by the researcher were able to facilitate the sessions effectively. Participant engagement was consistently high, and the coaching environment remained confidential and supportive, enabling open dialogue and reflective learning. Progress was monitored through documentation of action plans and feedback, with no reported issues of attrition, dissatisfaction, or resistance.

Table 2. Composite Table of Shapiro-Wilk Test for Four Constructs of both Control and Experimental Group (Pre-test)

Constructs	Group	Shapiro-Wilk Mean Rating		
		Statistic	Degrees of freedom	*p* value
Self-awareness	Experimental	0.680	34	<0.001
	Control	0.728	23	<0.001
Knowledge	Experimental	0.734	34	<0.001
	Control	0.714	23	<0.001
Behavior	Experimental	0.726	34	<0.001
	Control	0.724	23	<0.001
Leadership Skills	Experimental	0.728	34	<0.001
	Control	0.711	23	<0.001

Table 3. Composite Table on Pre-test Levels of Self-awareness, Knowledge, Behavior, and Leadership Skills

Variable	CTRL Mean	EXP Mean	Mean Difference	Wilcoxon Test (CTRL vs. EXP)	Interpretation (Wilcoxon)
Self-Awareness	2.8	2.9	0.1	z = -1.090, *p* = 0.276	Not significant
Knowledge	2.8	2.9	0.1	z = -0.891, *p* = 0.373	Not significant
Behavior	3.2	3.3	0.1	z = -0.837, *p* = 0.402	Not significant
Leadership Skills	2.8	2.9	0.1	z = -0.837, *p* = 0.402	Not significant

CTRL – Control Group, EXP – Experimental Group

Evaluation (*ADDIE*)

Table 4 presents the results of the Shapiro-Wilk Test for normality on the four key constructs (Self-awareness, Knowledge, Behavior, and Leadership Skills) for both the experimental and control groups during the post-test phase.

The Shapiro-Wilk Test results indicated a lack of normal distribution across all post-test variables in both the experimental and control groups. Key aspects, including reflection frequency, leadership theory familiarity, group cohesion, and communication effectiveness, consistently exhibited non-normal distributions.

Given these findings, the Wilcoxon Signed-Rank Test was used to analyze pre-test and post-test scores within groups. Table 5 presents the summary of post-test scores of participants from both control and experimental groups per general constructs using the grand means and Wilcoxon Signed-Rank Test at $p = 0.05$.

The experimental group demonstrated consistently higher mean scores (grand mean = 4.86, SD = 0.33) compared to the control group (grand mean = 3.17, SD = 0.47), most notably with self-awareness. The statistical significance of these improvements was confirmed, with Z-values ranging from -4.05 to -4.35 and corresponding p-values of <0.05 for all statements.

Comparison of Pre-test vs. Post-test Results in the Control Group

Minimal improvements were observed in the control group across measured variables, most of which were not statistically significant (Table 6). Leadership Skills displayed the most notable improvement, with a mean difference of 0.4 ($Z = -2.01$, $p = 0.04$), indicating marginal significance.

Comparison of Pre-test vs. Post-test Results in the Experimental Group

Table 7 shows the results of the pre-test and the post-test of the experimental group, showing significant improvement in all measured variables.

Perception of Participants on the Effectiveness of the Coaching Program in Achieving Objectives and Improving Leadership Performance

Feedback on the perception of participants regarding the effectiveness of the coaching program is shown in Table 8.

Table 4. Composite Table of Shapiro-Wilk Test for Four Constructs of both Control and Experimental Group (Post-test)

Constructs	Group	Shapiro-Wilk Mean Rating		
		Statistic	Degrees of freedom	*p* value
Self-awareness	Experimental	0.339	34	<0.001
	Control	0.464	23	<0.001
Knowledge	Experimental	0.390	34	<0.001
	Control	0.466	23	<0.001
Behavior	Experimental	0.451	34	<0.001
	Control	0.534	23	<0.001
Leadership Skills	Experimental	0.435	34	<0.001
	Control	0.515	23	<0.001

Table 5. Comparison of Post-test Scores of the Control and Experimental Groups Using the General Constructs

Construct	Mean (CTRL)	SD (CTRL)	Mean (EXP)	SD (EXP)	Wilcoxon Signed-Rank Test, *p*-Value
Level of Self-awareness	3.17	0.47	4.86	0.33	<0.05
Level of Knowledge	3.15	0.47	4.86	0.31	<0.05
Level of Behaviors	3.4	0.55	4.49	0.49	<0.05
Level of Leadership Skills	3.0	0.56	4.97	0.14	<0.05

CTRL – Control Group, EXP – Experimental Group, SD – Standard Deviation

Table 6. Descriptive Statistics and Wilcoxon Signed-Rank Test results (Z,*p*) for Pre-test and Post-test Results of the Control Group

Variable	Pre-test Means	Post-test Means	Mean Difference	Z-Value, *p*-Value	Interpretation
Self-awareness	2.8	3.0	0.2	Z = -0.92, *p* = 0.36	No Significant Improvement
Knowledge	2.8	3.1	0.3	Z = -1.12, *p* = 0.26	No Significant Improvement
Behavior	3.2	3.5	0.3	Z = -1.03, *p* = 0.30	No Significant Improvement
Leadership Skills	2.8	3.2	0.4	Z = -2.01, *p* = 0.04	Marginal Improvement

Table 7. Descriptive Statistics and Wilcoxon Signed-Rank Test results (Z,p) for Pre-test and Post-test Results of the Experimental Group

Variable	Pre-test Means	Post-test Means	Mean Difference	Z-Value, *p*-Value	Interpretation
Self-awareness	2.9	4.86	1.96	Z = -4.88, p <0.05	Significant Improvement
Knowledge	2.9	4.86	1.96	Z = -4.91, p <0.05	Significant Improvement
Behavior	3.3	4.49	1.19	Z = -4.85, p <0.05	Significant Improvement
Leadership Skills	2.9	4.96	2.06	Z = -4.92, p <0.05	Significant Improvement

Table 8. Effectiveness of the Coaching Program in Achieving Objectives and Improving Leadership Performance

Statement	Mean	SD	Z-value	*p*-value	Verbal Interpretation
1. The coaching program has helped me achieve my leadership development goals.	4.88	0.32	-4.23	<0.05	Highly Effective
2. The coaching sessions have been effective in enhancing my leadership skills.	4.94	0.23	-4.10	<0.05	Highly Effective
3. The coaching program has positively impacted my performance as a leader.	4.97	0.17	-4.30	<0.05	Highly Effective
4. The coaching program has improved my ability to lead my team effectively.	4.85	0.35	-4.18	<0.05	Highly Effective
5. The feedback received during coaching was constructive and helpful.	4.94	0.23	-4.12	<0.05	Highly Effective
6. The coaching program has increased my confidence in my leadership abilities.	4.79	0.40	-3.90	<0.05	Highly Effective
7. The program has contributed to my personal growth.	4.82	0.38	-4.01	<0.05	Highly Effective
8. The program has contributed to my professional growth.	4.88	0.32	-4.20	<0.05	Highly Effective
General Mean	**4.88**	**0.30**	**-4.15**	**<0.05**	**Highly Effective**

Notably, the results indicate that the program was highly effective in enhancing leadership skills and achieving developmental objectives. The general mean score for the experimental group was 4.88, reinforcing the program's positive impact.

Participants reported that the coaching program helped them achieve their leadership goals and enhanced their leadership skills. Moreover, the highest-rated item was the statement, "The coaching program has positively impacted my performance as a leader." (M = 4.97, SD = 0.17, p <0.05), suggesting strong agreement among participants on its effectiveness. Additionally, participants found the feedback received during coaching sessions constructive and helpful, and the program increased their confidence in leadership. Furthermore, the program contributed to both personal and professional growth.

The Wilcoxon Signed-Rank Test results indicate whether the differences between pre-test and post-test scores are statistically significant. A negative Z value reflects the direction of change, while a p-value <0.05 denotes that the observed improvements are unlikely due to chance.

Participants in the experimental group reported that the program objectives were well communicated and met, sessions were well-structured, materials were helpful and relevant, coaching sessions were convenient, facilitators were knowledgeable and effective, and the learning environment supported engagement. The general mean score for the experimental group was 4.88 indicating that participants viewed the program structure as highly effective (p <0.05) (Table 8).

DISCUSSION

Baseline Similarity between Control and Experimental Groups (Pre-test Results)

As presented in Table 3, the mean scores across all measured variables were slightly higher in the experimental group than in the control group. Despite these slight differences, the Wilcoxon test indicated no significant difference between the two groups across all variables (all p-values were greater than 0.05). This comparability ensured that participants started from similar baseline levels, thereby minimizing potential biases, as any observed improvements in post-test results can be more confidently attributed to the coaching program.

These findings align with Kimsey-House et al., who emphasized the importance of establishing a baseline before initiating coaching interventions.[15] Additionally, Passmore and Sinclair highlight that coaching is most effective when participants start with comparable competencies, while Quenza underscores the role of baseline assessments in facilitating measurable growth.[3,16]

Immediate Outcome of the Coaching Program

The coaching program brought about a marked and statistically significant improvement across all measured domains—self-awareness, knowledge, behavior, and leadership skills—among participants in the experimental group. The experimental group demonstrated significant growth across all measured domains. For example, self-awareness improved from a pre-test mean of 2.9 to 4.86 post-test, while leadership skills rose dramatically from 2.9 to 4.96. These enhancements were validated by Wilcoxon Signed Rank

Test values (Z = -4.88 to -4.92, p <0.05). On the other hand, participants in the control group showed marginal gains in self-awareness, knowledge, behavior, and leadership skills. However, these gains lacked statistical significance (p >0.05), implying that traditional approaches or passive experiences offered limited developmental benefit.

The control group's minimal progress serves as a reminder that leadership development does not occur by chance or exposure alone. Echoing the insights of Rothwell and Bakhshandeh, and Kets de Vries and Korotov, this study supports the argument that structured coaching—particularly when peer-supported—enables deeper reflection, promotes accountability, and accelerates professional growth.[17,18] It is not merely the presence of content, but the active engagement and structured delivery that make a significant difference. The comparative data highlight the gap between coached and uncoached participants, underscoring the value of guided and intentional leadership development efforts.

As evidenced by the comparison tables, the noted enhancements underscore the efficacy of structured coaching interventions over traditional, passive learning models. These results represent immediate learning outcomes achieved by participants following the coaching program. However, they should not yet be equated with long-term impact, which can only be determined through follow-up evaluations of sustained leadership behaviors and organizational effects.

The program's structure—anchored on well-organized face-to-face coaching sessions and clearly defined objectives—played a vital role in reinforcing the noted improvements. High participant satisfaction scores related to program delivery further validated its relevance and effectiveness. This consistency suggested that the program not only facilitated learning but also fostered personal and professional growth among future healthcare leaders.

In light of these findings, coaching can be viewed as a transformative strategy in leadership development. It provides a replicable, evidence-based model that institutions can adopt to empower leaders, promote competency-based growth, and build resilient teams in high-stakes environments like healthcare. The results support expanding similar coaching interventions to foster a culture of excellence and continuous improvement.

Linking Theory to Practice

Beyond the statistical differences in post-test scores, the significance lies in the tangible improvements in participants' workplace competencies—such as clarity in communication, effective decision-making, team leadership, and accountability. These are critical skills in high-pressure environments like healthcare settings, where effective leadership directly influences patient care and team dynamics.

The structured approach to the coaching program—combining face-to-face workshops with practical interactive sessions—created an environment in which deep learning and reflection could truly take place. Thus, improvements in performance and a deeper understanding of their leadership roles could be appreciated by participants within their healthcare teams.

From this, participants realized considerable gains in the application of the contingencies of leadership to real-life situations, exemplified through behaviors related to communication, decision-making, and team management. Indeed, this application of leadership theories, combined with behavior modification techniques, underlines the importance of experiential learning concepts emanating from adult learning theories.

Study Limitations

The study had several limitations. Its findings may have limited generalizability beyond Tondo Medical Center's Department of Pathology and Laboratory due to its unique roles and dynamics. The sample, which included pathologists, medical officers, medical technologists, technicians, laboratory aides, blood bank nurses, and administrative staff, may not reflect the diversity of other healthcare settings. Blinding of participants and coaches was not feasible due to the interactive nature of the intervention, which may have introduced bias. This is acknowledged as a study limitation.

Focusing on a single institution reduced external validity, as leadership styles and organizational cultures vary across facilities. The coaching program was tailored to this department's needs, limiting its applicability elsewhere. Individual differences, such as experience and personality traits, were not extensively examined, which may have influenced responses to coaching. The analysis did not differentiate outcomes based on profession or other such variables. Time and resource constraints also affected the depth and frequency of sessions, potentially impacting effectiveness.

Additionally, external factors like leadership changes or healthcare policy shifts may have introduced confounding variables. Despite these limitations, the study provides valuable insights into leadership development at Tondo Medical Center and a foundation for future research in diverse settings.

The use of a transmutation table to interpret Likert means may have oversimplified interval data, potentially masking subtle differences. Results should be interpreted with caution.

CONCLUSION AND RECOMMENDATIONS

The study concludes that the coaching program effectively strengthened self-awareness, leadership knowledge, behavior, and skills among human resource personnel. The structured intervention addressed critical leadership gaps and facilitated substantial growth in key areas.

The uniformly positive feedback regarding the structure and content of the coaching program suggested that its design was well-received by participants, reducing resistance to engagement. While this indicated that the program was acceptable to participants at the time of the post-test, its

long-term effects remain to be seen. The clear objectives, well-designed materials, and appropriate scheduling provided a strong foundation for an effective program, as reflected in the consistently high ratings from participants. Future leadership development programs may benefit from maintaining these key structural elements and considering coaching approaches similar to the one described in this study.

Future studies might examine the longer-term effects that coaching could have on leadership performance and the adaptability of this model to diverse organizational contexts. For example, the coaching program should be expanded to include other departments at Tondo Medical Center to enhance its impact, fostering broader organizational change. Periodic follow-up sessions will help sustain leadership development and reinforce learning outcomes. Additionally, future iterations should incorporate advanced leadership modules, integrate participants' feedback, and align with emerging leadership theories and best practices to ensure continued relevance.

Long-term evaluations through longitudinal studies are recommended to assess the sustained effects of the program. The successful findings suggest that similar coaching initiatives could be implemented in other healthcare settings, with the framework and insights shared to improve leadership across institutions. Future research should explore qualitative and mixed-methods approaches to gain deeper insights into participants' experiences, program impact, and its influence on organizational culture.

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Data Availability Statement

A copy of the more detailed protocol containing expanded methodology and details regarding implementation, development, and validity results of questionnaires, as well as expanded collection of results can be accessed upon request from the author. Likewise, a full report on the developed program's design, development, and implementation—including copies of the coaching manual and instructional materials produced during development and implementation—is available upon request from the author. The questionnaire utilized in the study is likewise available upon request for those interested in reviewing its content and structure.

Statement of Authorship

The author certified fulfillment of ICMJE authorship criteria.

Author Disclosure

The author declared no conflicts of interest.

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