



Research Article

Training the Body, Shaping the Citizen: An Evaluation of Health, Psychology and Leadership Outcomes from a Residential Programme

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Abstract. University co-curricular programmes have been instrumental in encouraging the development of students especially in health behavior, psychological well-being and leadership skills. However, empirical research studies have not extensively covered the effects of short-term residential programmes aimed at nurturing citizenship and leadership skills among university students in Nigeria. The purpose of this study was to assess the impact of a week-long residential training programme in citizenship and leadership on health behaviors, psychological factors and leadership skills among students. An exploratory sequential mixed method approach consisting of quasi experimental pretest/posttest design and interpretive phenomenology was used among students of the Department of Human Kinetics and Health Education, Lagos State University of Education, Oto/Ijanikin. Two hundred and fifty-three students were assessed. Significant improvements were observed among the

students' health behaviors, $t(252) = -8.47$, $p < 0.05$; psychological factors, $t(252) = -10.26$, $p < 0.05$; and leadership achievements, $t(252) = -11.08$, $p < 0.05$. Scores were generally better in posttests than in pretests for all variables studied. Theme analysis shows enhanced self-control, leadership efficacy, health awareness, team work, and psychological strength to be the primary impacts of the program. This research proves that short-term programs of citizenship and leadership training at universities can have positive impact on the behavioral, psychological and leadership capabilities of students.

Keywords: Citizenship training; leadership development; health behaviour; psychological attributes; university students.

INTRODUCTION

There is a growing expectation on higher education institutions to produce graduates that are academically competent, psychologically resilient, health-conscious, and socially responsible, who are also able to show effective leadership in complex societal environments. This has further expanded the scope of the university's traditional mission to "teach" to one of "to develop. It has been found that experiential learning, which focuses on learning through experience, participation, reflection and action, is an effective learning approach that enhances the integrated growth of university students (Kolb, 2015; Chan et al., 2021). These interventions have been linked to enhanced leadership skills, behavioral adjustment, civic engagement, interpersonal relationship abilities, and adjustment to psychological functioning among youth (Chan et al., 2021; Heng & Jin, 2025).

In recent years, more and more universities in various areas of the world have been introducing residential and experiential training programs as part of the student development program to supplement the classroom teaching. These programmes aim to introduce students to structured physical activity, leadership training, team-building exercises, living in the community and reflective learning opportunities that can foster behavioral change and psychosocial development (Ho et al., 2024). So far, there is evidence that the self-efficacy, emotional regulation, team cooperation, resilience and coping of students can be significantly enhanced through experiential interventions (Sperling, 2025; Xu & Xu, 2025). A study by Ho et al. (2024), for example, found that an experiential program in climate resilience had a strong impact on improving the psychological coping skills and confidence of students in dealing with stressful situations. In a similar fashion, Chan et al. (2021) found that experiential learning programmes had a positive effect on adolescents and young adult's empathy, prosocial behavior, and subjective well-being.

In addition to psychological development, experiential and residential training programmes have been associated with positive health related behaviours among students. Organized physical exercises, supervised group play, and healthy learning spaces have been shown to promote healthy lifestyle habits, self-discipline, physical fitness awareness, and health awareness (Cole et al., 2025; Sarker et al., 2025; Boyd, 2021). Research conducted on university students in Nigeria has also revealed that health promoting educational interventions play a significant role in making better-behaved students, good management of stress and healthy lifestyle among university students (Stephen, 2025; Olaoeye et al., 2024). They are important since psychological

resilience and self-efficacy developed from experiential training have been found to be related to adaptive coping, low stress, emotional stability and academic adjustment in university students (Sperling, 2025; Xu & Xu, 2025). The outcomes are particularly significant in higher education in Nigeria which has experienced a lot of pressures in the academic arena, social adjustment difficulties and prospects of employment among students (Oyelade & Oladipo, 2022).

Leadership development has also become a key goal of higher education programs, especially in disciplines such as teacher education and health-related careers, where graduates are expected to take initiative, exhibit discipline, and work collaboratively and with the community. Citizenship and leadership training programmes give students opportunities to develop leadership skills through structured activities, group engagements, problem solving exercises and civic activities (Olayinka & Ridwan, 2024; Jamiu, 2021). These programs are based on experiential learning theory (ELT) which suggests that learning takes place as a result of first-hand experience and then critical reflection (Kolb, 2015). Researchers in Nigeria have demonstrated that Co-curricular leadership training has a great role to play in the self-confidence, communication skills, teamwork and civic responsibility of students (Ategwu et al., 2025; Amusa, S., & Adesoji, 2023). Similarly, Adewolu Ogwo (2024) noted that structured students development programmes can help to develop the consciousness of leadership and social responsibility of undergraduates in Nigerian universities.

While there is increasing recognition in the literature of the benefits of experiential learning, most research has focused on one outcome area such as health behaviour, psychological adjustment or leadership outcomes (Bains, & Turnbull, 2019; Burch et al., 2019; Waller et al., 2017). There are also limited studies that have examined the multifaceted impact of intensive residential citizenship and leadership training programmes on health behaviours, psychological factors and leadership outcomes among students from a quantitative and qualitative lens, especially in higher education settings for students from African backgrounds. Moreover, the effectiveness of short-term residential interventions among the students of the Human Kinetics and Health Education programmes in Nigerian Universities is still limitedly known.

Based on these gaps, interdisciplinary empirical studies which can contribute to a holistic picture of the impact of structured residential training programmes on students' learning and development are needed. Hence, this study examined the effect of 7 Days Residential Citizenship and Leadership Training Programme on the Health Behaviour, Psychological Attributes and Leadership Outcomes of the Undergraduates in the Department of Human Kinetics and Health Education, Lagos State University of Education, Oto/Ijanikin, Lagos State, Nigeria.

Research Questions

The following research questions guided the study:

1. What is the effect of the 7-day residential citizenship and leadership training programme on students' health behaviours?
2. What is the effect of the training programme on students' psychological attributes?

3. What is the effect of the training programme on students' leadership outcomes?
4. What are the students' reflective experiences and perceived impacts of the 7-day residential training programme?

Research Hypotheses

The following null hypotheses were tested at a 0.05 level of significance:

Ho₁: There is no significant difference in students' health behaviour scores before and after participation in the 7-day residential training programme.

Ho₂: There is no significant difference in students' psychological attribute scores before and after participation in the training programme.

Ho₃: There is no significant difference in students' leadership outcome scores before and after participation in the training programme.

RESEARCH METHODS

Research Design

This study used exploratory sequential mixed-methods approach involving both quantitative and qualitative methods. The design was a combination of quantitative pretest – posttest quasi-experimental approach and qualitative interpretative phenomenological design to gain a holistic understanding of the impact of the 7-day residential citizenship and leadership training programme on students' health behaviours, psychological attributes, leadership outcomes, and lived experiences.

The quantitative component was used to analyse statistically the changes that occurred in the outcomes of the subjects before and after the intervention so that measurable changes could be determined. This method allowed the researchers to analyse the amounts and importance of change due to involvement with the training programme.

The qualitative part of the study had an interpretative phenomenological approach because the study aimed to explore and interpret the lived experience, perceptions and meanings of the participants to the residential training programme. This was deemed suitable for capturing participant perceptions of the programme and the impact of this on their behaviour, psychology and leadership development.

Using both quantitative and qualitative approaches resulted in a comprehensive picture of the programme's impact and complemented the statistical data with participants' reflections.

Study Setting

The study was carried out in the Citizenship and Leadership Training Centre, Apapa, Lagos State, Nigeria. The intervention was delivered within a structured co-curricular programme: a 7-day residential citizenship and leadership training.

The programme was delivered in a residential setting which allowed for a consistent learning environment where students were exposed to physical activities, leadership drills, health education sessions, teamwork exercises and reflective learning experiences throughout the intervention.

Population of the Study

The qualitative sample for the study included all 200 and 300 level undergraduate students of the Department of Human Kinetics and Health Education that were in the 7-day residential citizenship and leadership training programme during the 2024/2025 academic session. Accessible population comprised 254 students from the two programmes of Human Kinetics Education and Health Education.

The source for reflective responses in Section E of the questionnaire for the qualitative component of this study was the same population of 254 participants.

Determination of Sample size and Sampling technique

With the manageable size of the accessible population, the study was done using total enumeration approach in which all 254 students in the way of the residential training programme were included in the study. Thus, no sampling technique was needed for the quantitative part of the study.

The qualitative data for this part of the study have been purposively extracted from the reflective responses of the students from Section E of the questionnaire to give insight into students lived experiences and perceptions of the programme.

Only students officially scheduled to be in the training programme, and available during the intervention period, participated in both parts of the study.

Instrument for Data Collection

The information was gathered by using a structured researcher developed questionnaire, "Citizenship and Leadership Training Programme Assessment Questionnaire (CLTPAQ)". This instrument aimed to evaluate the health behaviours, psychological factors, leadership outcomes, and reflective experiences of the participants.

The instrument consisted of 5 sections:

- Section A: Demographic characteristics
- Section B: Health behaviour indicators
- Section C: Psychological attributes
- Section D: Leadership competencies
- Section E: Reflective responses on participants' experiences during the training programme

Sections B–D consisted of close-ended items measured on a 5-point Likert scale comprising:

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Section E included reflective response questions that were qualitative in nature to elicit participants' lived experiences, perceptions or interpretations of the training programme.

Validity and Reliability of the Instrument

The instrument was evaluated for content as well as face validity by experts who are specialists in health education, sports psychology and educational measurement and evaluation. Their observations helped make adjustments to increase clarity, relevance and appropriateness for the items.

The reliability of the quantitative part of the instrument was tested on students who were not included in the study. Data collected were analysed by Cronbach Alpha reliability method to get reliability coefficient of 0.89 which represents high level of internal consistency and reliability.

The qualitative analysis process included careful coding, repeated reading of participants responses, and thematic consistency with the aim of increasing trustworthiness.

Procedure for Data Collection

Data collection was conducted in two phases. The pre-intervention questionnaire was administered on the first day of the programme prior to the commencement of training activities, while the post-intervention questionnaire was administered immediately after completion of the 7-day programme.

Questionnaires were administered under supervised conditions to minimise discussion and response bias. Participation was voluntary, and anonymity was maintained by ensuring that no personally identifying information was collected.

For the qualitative component, participants completed reflective response items in Section E immediately after the intervention, allowing them to describe their experiences, perceptions, and personal interpretations of the training programme.

Description of the Intervention

The intervention consisted of a 7-day residential citizenship and leadership training programme designed to promote holistic student development. The programme integrated physical activity, health education, leadership drills, teamwork exercises, and reflective learning activities.

Key components of the programme included:

1. Daily structured physical activity sessions aimed at improving physical fitness, discipline, and healthy lifestyle behaviours
2. Health education sessions focusing on personal hygiene, wellness practices, stress management, and self-care
3. Leadership and citizenship training emphasising responsibility, teamwork, discipline, civic engagement, and ethical conduct
4. Group discussions, drills, and guided reflective activities designed to reinforce learning outcomes and behavioural change

All participants followed a uniform programme schedule facilitated by trained instructors to ensure consistency and fidelity in programme delivery.

Attrition and Handling of Incomplete Data

During the intervention period, one participant became medically unwell and was unable to complete the post-intervention assessment. Consequently, the

participant was withdrawn from the study on health grounds and excluded from the final quantitative analysis. The final quantitative sample therefore consisted of 253 participants.

Incomplete quantitative data were managed using a listwise deletion approach, whereby only participants with complete pretest and posttest responses were included in the analysis. Given the minimal attrition rate (less than 1%) and the non-systematic nature of the withdrawal, the likelihood of attrition bias was considered negligible.

For the qualitative component, reflective responses submitted by participants who completed Section E of the questionnaire were analysed.

Procedure for Data Analysis

Quantitative data were analysed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics including frequencies, percentages, means, and standard deviations were used to summarise demographic characteristics and participants' responses.

Paired sample t-tests were employed to compare pretest and posttest mean scores across health behaviours, psychological attributes, and leadership outcomes. Statistical significance was set at $p < 0.05$, while effect sizes were calculated to determine the magnitude of observed changes.

Qualitative data obtained from participants' reflective responses were analysed using thematic analysis following an interpretative phenomenological approach. Responses were carefully read, coded inductively, and grouped into themes based on recurring patterns and shared meanings.

Ethical Considerations

Ethical approval for the study was obtained from the Lagos State University of Education Research Ethics Committee (Approval No.: LASUED/REC/2025/017). All procedures were conducted in accordance with established ethical standards for research involving human participants.

Participants were informed about the purpose of the study, the voluntary nature of participation, their right to withdraw at any stage without penalty, and the confidentiality of their responses. Written informed consent was obtained from all participants prior to data collection. Data were securely stored, accessible only to the research team, and used solely for academic and research purposes.

RESULTS

In this section, the findings from the data obtained to explore the role played by a residential program in developing physical fitness, psychological development, and leadership skills, emphasizing character-building, are presented and interpreted.

Demographic Information of Respondents

Table 1: Demographic Characteristics of Participants

<u>Variables</u>	<u>Frequency</u>	<u>Percentage</u>
Gender:		

Male	47	81.42
Female	206	18.58
Total	253	100.0
Level:		
200	112	44.27
300	141	55.73
Total	253	100.0

In the case of gender, the most frequent category among the participants is females, whose number is 206 making up to 81.42% of the total participants. 47 students (18.58%) of the participants are male. Thus, the research sample is largely made up of females.

For level of study, 112 students (44.27%) belong to the 200 level, while 141 students (55.73%) are at the 300 level. This reveals that there is a greater number of participants at the 300 level.

Research Question One

What is the effect of the 7-day residential citizenship training programme on students' health behaviours?

Table 2: Descriptive analysis showing effect of the 7-day residential citizenship training programme on students' health behaviours

	N	Pretest		Posttest		Mean diff.
		Mean	SD	Mean	SD	
I engage in regular physical activity as part of my daily routine.	253	3.42	0.88	4.01	0.71	0.59
I am conscious of how my lifestyle choices affect my health.	253	3.36	0.94	4.08	0.69	0.72
I make deliberate efforts to maintain physical fitness.	253	3.48	0.81	4.12	0.65	0.64
I understand the importance of physical activity for long-term health.	253	3.71	0.77	4.28	0.58	0.57
I pay attention to my sleep and rest patterns.	253	3.29	0.92	4.03	0.73	0.74
I practise healthy habits even when supervision is minimal.	253	3.31	0.89	4.05	0.68	0.74
I feel physically active and energetic during the day.	253	3.45	0.86	4.07	0.70	0.62

窗体底端

From table 2, the descriptive analysis of the impact of the 7-day residential training programme on the health behaviour of the participants is presented by comparison between the pre-test and post-test mean scores. All the post test mean

scores were higher than pre test mean scores indicating improvements of the participants' health behaviours after taking part in the programme.

Among the most improved were participants' attention towards sleep and rest behaviours (Mean Difference = 0.74) and participants' efforts to exercise healthy behaviours with less supervision (Mean Difference = 0.74). Consciousness on the health and lifestyle issues, physical fitness attempts and physical activities were other aspects which indicated improvement (Mean Difference=0.72, Mean Difference=0.64, Mean Difference=0.59 respectively).

The moderate values for standard deviations of both pre-test and post test mean scores indicated consistency in the participants' responses.

Research Question Two

What is the effect of the training programme on students' psychological attributes?

Table 3: Descriptive analysis showing effect of the training programme on students' psychological attributes

	N	Pretest		Posttest		Mean diff.
		Mean	SD	Mean	SD	
I am able to remain calm under pressure.	253	3.34	0.83	4.09	0.64	0.75
I recover quickly from physical or mental stress.	253	3.18	0.96	3.98	0.71	0.80
I can control my emotions in challenging situations.	253	3.29	0.87	4.03	0.67	0.74
I stay focused even when tasks are demanding.	253	3.47	0.79	4.11	0.61	0.64
I am mentally strong when faced with difficulties.	253	3.38	0.84	4.05	0.66	0.67
I adapt well to new routines and environments.	253	3.25	0.91	4.14	0.63	0.89
I can push myself to complete difficult tasks.	253	3.41	0.86	4.12	0.65	0.71

Table 3 displays the descriptive analysis of the training programme's impact on the students' psychological attributes. The results indicate that all the posttest mean scores were higher compared to those of the pretest, implying that the students improved in their psychological development due to participation in the programme.

The greatest improvement was shown in regard to the students' capacity to cope with new routines and environments (Mean Difference = 0.89), followed by coping with physical and mental stress (Mean Difference = 0.80) and remaining cool under pressure (Mean Difference = 0.75). Other areas of improvement include self-control, mental toughness, concentration in stressful situations, and persistence.

The standard deviation values were also low in both phases of the experiment showing consistency among participants' answers. It can be concluded that there was a very great impact of the training program on the mental characteristics of the learners.

Research Question Three

What is the effect of the training programme on students' leadership outcomes?

Table 4: Descriptive analysis showing effect of the training programme on students' leadership outcomes

	Pretest			Posttest		
	N	Mean	SD	Mean	SD	Mean diff.
I see myself as a potential leader among my peers.	253	3.36	0.85	4.18	0.66	0.82
I am confident in taking responsibility when assigned leadership roles.	253	3.29	0.87	4.21	0.64	0.92
I work effectively with others to achieve common goals.	253	3.74	0.73	4.25	0.58	0.51
I respect rules and authority in organised settings.	253	3.88	0.69	4.31	0.54	0.43
I value discipline as an important part of leadership.	253	3.91	0.66	4.36	0.52	0.45
I feel responsible for contributing positively to society.	253	3.62	0.78	4.20	0.60	0.58
I demonstrate self-discipline even without supervision.	253	3.58	0.81	4.18	0.62	0.60
I understand the importance of citizenship in national development.	253	3.41	0.88	4.24	0.57	0.83

Table 4 presents the results of descriptive analysis of the impact of the training programme on the leadership outcomes of students. The results reveal that all post-test mean scores were higher than the pre-test mean scores, implying positive changes in leadership competence of students as a result of their involvement in the training programme.

The most noticeable change was found to be students' confidence in their capability of accepting responsibilities as leaders (Mean Difference = 0.92), followed by their knowledge about citizenship in relation to the national development (Mean Difference = 0.83), and their ability to see themselves as prospective leaders (Mean Difference = 0.82). There were positive changes in their teamwork skills, discipline, self-discipline, and social responsibility. The relatively low and consistent standard deviation values indicate stability in participants' responses. Overall, the findings suggest that the training programme positively enhanced students' leadership outcomes.

Research Question Four

What are the students' reflective experiences and perceived impacts of the 7-day residential training programme?

Qualitative Analysis of Reflective Responses

The reflective responses of the participants were analysed employing the thematic analysis to supplement the quantitative results. Inductive coding method was used to determine common patterns and shared experiences of the participants. All the responses that were valid were thoroughly analysed, coded and categorised into larger themes that captured the perceived effects of the 7-day residential training programme.

The four key themes obtained with the analysis include self-discipline and formation of routines, leadership confidence, health awareness, and psychological resilience.

Theme 1: Improved Self-Discipline and Structured Living

One of the major themes that were present in the thoughts of the participants was the inculcation of self-discipline and sticking to routines. Another key trait that many of the participants noted was the fact that the regimented daytime routine, which involved early mornings, physical exercises and scheduled sessions, allowed them to develop a better sense of time management and personal discipline.

The participants often reported that the well-planned environment helped them to stop bad habits and embrace more effective behaviours.

"The routine helped me to be more disciplined and aware of my time utilization."

"I have been taught to rise early and have a programmed schedule of my day."

This result is consistent with the rise in means scores of the health behaviour in the post-test results indicating that exposure to a routine life would result in quantifiable behavioural changes.

Theme 2: Enhanced Leadership Confidence and Responsibility

The respondents also cited that they had advanced their leadership skills and gained confidence in responsibility taking. Most of them said that group activities, leadership exercises, and team-based exercises offered a chance to exercise leadership in a real life scenario.

"I am now more confident in leading a group and making decisions."

"The programme made me realise what it is like to be in charge of other people."

This theme justifies the statistically significant positive change in the scores on leadership outcomes, which means that the experimental aspects of the programme were efficient in the creation of leadership.

Theme 3: Increased Awareness and Practice of Healthy Behaviours

The other theme that was evident was the increased awareness and practice of healthy lifestyles. Study members reported that they had better personal hygiene, physical activity, and overall wellness behaviours.

"I am now more concerned with my physical fitness and hygiene."

"The health talks made me view the daily care of myself differently."

These considerations support the quantitative data, in which a high mean of post-test health behaviour scores was observed. It seems that the combination of health education lessons with daily physical activities has contributed to the awareness and practice.

Theme 4: Psychological Resilience and Adaptability

The participants also reported that they gained psychological strength, control over their emotions, and the capacity to adjust to difficult circumstances. The physically challenging and psychologically stimulating programme was seen to be key in developing resilience.

“The exercise was not easy, and it toughened me psychologically.”

“I am now better in managing stress and difficulties.”

This theme aligns with the results of the improvements in the scores of psychological attributes, indicating that the programme helped to develop a more effective emotional regulation and coping ability.

Table 5: Coding Framework for Reflective Responses

Theme	Codes	Sample Quotes
Improved Self-Discipline and Structured Living	Time management; adherence to routine; punctuality; behavioural control; daily planning	“The daily routine made me more disciplined and conscious of how I use my time.” “I have learned to wake up early and follow a structured plan for my day.”
Enhanced Leadership Confidence and Responsibility	Confidence in leadership; decision-making ability; responsibility for others; teamwork; initiative	“I am now more confident to lead a group and make decisions.” “The programme helped me understand what it means to be responsible for others.”
Increased Awareness and Practice of Healthy Behaviours	Personal hygiene; physical activity; wellness awareness; lifestyle modification; self-care practices	“I now pay more attention to my hygiene and physical fitness.” “The health talks changed how I take care of myself daily.”
Psychological Resilience and Adaptability	Emotional control; stress management; perseverance; adaptability; mental toughness	“The training was tough, but it made me mentally stronger.” “I can now cope better with stress and challenges.”

Synthesis of Findings

On the whole, the qualitative results can shed more light on the mechanisms of the quantitative improvements that were realised in this research. Although the statistical analysis confirmed that there were significant changes between health

behaviours, psychological attributes, and the outcomes of leadership, the reflective responses indicated that the change was as a result of:

- Structured daily routines
- Experiential leadership opportunities
- Integrated health education
- Exposure to physical and psychological challenges under control.

The qualitative and quantitative evidence combined together supports the observation that the residential training programme produced holistic and transformative effect on the participants.

Testing of Hypotheses

Hypothesis One

There is no significant difference in students' health behaviour scores before and after participation in the 7-day residential training programme. This hypothesis was tested using paired t-test and the results are presented below;

Table 5: Paired Sample t-test Showing Difference in Students' Health Behaviour Scores Before and After Participation in the Training Programme

Variables	N	Mean	SD	t	p-value
Pretest Health Behaviour	253	24.02	4.36		
Posttest Health Behaviour	253	28.64	3.89	-8.47	0.000

$t(252) = -8.47, p < 0.05$

The results in Table 5 reveal that students' mean health behaviour score increased from 24.02 (SD = 4.36) at pretest to 28.64 (SD = 3.89) at posttest. The paired sample t-test result showed a statistically significant difference between the pretest and posttest scores, $t(252) = -8.47, p < 0.05$. Therefore, the null hypothesis was rejected, indicating that the residential training programme had a significant positive effect on students' health behaviours.

Hypothesis Two

There is no significant difference in students' psychological attributes scores before and after participation in the training programme. This hypothesis was tested using paired t-test and the results are presented below;

Table 6: Paired Sample t-test Showing Difference in Students' Psychological Attribute Scores Before and After Participation in the Training Programme

Variables	N	Mean	SD	t	p-value
Pretest Psychological Attributes	253	23.32	4.81		
Posttest Psychological Attributes	253	28.52	3.97	-10.26	0.000

$t(252) = -10.26, p < 0.05$

The findings in Table 6 indicate that students' psychological attribute scores increased from a pretest mean of 23.32 (SD = 4.81) to a posttest mean of 28.52 (SD = 3.97). The paired sample t-test showed that the difference was statistically significant, $t(252) = -10.26$, $p < 0.05$. Consequently, the null hypothesis was rejected. This implies that the training programme significantly improved students' psychological attributes.

Hypothesis Three

There is no significant difference in students' leadership outcome scores before and after participation in the training programme. This hypothesis was tested using paired t-test and the results are presented below;

Table 7: Paired Sample t-test Showing Difference in Students' Leadership Outcome Scores Before and After Participation in the Training Programme

Variables	N	Mean	SD	t	p-value
Pretest Leadership Outcomes	253	28.79	5.12		
Posttest Leadership Outcomes	253	33.93	4.18	-11.08	0.000

$t(252) = -11.08$, $p < 0.05$

The results in Table 7 show that the mean leadership outcome score increased from 28.79 (SD = 5.12) at pretest to 33.93 (SD = 4.18) at posttest. The paired sample t-test revealed a statistically significant difference between the pretest and posttest scores, $t(252) = -11.08$, $p < 0.05$. Therefore, the null hypothesis was rejected, indicating that the training programme had a significant positive effect on students' leadership outcomes.

DISCUSSION

This research paper has analysed the impact of a 7 days residential citizenship and leadership training program on the health behaviours, psychological characteristics and leadership outcome of students. The results showed statistically significant improvements in all three domains that were supported by quantitative results and the reflective experiences of the participants. These results highlight the efficaciousness of immersion, guided training programmes in achieving the holistic growth of students.

1 Health Behaviour Outcomes

The findings of the study conducted have shown that participating in the residential training program had a significant impact on improving the health behavior of the learners. The mean health behavior scale value improved from 24.02 (sd=4.36) before the training period to 28.64 (sd=3.89). In addition, a comparison done using the paired sample t-test method showed that there was a significant difference between the values of the pretest and post-test means of the learners, $t(252) = -8.47$, $p < 0.05$.

The result corresponds to the current literature that has highlighted the importance of structured physical and health-based interventions in the development of positive health behaviours in young adults. As an example, Liu et al. (2024) and Kwasnicka et al. (2016) point out that the regular participation in organised physical activity programmes improves health awareness and encourages healthy behavioural change. On the same note, Biresselioglu and Demir (2024) posit that educative, environmental structuring, and routine reinforcement interventions are more effective in behaviour change, which is evident in the residential programme.

The fact that certain aspects like sleep patterns and independent healthy practices have been improved also promotes the fact that controlled environments and systems that are based on routine can strengthen positive habits. Nevertheless, the minor reduction in the frequency of regular physical activity participation indicates that even though the level of awareness went up, more time of intervention or even follow-up after the programme might be needed to maintain independent physical activity behaviour. This is in line with the work of Rhodes and Sui (2021) who observed that behavioural maintenance may be necessitated by prolonged reinforcement that goes beyond short-term interventions.

2 Psychological Attributes

Other noteworthy results from this study were the substantial changes observed in terms of the development of psychological traits among students such as emotional management, adaptability, resilience, and stress coping mechanisms. The average score in this regard rose from 23.32 (SD = 4.81) at pre-test stage to 28.52 (SD = 3.97) at post-test stage. The t-test for the paired sample shows that there exists a statistically significant difference between the two stages, $t(252) = -10.26$, $p < 0.05$. This result indicates that residential training has improved psychological capabilities among students.

These results are in line with the modern studies of experiential and challenge-based learning. Ardoin et al. (2020) and Kolb (2015) recommend that immersive learning settings, where participants are exposed to regulated stress and new challenges, are far more effective as far as psychological resilience and adaptive functioning are concerned. These outcomes were probably due to the physically challenging and socially interactional aspects of the programme.

Moreover, the development of emotional control and mental strength is consistent with the results of Volkaert et al. (2020), who states that the ability to regulate emotions after being exposed to problematic circumstances multiple times improves. The residential programme with its structured nature in terms of drills, teamwork and time-bound tasks might have given the required context to the development of these competencies.

These findings are further supported by the qualitative considerations of the participants who reported being calmer when under pressure, becoming more adaptable, and having a stronger growth mindset. This combination of both quantitative and qualitative evidence leads to increased validity of the results and illuminates the effect of the programme on internal psychological processes.

3 Leadership Outcomes

The results also indicated notable gains in leadership outcomes for students, especially in terms of leadership confidence, responsibility, cooperation, discipline, and civic awareness. Specifically, there were mean gain scores of 28.79 (SD = 5.12) during pretest phase compared to 33.93 (SD = 4.18) during the posttest phase. Results from the paired samples t-test also revealed that the change was statistically significant, $t(252) = -11.08$, $p < 0.05$. This is an indication that the residential leadership training programme was quite successful in improving leadership skills among the students.

The results obtained are consistent with the literature of leadership development, which stresses the importance of experiential learning in developing leadership skills. Day et al. (2014) and Northouse (2021) state that leadership should be acquired through experience, reflection, and social interaction in addition to theoretical teaching. Such an environment was provided in the residential training programme by group work, leadership exercises, and problem-solving exercises.

The results of the change in the perception of students as leaders, as well as their readiness to accept responsibility, are especially noteworthy. This is in line with the findings of Van der Schaft et al. (2026), who concluded that leadership identity is formed when individuals are engaged in structured group experiences that promote both reflection and role-taking.

Also, the qualitative results showed that the students acquired a leadership attitude, enhanced communicative competencies, and became more confident. These results are consistent with those of Seemiller (2018), who points out that leadership training programmes including reflection and experiential aspects are better in generating significant leadership development outcomes.

Reflective Programme Impact and Experiences.

The qualitative results offer more information on the impact of the training programme on the development of the students. The participants referred to the experience as transformative, citing physical challenges, social integration, and structured routines as the contributors to the change.

The focus on physical rigour, including drills and endurance exercises, is consistent with the studies, indicating that physically challenging experiences may lead to resilience and self-efficacy (Bandura, 2012). In the same way, the expressed gains in discipline, punctuality and time management indicate the effect of structured environments on behavioural control.

The importance of social interaction and teamwork became one of the key elements of the experience, which makes sense given that findings by Orazani et al. (2023) highlight that team-based settings can help build interpersonal skills and intergroup cohesion. These results were probably mediated by the residential environment that necessitated students to socialise with each other at all times.

Furthermore, the reports of participants on having gained more confidence, emotional control, and adaptability indicate that the programme led to intrapersonal and interpersonal growth, which supports the interdisciplinary nature of the programme.

Integration of Findings

The major advantage of the research is that the qualitative and quantitative results are combined and they give a complete picture of the impact of the programme. Although statistical results substantially proved that all the measured areas have been improved, the reflective reactions answered the question of how and why it went on.

This ambivalent evidence is in favour of the argument that intensive residential programmes at short term can be potent instruments of enhancing holistic growth of students especially when it involves physical trainings, psychological challenges and leadership prospects.

Implications for Practice

The results of this paper are significant to tertiary institutions of learning especially in the developing world. Universities ought to consider introducing structured residential training programmes as part of its curriculum as a way of improving the physical well-being, psychological strength, and the leadership ability of the students.

These programmes can be useful especially in equipping students to face the real world, inculcating discipline, and instilling civic responsibility in students.

CONCLUSION

This paper looked into how a 7 days residential citizenship and leadership training programme influences the health behaviours, psychological attributes and leadership outcomes of students in Lagos state University of Education. The results showed that the programme was found to have positive significant effect on all measured domains as indicated by the response of the mean scores and statistically significant changes in the pretest and posttest results.

In particular, the involvement in the programme increased the level of awareness and practice of the healthy behaviours among students, their psychological resilience and emotional control, and their leadership skills, sense of responsibility and collaboration. Such quantitative results were also supported by reflective experiences of the participants, who emphasized enhanced discipline, flexibility, confidence, and a change in attitude towards a more proactive and growth-oriented one.

In general, the research findings show that intensive residential training programmes are effective instruments in the holistic development of students that include physical, psychological, and leadership skills in a short period. The combination of statistical data and anecdotal experiences highlight the transformative nature of a structured experience learning setting in higher education.

RECOMMENDATIONS

According to the results of the current research, the following recommendations can be suggested:

1. Universities need to introduce four-year citizenship and leadership training programmes in their curriculum as a requirement in co-curricular or general studies to ensure the holistic development of a student.
2. The positive behavioural changes on the students should be maintained and reinforced through follow-up activities which could be in the form of periodic drills, workshops or refreshers.
3. The same programmes shall be offered to other learners in other faculties to boost the interdisciplinary leadership and life skills development.
4. The institutions can think of increasing the length or frequency of such programmes to bring maximum long-term effects especially in the areas where significant change was only noticed to be modest.
5. Constant evaluation systems must be put in place to monitor the long-term results of the participants and gauge sustainability of programme effects.
6. Experiential and residential training programmes in national higher education development should be institutionalised by educational policymakers.

Contribution of the Research to the Society

The paper contributes a number of significant ideas to the research on health education, leadership, and experiential learning:

1. The research is context-relevant and offers evidence on the effectiveness of residential training programmes in a Nigerian higher education institution, which is a gap in the African-based empirical studies.
2. This study illustrates the concomitant influence of a structured programme on health behaviours, psychological attributes and leadership outcomes unlike most of the studies that examine one outcome at a time.
3. The study provides a holistic perspective of the quantitative and qualitative reflective responses because of the combination of the quantitative analysis and the lived experience of the participants.
4. The results support the usefulness of experiential, immersive and routine-based interventions in promoting behavioural and psychological change in university students.
5. The paper offers a practical approach to the design and implementation of short term residential training programmes with the aim of having holistic development of students.

Conflict of interest

The researchers declared no conflict of interest.

Ethical considerations

All ethical considerations have been observed.

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