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Empowering Rural Learners: Assessing the Impact of Home Economics Education on Life Skills Acquisition in a Zambian Secondary School

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Abstract

Background

Home Economics education is recognized globally for its role in equipping students with practical life skills essential for personal and community development. However, in rural Zambian schools, resource constraints may limit its effectiveness. This study assessed the impact of Home Economics education on pupils at Syakalyabanyama Secondary School in Chirundu District, Southern Province, Zambia.

Methods

A mixed-methods case study design was employed, integrating quantitative data from 50 Grade 10 pupils via structured questionnaires with qualitative insights from semi-structured interviews with the Headteacher, Home Economics teacher, and 10 guardians. Data were analyzed using descriptive statistics (frequencies, means, standard deviations) for quantitative data and thematic analysis for qualitative data. Findings were triangulated across sources. Cronbach's alpha coefficients were calculated to assess internal consistency reliability.

Results

Pupils reported a high level of perceived life skills acquisition (composite mean = 4.37/5.0; 91% agreement). Practical skills development was strongest in personal hygiene (mean = 4.62), cooking (mean = 4.27), and home management (mean = 4.28), but comparatively constrained in applied financial management (mean = 3.98) due to resource limitations. Pupils and stakeholders unanimously perceived Home Economics as an essential, empowering subject crucial for self-sufficiency and independence (96% agreement). Female pupils showed slightly higher satisfaction (89.3%) than males (86.4%), though differences were not statistically significant ($p > 0.05$). Resource constraints—including inadequate funding, materials, and infrastructure—were identified as primary barriers limiting practical skill mastery.

Conclusion

Home Economics education at Syakalyabanyama is effective in imparting foundational life and practical skills, thereby supporting personal development and community resilience. However, its full transformative potential, particularly in entrepreneurial and advanced skill application, remains hindered by systemic resource gaps. Recommendations are offered for school administration, teachers, curriculum developers, and policymakers to enhance resource allocation, promote contextual adaptation, and strengthen practical learning opportunities.

BACKGROUND

Home Economics (HE) aims to equip students with practical life skills, such as cooking, sewing, financial literacy, and household management, which are crucial for personal and community development. Studies have shown that Home Economics programs can improve students' self-sufficiency and foster important socio-economic skills that align with sustainable development goals, particularly Sustainable Development Goals 4 (Quality Education), 5 (Gender Equality), and 8 (Decent Work and Economic Growth) (Arubayi, Diana 2021). These programs contribute to rural communities by teaching skills that enhance food security and income-generation opportunities (Bakare, 2024).

Historically, Home Economics emerged as a formal discipline in North America during the mid-nineteenth century. The American Home Economics Association (AHEA) was established at the Lake Placid Conference in 1908, marking the beginning of HE as a recognized field of study, with Ellen Richards serving as its inaugural president (Vanes, 1984). The discipline subsequently expanded into higher education and became effectively taught in schools, colleges, and universities across America.

Originally called Domestic Science, HE was introduced in Africa by the wives of British missionaries who sought to educate women on the fundamentals of housekeeping, including cooking and sewing (Snelson, 1974). Similarly, in Zambia, Domestic Science (DS) was initiated by missionaries' wives who observed that the living standards of the Northern Rhodesian people were very poor. With limited opportunities for engagement while their husbands undertook missionary work, they began teaching home skills in areas where they settled. Home Economics came to Zambia in 1915 and was formally taught first at mission schools like Mbereshi by Mable Show and other missionary female teachers. The curriculum covered aspects of sewing, housewifery, oil making, soap making, starch making, gardening, and cooking (Snelson, 1974).

The integration of Home Economics into school curricula at various educational levels has been recognized for its role in preparing students for real-world challenges, yet several barriers affect its effective implementation in Zambia. According to Phiri (2023), numerous schools, particularly those in rural areas, struggle with inadequate financing, subpar facilities, and a shortage of instructional resources, which limit the practical experiences that give home economics instruction its impact. This finding aligns with Kayenda's (2022) observation that supervision and implementation of the revised Home Economics and Hospitality curriculum in Zambian secondary schools face significant systemic challenges.

Recent curriculum adjustments seek to enhance Home Economics by incorporating creative and innovative skills to address community needs, aligning with broader sustainable development goals in Zambia. However, addressing funding and equipment gaps remains crucial for achieving these objectives in Zambian education. The Ministry of Education's (2023) revised Home Economics and Hospitality syllabus for Grades 4–6 emphasizes competencies including collaboration, critical thinking, entrepreneurship, and financial literacy, reflecting a shift toward competence-based education.

In secondary school settings in Zambia, Home Economics fosters 21st-century skills, including collaboration, problem-solving, and information management—skills crucial in today's interconnected

society (Mabo, 2025). Activities that foster responsibility and teamwork, such as group meal planning or household budgeting, are useful in both family and community contexts. These real-world applications help pupils succeed academically while also boosting their self-esteem and preparing them for adult responsibilities and potential career opportunities in related sectors.

Syakalyabanyama is a school in a rural area of Zambia which was upgraded by the Ministry of Education in 2021 to a secondary school, subsequently integrating Home Economics into its curriculum. According to Mapiki (2026), schools in rural settings like Syakalyabanyama struggle with insufficient resources for hands-on lessons, affecting students' engagement and skill mastery. This situation is not always the same in urban settings; hence the impact of Home Economics may differ between these two contexts. This study sought to assess the impact of Home Economics on pupils attending Syakalyabanyama Secondary School in Chirundu District, Zambia.

METHODS

Study Design and Setting

This study adopted a case study design employing a mixed-methods approach, integrating both quantitative and qualitative research methods. This study employed a sequential explanatory mixed-methods design, where quantitative data from pupil questionnaires were collected and analyzed first, followed by qualitative interviews with the Headteacher, Home Economics teacher, and guardians. Integration occurred through narrative synthesis, where qualitative themes were used to explain, contextualize, and triangulate the quantitative findings during the discussion section.

The study was conducted at Syakalyabanyama Secondary School, located in Chirundu District, Southern Province, Zambia. This school serves as a vital educational institution in a region characterized by a rural community. The school is committed to providing quality education and offers a range of subjects, including Home Economics, which aims to equip students with practical skills for everyday life.

Study Population and Sampling

The target population for this study included Grade 10 pupils enrolled at Syakalyabanyama Secondary School, as this was the only class taking Home Economics at the institution. The study also included the Home Economics teacher, the Headteacher, and guardians whose children were enrolled at the school to gather insights on their perceptions of the value and impact of Home Economics on their children's skills and future opportunities.

Quantitative Sample Determination

This study applied Slovin's formula for determining the sample size for quantitative analysis:

$n = N / (1 + Ne^2)$

where:

- n = sample size needed
- N = total population size (56)
- e = acceptable margin of error (0.05)

$n = 56 / (1 + (56)(0.05)^2) = 56 / (1 + 0.14) = 56 / 1.14 = 49.12 \approx 50$

Therefore, this study included 50 participants for quantitative data collection and analysis.

Qualitative Sample Determination

For qualitative analysis, data were collected from the following key informants:

- The Headteacher (1)
- The Home Economics Teacher (1)
- Guardians whose children were learning Home Economics at the school (10)

Sampling Methods

For quantitative data collection, the study employed simple random sampling from the population of 56 Grade 10 pupils enrolled in Home Economics. Six pupils were excluded from the sampling frame as they were absent during the data collection period. This method enhanced the representativeness of the sample and allowed for more accurate generalizations about the impact of Home Economics education across different demographics.

For qualitative data collection, the researchers employed purposive sampling to select the Headteacher and the Home Economics teacher based on their direct involvement with Home Economics education at the school. Purposive sampling was used to select 10 guardians (saturation achieved) whose children demonstrated varied performance levels in Home Economics, ensuring diverse perspectives on the subject's impact.

Data Collection Tools

Data were collected using multiple research instruments to ensure comprehensive coverage of the study objectives.

Questionnaires

Structured questionnaires were administered to students enrolled in Home Economics classes. These questionnaires included both closed and open-ended questions designed to quantify students' knowledge, skills, attitudes, and perceived benefits of the Home Economics curriculum. The questionnaire was divided into five sections

- Section A: Demographic Information (gender, age, grade, duration in Home Economics)
- Section B: Life Skills Acquisition (4 items, 5-point Likert scale)
- Section C: Practical Skills in Key Areas (8 items covering financial management, cooking, personal hygiene, and home management)
- Section D: Perceptions of Home Economics (4 items)
- Section E: Overall Satisfaction and Suggestions

Interviews

Semi-structured interviews were conducted with the Home Economics teacher, Headteacher, and pupils' guardians to gain insights into their teaching practices, challenges faced, and perceptions of student engagement and learning outcomes. This qualitative data provided depth to the understanding of how Home Economics was taught and its impact on students.

Document Analysis

The researchers analyzed relevant documents such as curriculum guides (syllabus), assessment criteria, and students' practical work to collect additional context regarding the educational framework within which Home Economics was taught.

Validity and Reliability of Instruments

To ensure the validity and reliability of the research instruments, several strategies were implemented.

Pre-testing

Before full-scale implementation, the questionnaires and interview guides underwent pretesting with a small group of five students and two teachers from a similar rural school. This process helped identify any ambiguous or confusing items, allowing for necessary revisions to enhance clarity and relevance.

Expert Review

The research instruments were evaluated by three experts in educational research and Home Economics education to assess content validity. Their feedback ensured that the instruments adequately covered all relevant aspects of Home Economics education and aligned with the study's objectives to ensure construct and content validity.

Triangulation

The researcher used multiple data collection methods (questionnaires, interviews, and document analysis). The study triangulated findings to cross-verify results. This approach enhanced validity by providing a more comprehensive understanding of the impact of Home Economics education from different perspectives. Quantitative and qualitative data were integrated using a convergent parallel design, where findings from both strands were compared and contrasted during interpretation to identify convergence and divergence.

Statistical Reliability: Quantitative data were analyzed using SPSS version 26.0. Qualitative data were coded manually using thematic analysis following Braun and Clarke's (2006) six-step framework. For quantitative instruments, reliability was assessed using Cronbach's alpha to evaluate internal consistency. The results showed acceptable reliability coefficients: Life Skills Acquisition ($\alpha = 0.82$), Practical Skills Development ($\alpha = 0.79$), and Perceptions of Home Economics ($\alpha = 0.85$). These values exceed the generally accepted threshold of 0.70, indicating that the items measured the same constructs reliably.

Clarity of Instruments

The questionnaire and interviews contained simple, easy-to-understand questions to enhance both the validity and reliability of the research instruments.

Variables and Definitions

The study assessed three primary outcome variables aligned with the research objectives:

1. **Life Skills Acquisition**: Measured through pupils' self-reported agreement with statements about responsibility, confidence, and perceived usefulness of skills learned (composite score from four items).
2. **Practical Skills Development**: Assessed across four domains:

- Financial Management (2 items)
- Cooking (2 items)
- Personal Hygiene (2 items)
- Home Management (2 items)

3. Perceptions of Home Economics: Measured through pupils' agreement with statements about the subject's essential nature, role in independence, self-sufficiency, and overall satisfaction.

All perception items used a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

Data Collection Procedures

Quantitative Data Collection

A structured questionnaire was designed, incorporating both closed and open-ended questions. The questionnaires were administered in person immediately after designated class times to maximize participation. The researcher distributed the questionnaires, provided instructions, and clarified any questions the students had.

Qualitative Data Collection

Semi-structured interviews were conducted with the Headteacher, Home Economics teacher, and selected guardians to gather in-depth insights into their teaching practices, challenges faced, and perceptions of student engagement. Interviews were audio-recorded (with participants' consent) and transcribed verbatim for analysis. Each interview lasted between 30 and 60 minutes.

Statistical Analysis

Quantitative Data Analysis:

- **Descriptive Statistics**: Calculated measures such as mean, median, mode, frequencies, and percentages to summarize the demographic characteristics of the respondents and their responses regarding Home Economics education.
- **Inferential Statistics**: Independent samples t-tests were conducted to compare means across gender groups. Fisher's Exact Test was used to examine relationships between age groups and confidence levels due to small expected frequencies in contingency tables. Cross-tabulations were performed to examine relationships between demographic variables and satisfaction/confidence levels. Statistical significance was set at $p < 0.05$. Effect sizes (Cohen's d for t-tests; Cramér's V for Fisher's Exact) were calculated to assess practical significance.
- **Data Presentation**: Findings were presented using tables, graphs, and charts to visually depict trends and relationships.

Qualitative Data Analysis:

- **Transcription**: Audio-recorded interviews were transcribed verbatim to ensure accuracy in capturing participants' responses.
- **Thematic Analysis**: Thematic analysis was employed to identify and analyze patterns or themes within the qualitative data. Themes were derived inductively from the data and deductively from the research objectives.
- **Data Presentation**: Qualitative findings were presented narratively, supported by direct quotes from participants to illustrate key themes. Participant codes were assigned (HT=Headteacher, T=Teacher, G=Guardian) to ensure anonymity.

Ethical Considerations

Before beginning the study, the researcher obtained approval and consent from the Rockview University IRB in accordance with the rules set forth by the National Health Research Authority. To conduct the study, a letter of support and approval was requested from Rockview University, the local DEBS office, and the management of Syakalyabanyama Secondary School.

The researcher obtained informed consent from all participants involved in the study, including students, teachers, and parents. Participants were fully informed about the purpose of the research, what their participation entailed, any potential risks, and their right to withdraw at any time without penalty. This process ensured that participation was voluntary and based on a clear understanding of the study.

Given that the study involved minors (pupils under the age of 18), assent was collected from the pupils, and consent was obtained from their guardians prior to and throughout the data collection timeframe.

RESULTS

Demographic Characteristics

A total of 50 Grade 10 pupils participated in the quantitative survey, achieving the targeted sample size. The demographic profile of the respondents is summarized in Table 1.

Table 1
Demographic Profile of Pupil Respondents (N = 50)

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	22	44.0
	Female	28	56.0
Age	12–14 years	15	30.0
	15–17 years	32	64.0
	18 years or older	3	6.0
Duration in HE	Less than 1 year	8	16.0
	1–2 years	35	70.0
	More than 2 years	7	14.0

The qualitative component involved in-depth interviews with three key informants:

1. The Headteacher of Syakalyabanyama Secondary School (HT)
2. The Home Economics teacher (T)
3. Ten (10) guardians/parents of pupils enrolled in Home Economics (G1-G10)

Objective 1: Life Skills Acquisition

Quantitative Findings:

Respondents rated their agreement with four statements related to life skills acquisition on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The results are presented in Table 2.

Table 2
Pupils' Perceived Acquisition of Life Skills (N = 50)

Statement	Mean Score	Std. Deviation	Agree/Strongly Agree (%)
Q5. I have acquired valuable life skills through Home Economics.	4.42	0.67	94.0
Q6. Home Economics has helped me become more responsible.	4.28	0.76	88.0
Q7. I feel more confident in managing personal tasks because of what I learned.	4.16	0.81	84.0
Q8. The skills I have learned will be useful after I leave school.	4.60	0.58	98.0
Composite Score for Life Skills Acquisition	**4.37**	**0.58**	**91.0**

Interpretation

The data indicates a very high perceived level of life skills acquisition among pupils. The composite mean score of 4.37 (on a 5-point scale) and an average agreement rate of 91% demonstrate that pupils strongly believe Home Economics has equipped them with valuable, responsibility-building, and confidence-boosting skills that are highly relevant for their future.

Distribution of Overall Satisfaction with Home Economics Program

The overall satisfaction with the Home Economics program (Question 21) showed a strongly positive but nuanced distribution, as detailed in Table 3.

Table 3
Distribution of Overall Satisfaction Scores (Q21)

Satisfaction Level	Score	Frequency	Percentage (%)	Cumulative Percentage (%)
Strongly Satisfied	5	20	40.0	40.0
Satisfied	4	24	48.0	88.0
Neutral	3	5	10.0	98.0
Dissatisfied	2	1	2.0	100.0
Strongly Dissatisfied	1	0	0.0	100.0
Total		**50**	**100.0**	

Analysis

The data reveals that 88% of pupils are either Satisfied or Strongly Satisfied with the Home Economics program, indicating widespread approval. However, the distribution shows that while 40% are "Strongly Satisfied," a larger proportion (48%) are simply "Satisfied," suggesting there is room for improvement to move more respondents into the highest satisfaction category. The presence of neutral (10%) and dissatisfied (2%) responses, though small, indicates that the program does not uniformly meet all pupils' expectations or needs.

Gender-Based Comparison of Satisfaction

Table 4
Gender Distribution Across Satisfaction Levels (Q21: Overall Satisfaction)

Satisfaction Level	Male (n = 22)	Female (n = 28)	Total (n = 50)
Strongly Satisfied (5)	8 (36.4%)	12 (42.9%)	20 (40.0%)
Satisfied (4)	11 (50.0%)	13 (46.4%)	24 (48.0%)
Neutral (3)	2 (9.1%)	3 (10.7%)	5 (10.0%)
Dissatisfied (2)	1 (4.5%)	0 (0.0%)	1 (2.0%)
Strongly Dissatisfied (1)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	**22 (100%)**	**28 (100%)**	**50 (100%)**

Analysis

The cross-tabulation reveals that satisfaction with the Home Economics program is high among both genders, with 86.4% of male pupils and 89.3% of female pupils reporting satisfaction (Satisfied + Strongly Satisfied). Female pupils show a slightly higher proportion in the "Strongly Satisfied" category (42.9% vs 36.4% for males), while male pupils have a marginally higher proportion in the "Satisfied"

category (50.0% vs 46.4% for females). Only one pupil (male) reported being "Dissatisfied," and there were no "Strongly Dissatisfied" responses from either gender. The relatively equal distribution suggests that the program is meeting the expectations and needs of both male and female pupils effectively, supporting the school's gender-inclusive approach to Home Economics education.

Objective 2: Practical Skills Development

Pupils' self-assessment of practical skills across four key domains is presented in Table 5.

Table 5
Pupils' Self-Assessed Practical Skills by Domain (N = 50)

Skill Domain	Statement	Mean	Std. Dev.	Agree/Strongly Agree (%)
Financial Management	Q9. Learned to manage money/create a budget.	3.94	0.92	78.0
	Q10. Can now save money better.	4.02	0.89	82.0
	Domain Sub-Score	**3.98**	**0.83**	**80.0**
Cooking	Q11. Learned to cook basic meals.	4.40	0.71	92.0
	Q12. Feel confident preparing healthy meals.	4.14	0.85	86.0
	Domain Sub-Score	**4.27**	**0.71**	**89.0**
Personal Hygiene	Q13. Taught about good personal hygiene practices.	4.56	0.62	96.0
	Q14. Understand importance of hygiene for health.	4.68	0.53	94.0
	Domain Sub-Score	**4.62**	**0.52**	**98.0**
Home Management	Q15. Feel more capable managing household tasks.	4.22	0.79	88.0
	Q16. Know how to keep environment clean/organized.	4.34	0.73	90.0
	Domain Sub-Score	**4.28**	**0.70**	**89.0**

Interpretation

Pupils report the highest level of influence in Personal Hygiene (Mean = 4.62), followed by Cooking (4.27) and Home Management (4.28). Financial Management, while still positive, shows a relatively lower mean score (3.98), suggesting this area might require more focused instructional effort or practical application.

Gender-Based Comparison of Skill Domain Scores

An independent samples t-test was conducted to examine whether there were statistically significant differences in how male and female pupils perceived their skill acquisition across the four practical domains. The results are summarized in Table 6.

Table 6
Gender Comparison of Mean Scores in Practical Skill Domains

Skill Domain	Male (n = 22) Mean (SD)	Female (n = 28) Mean (SD)	Mean Diff	t-value	p-value	95% CI	Significance
Financial Management	3.85 (0.89)	4.08 (0.78)	-0.23	-1.12	0.268	[-0.64, 0.18]	Not Significant
Cooking	4.18 (0.76)	4.34 (0.68)	-0.16	-0.87	0.389	[-0.53, 0.21]	Not Significant
Personal Hygiene	4.55 (0.58)	4.67 (0.48)	-0.12	-0.78	0.439	[-0.43, 0.19]	Not Significant
Home Management	4.20 (0.74)	4.34 (0.66)	-0.14	-0.71	0.482	[-0.53, 0.25]	Not Significant
Overall Practical Skills	**4.20 (0.62)**	**4.36 (0.54)**	**-0.16**	**-0.95**	**0.347**	**[-0.49, 0.17]**	**Not Significant**

Analysis

The analysis reveals no statistically significant differences ($p > 0.05$ for all domains) between male and female pupils in their self-assessed competency across all practical skill areas. While female pupils reported slightly higher mean scores in every domain, these differences are not large enough to be statistically meaningful. This is a noteworthy finding as it suggests that at Syakalyabanyama Secondary School, Home Economics education is perceived as equally relevant and effective for both genders, challenging potential stereotypes about the subject being predominantly feminine (Jadjuli 2026).

Objective 3: Pupils' Perceptions of Home Economics

Pupils' perceptions and beliefs about the value of Home Economics are summarized in Table 7.

Table 7
Pupils' Perceptions of Home Economics Education (N = 50)

Statement	Mean	Std. Dev.	Agree/Strongly Agree (%)
Q17. I believe Home Economics is an essential subject for students.	4.48	0.68	94.0
Q18. It prepares me to live independently in the future.	4.52	0.65	96.0
Q19. Home Economics helps students become more self-sufficient.	4.56	0.58	98.0
Q20. I am motivated to apply what I learn to real-life situations.	4.44	0.70	92.0
Composite Score for Perceptions	**4.45**	**0.62**	**93.6**

Interpretation

Pupils hold extremely positive perceptions of Home Economics, with near-universal agreement on its essential role in fostering independence (96%) and self-sufficiency (98%). High motivation to apply learning (92%) indicates strong engagement with the subject.

Age Group by Confidence in Cooking Skills

Table 8
Age Group by Confidence in Cooking Skills (Q12: Confident in Preparing Meals)

Age Group	Not Confident (Score 1–2)	Neutral (Score 3)	Confident (Score 4–5)	Total
12–14 years (n = 15)	1 (6.7%)	4 (26.7%)	10 (66.7%)	15 (100%)
15–17 years (n = 32)	1 (3.1%)	2 (6.3%)	29 (90.6%)	32 (100%)
18 + years (n = 3)	0 (0.0%)	0 (0.0%)	3 (100.0%)	3 (100%)
Total	**2 (4.0%)**	**6 (12.0%)**	**42 (84.0%)**	**50 (100%)**

A Fisher's Exact Test was conducted to examine the relationship between age group and confidence in cooking skills. The test revealed a statistically significant association ($p = 0.043$), indicating that older pupils were more likely to report confidence in cooking skills compared to younger pupils.

Analysis

The relationship between age and cooking confidence shows a clear developmental pattern. Among the youngest pupils (12–14 years), while 66.7% report confidence in preparing meals, a substantial 26.7%

remain neutral, suggesting some uncertainty about their cooking abilities. In the 15–17 years age group, confidence increases markedly to 90.6%, with only 6.3% neutral and 3.1% not confident. All pupils aged 18 years or older report confidence in cooking skills (100%). This progression suggests that as pupils mature, their confidence in practical cooking skills increases substantially, potentially due to both continued Home Economics instruction and increased opportunities to practice cooking skills at home.

Qualitative Findings (Triangulation)

Themes from interviews strongly support the quantitative data, providing depth and context to the nature of acquired life skills and perceptions.

Theme 1: Development of Responsibility and Self-Reliance. Both the teacher and guardians observed marked changes in pupils' attitudes. The Home Economics teacher noted, *"You see a difference, especially in boarders. They start taking care of their uniforms, budgeting their pocket money for soap... it's about owning small duties"* (T). A guardian corroborated this: *"My daughter now insists on washing her own school uniform and helps plan our Sunday meals. She says, 'Mother, we learned about time management'"* (G3).

Theme 2: Problem-Solving and Adaptability. The Headteacher highlighted the transfer of skills beyond the classroom: *"It's not just cooking. We had a burst pipe in the dormitory last term. Some of our Home Economics boys suggested using a temporary sealant method they discussed in class about resourcefulness. That is impact"* (HT). This aligns with the high score on the future usefulness of skills (Q8, 98%).

Theme 3: Confidence Building. The qualitative data revealed that confidence stemmed from mastery of practical tasks. One pupil during an informal discussion mentioned, *"I never knew I could mend a tear. When I fixed my brother's shirt at home, everyone was surprised. I felt capable"* (Pupil, informal discussion). The teacher emphasized this: *"The confidence comes from 'I can do.' When they successfully bake a cake or draft a simple budget, their posture changes"* (T).

Theme 4: Constraints Limit Advanced Practical Application. The lower score in financial management was explained by resource limitations. The teacher explained, *"We teach budgeting theoretically with imaginary figures. I wish we could give them small seed money for a market project, but there is no fund"* (T). The Headteacher added, *"Even for cooking, we rely on contributions. Sometimes a practical lesson on baking is postponed because we lack margarine or sugar. This affects skill mastery"* (HT).

Theme 5: Home Economics as a Tool for Empowerment and Gender Equity. The Headteacher framed the subject strategically: *"In this community, whether boy or girl, you need these skills to survive and thrive. We promote it as a subject for future heads of households, not just for girls"* (HT). This aligns with the high perception of its essential nature (Q17, 94%).

Theme 6: The Link Between Practical Skill and Independence. The teacher connected specific skills to independence: *"Independence starts with not depending on someone else to cook for you, to clean for you, to manage your little resources. When we teach them to plan a balanced meal with local foods, we are teaching them to be independent"* (T). Guardians saw this link practically. One noted, *"When I was sick, my son prepared simple meals for the family. That is self-sufficiency. He learned that from school"* (G7).

Theme 7: Satisfaction Tempered by Resource Awareness. While satisfaction was high, suggestions for improvement from the open-ended questionnaire question (Q22) clustered around requests for *"more practical lessons," "more equipment,"* and *"learning more about starting small business."* The Headteacher acknowledged this gap: *"The satisfaction is with the knowledge gained. The dissatisfaction, if any, is with our inability to provide the full practical experience due to constraints. The potential is not fully realized"* (HT).

DISCUSSION

This study found that Home Economics education at Syakalyabanyama Secondary School has a significant positive impact on pupils' acquisition of life skills and practical competencies. Pupils demonstrated high levels of perceived life skills acquisition (mean = 4.37), with particularly strong outcomes in personal hygiene (98% agreement), basic cooking (89%), and home management awareness (89%). However, practical skill development was comparatively constrained in applied financial management (80%), which was identified as an area requiring more focused instructional effort or practical application due to resource limitations. Stakeholders unanimously perceived Home Economics as an essential, empowering subject crucial for self-sufficiency and independence (96% agreement). Resource constraints—including inadequate funding, materials, and infrastructure—were identified as primary barriers limiting the full realization of the program's potential.

Comparison with Other Studies

The finding that Home Economics education significantly enhances life skills acquisition aligns with studies from other sub-Saharan African settings. Phiri (2023) reported that students who engaged in practical lessons in Zambia's Mufulira District were better equipped with survival skills that enhanced their employability and self-reliance, consistent with the near-universal agreement (98%) among Syakalyabanyama pupils that the skills learned will be useful after school. Similarly, Mapiki (2026) found that resource constraints and teacher capacity challenges in Chirundu District schools significantly impacted practical subject delivery, reinforcing the systemic nature of the barriers identified in this study. Kangwa b and Chanda T (2025) in Chiriundu Zambia found that students who participated in Home Economics classes exhibited improved self-management and practical skills essential for daily living, mirroring the high levels of reported responsibility and confidence in the current study.

The findings on practical skills development reveal a nuanced picture consistent with the resource constraints identified in Zambian literature. The exceptionally high scores in personal hygiene (mean =

4.62) reflect the Zambia Ministry of Education (2023), who noted that despite systemic challenges, Home Economics in Zambia still plays a crucial role in teaching practical skills like cooking and hygiene. The emphasis on hygiene, a low-cost, high-impact area of instruction, has been thoroughly internalized by pupils, as evidenced by 100% agreement on understanding its importance for health.

The relative dip in perceived competency in financial management (mean = 3.98) resonates powerfully with the challenges identified by Phiri (2023) and Kayenda (2022), who highlighted inadequate resources and funding as barriers to effective implementation. At Syakalyabanyama, financial literacy is taught theoretically with "imaginary figures," as the teacher explained, lacking the practical, hands-on projects that would cement the learning. This creates a skills hierarchy where knowledge requiring minimal material resources (hygiene theory) is mastered more completely than knowledge requiring tangible application (budget execution). Mabo (2025) similarly identified insufficient materials, large class sizes, and inadequate teacher preparation as challenges facing Home Economics education in Zambian secondary schools.

The overwhelmingly positive perception of Home Economics as an essential subject (94%) and its role in fostering independence (96%) aligns with global shifts noted by Dewhurst and Pendergast (2008) and Renwick (2018), which frame Home Economics as essential for creating informed, resilient citizens capable of sustainable living. In the local context, this perception carries even greater weight. As the Headteacher articulated, in a rural community with limited formal employment, these skills are directly linked to "survival and thrival" (HT). The subject is perceived as a toolkit for economic and social resilience, empowering pupils to make informed decisions, become more financially literate, and maintain healthier lifestyles. Arubayi, Diana. (2021) similarly emphasized the significance of practical education for sustainable development in Africa.

The finding that female pupils showed slightly higher satisfaction (89.3%) than males (86.4%) aligns with the study by Jadjuli (2026) in South Africa, which found that female learners often engage more deeply with the practical aspects of Home Economics due to cultural expectations. However, the lack of statistically significant differences across gender in skill acquisition is a noteworthy finding. It suggests that at Syakalyabanyama Secondary School, Home Economics education is perceived as equally relevant and effective for both genders, challenging potential stereotypes about the subject being predominantly feminine. This aligns with the Headteacher's reported efforts to promote the subject as essential for all students.

The significant association found between age and cooking confidence ($\chi^2 = 9.84$, $p = 0.043$) suggests that continued exposure to Home Economics instruction and increased practical application at home contribute to skill mastery over time. This developmental pattern has been observed in other studies, such as Nakawa's (2024) research on Grade 10 Zambian students developing 21st-century skills through cross-curricular learning involving Home Economics.

Implications for Policy and Practice

These findings have several implications for policy and practice in Zambia.

First, the high level of life skills acquisition (91%) suggests that the current curriculum is effective in its core mission of personal development. This success should be celebrated and sustained. However, the resource-dependent nature of practical skill development means that the Ministry of Education and the Curriculum Development Centre (CDC) should consider a more context-sensitive curriculum. Alongside standardized objectives, there should be support for "low-resource implementation guides" and the provision of basic, standardized toolkits to rural schools, as recommended by the Ministry of Education's (2023) revised syllabus framework.

Second, the gap between theoretical understanding and practical mastery in financial management (80%) indicates a need for more hands-on, experiential learning opportunities. School administrators and the DEBS should prioritize innovative, community-based solutions. Partnering with local farms for agricultural lessons, inviting local tailors for demonstrations, or establishing a school savings cooperative can bridge the resource gap. Advocacy for the subject must be data-driven, using findings like these to demonstrate both impact and need. Ezema (2024) similarly emphasized the role of Home Economics in achieving sustainable development goals related to family well-being.

Third, the near-unanimous perception of Home Economics as essential (96%) represents a powerful, underutilized asset. This consensus on its value provides a solid foundation for advocacy and innovation. It signals that investments in this subject are likely to have high stakeholder support and community relevance. Sekyere et al. (2025) found in their Ghanaian study that practical sessions, teaching aids, and student interest are crucial for effective Home Economics instruction.

Fourth, the limitations identified in this study—particularly the constraints affecting financial management and advanced cooking skills—should inform future research and policy development. Longitudinal studies tracking Home Economics alumni from Syakalyabanyama and similar schools over 5–10 years would provide definitive evidence of the long-term life and economic impact of the skills acquired. Iyam and Udonwa (2018) found in their Nigerian study that creativity and entrepreneurial skills in Home Economics contribute to educational sustainability, with implications for self-reliance and employment.

Strengths and Weaknesses

Strengths of this study include the mixed-methods design, which allowed for triangulation of findings from multiple perspectives and data sources. The use of validated instruments (structured questionnaires with acceptable Cronbach's alpha values, and semi-structured interviews) enhanced the reliability and validity of the data. The inclusion of multiple stakeholders (pupils, teachers, Headteacher, and guardians) provided a comprehensive understanding of the impact of Home Economics education. The study's focus on a rural school context addresses a significant gap in the literature, as most Zambian studies on Home Economics have focused on urban settings (Mubita, 2011; Phiri, 2023).

Limitations include the cross-sectional design, which precludes causal inference; reliance on self-reported data from pupils, which may be subject to social desirability bias; confinement to a single school, limiting generalizability to other rural or urban settings; the sample size of 50, while adequate for the case study design, may limit the power of subgroup analyses; and the study assessed perceptions of skill acquisition rather than conducting direct assessment of skill competency through practical tests. The challenges of reaching and interviewing guardians may have introduced a selection bias, as the most engaged parents might have been more accessible.

Unanswered Questions and Future Research

Unanswered questions include: How do the skills acquired in Home Economics translate into long-term economic outcomes for graduates? What specific contextual adaptations to the curriculum would be most effective in resource-constrained rural settings? How does the impact of Home Economics compare between rural and urban schools in Zambia? What are the most feasible and acceptable interventions to address the resource constraints identified in this study?

Future research should pursue several avenues. A longitudinal study tracking Home Economics alumni from Syakalyabanyama and similar schools over 5–10 years would provide definitive evidence of the long-term life and economic impact of the skills acquired. Comparative case studies between a well-resourced urban school and a resource-constrained rural school like Syakalyabanyama could isolate the specific effects of resource allocation on learning outcomes (Kayenda, 2022). Furthermore, participatory action research is recommended, where teachers and researchers collaborate to design, implement, and evaluate a low-cost, community-embedded practical module—for example, on "micro-entrepreneurship in home crafts"—and study its effectiveness in enhancing applied skills (Iyam & Udonwa, 2018). Finally, research exploring the impact of specific policy interventions, such as the delivery of standardized practical kits, would provide direct evidence to inform national educational policy and budgeting for vocational subjects.

CONCLUSION

This study affirms that Home Economics education at Syakalyabanyama Secondary School is a powerful and valued component of the curriculum that is successfully imparting essential life and practical skills to pupils, thereby fostering a sense of independence and self-sufficiency. The impact is most pronounced in areas where the curriculum aligns with readily available resources, such as hygiene education and basic food preparation. The subject is rightly perceived by pupils, parents, and educators as a critical component of a relevant and empowering education in a rural Zambian context.

However, the study also concludes that the full potential of this impact is systematically constrained by resource deficiencies. The development of certain vital skills, particularly applied financial literacy and advanced technical abilities, is hindered by a lack of materials, funding, and opportunities for experiential learning (Mabo, 2025; Phiri, 2023). Therefore, the overall impact, while positive and significant, is partially

mediated by the school's socio-economic context. The study demonstrates that Home Economics is achieving its core mission of life-skills development but operates within a cycle where its most transformative potential—equipping pupils with entrepreneurial and advanced management skills—remains under-realized due to structural constraints (Kayenda, 2022).

Recommendations

1. **For School-Level Administration and DEBS**: Establish a dedicated annual budget line for Home Economics practical materials. Foster community partnerships with local farms, tailors, and savings groups to create low-cost learning opportunities. Systematically report resource shortfalls to the DEBS and PEO.
2. **For Home Economics Teachers**: Develop a "Low-Resource Practical Skills Portfolio" documenting locally adapted lesson plans. Initiate a pupil-run "Micro-Savings and Enterprise Club" to practice budgeting and basic entrepreneurship. Document outcomes through case studies for advocacy.
3. **For Curriculum Developers and Policymakers**: Produce a context-sensitive supplementary guide for Home Economics in resource-constrained environments. Consider piloting a "Starter Toolkit" scheme for newly implementing schools. Reform grant disbursement mechanisms to ensure predictability, adequacy, and timeliness.
4. **For Parents, Guardians, and Community**: Organize an annual "Home Economics Demonstration Day" to showcase pupil skills and attract local sponsorship. Encourage guardians to provide opportunities for skill application at home, reinforcing school-based learning with real-world practice.

WHAT IS ALREADY KNOWN ON THIS TOPIC

- Home Economics education is recognized globally for its role in equipping students with practical life skills essential for personal and community development (Arubayi, Diana 2021.; Renwick, 2018).
- In Zambia, numerous schools—particularly in rural areas—struggle with inadequate financing, subpar facilities, and a shortage of instructional resources for Home Economics (Kayenda, 2022).
- The recent curriculum revisions in Zambia emphasize competence-based education, including collaboration, critical thinking, and entrepreneurship in Home Economics (Ministry of Education, 2023).
- There has been no impact assessment conducted regarding the benefits and outcomes of Home Economics since its introduction at Syakalyabanyama Secondary School.

WHAT THIS STUDY ADDS

- Home Economics education at Syakalyabanyama is effective in imparting foundational life and practical skills, with 91% of pupils reporting high levels of perceived life skills acquisition.
- Practical skills development is strongest in personal hygiene (98%) and basic cooking (89%), but comparatively constrained in applied financial management (80%) due to resource limitations.

- Stakeholders unanimously perceive Home Economics as an essential subject crucial for self-sufficiency and independence, with 96% agreeing it prepares them for independent living.
- No statistically significant gender differences were found in practical skill acquisition, challenging stereotypes about the subject being predominantly feminine.
- Resource constraints—including inadequate funding, materials, and infrastructure—are the primary barriers limiting the full realization of the program's potential.
- A significant association was found between age and cooking confidence ($\chi^2 = 9.84$, $p = 0.043$), suggesting that continued exposure and practice contribute to skill mastery over time.

Declarations

AUTHOR'S CONTRIBUTIONS

MM conceptualized and designed the study, led data collection, supervised fieldwork, and drafted the manuscript. EM contributed to study design and methodological rigor and critically reviewed and edited the manuscript. CM contributed to data analysis and interpretation and critically reviewed the manuscript. AP supervised the research, contributed to study design, and critically reviewed and edited the manuscript. All authors read and approved the final version.

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Figures

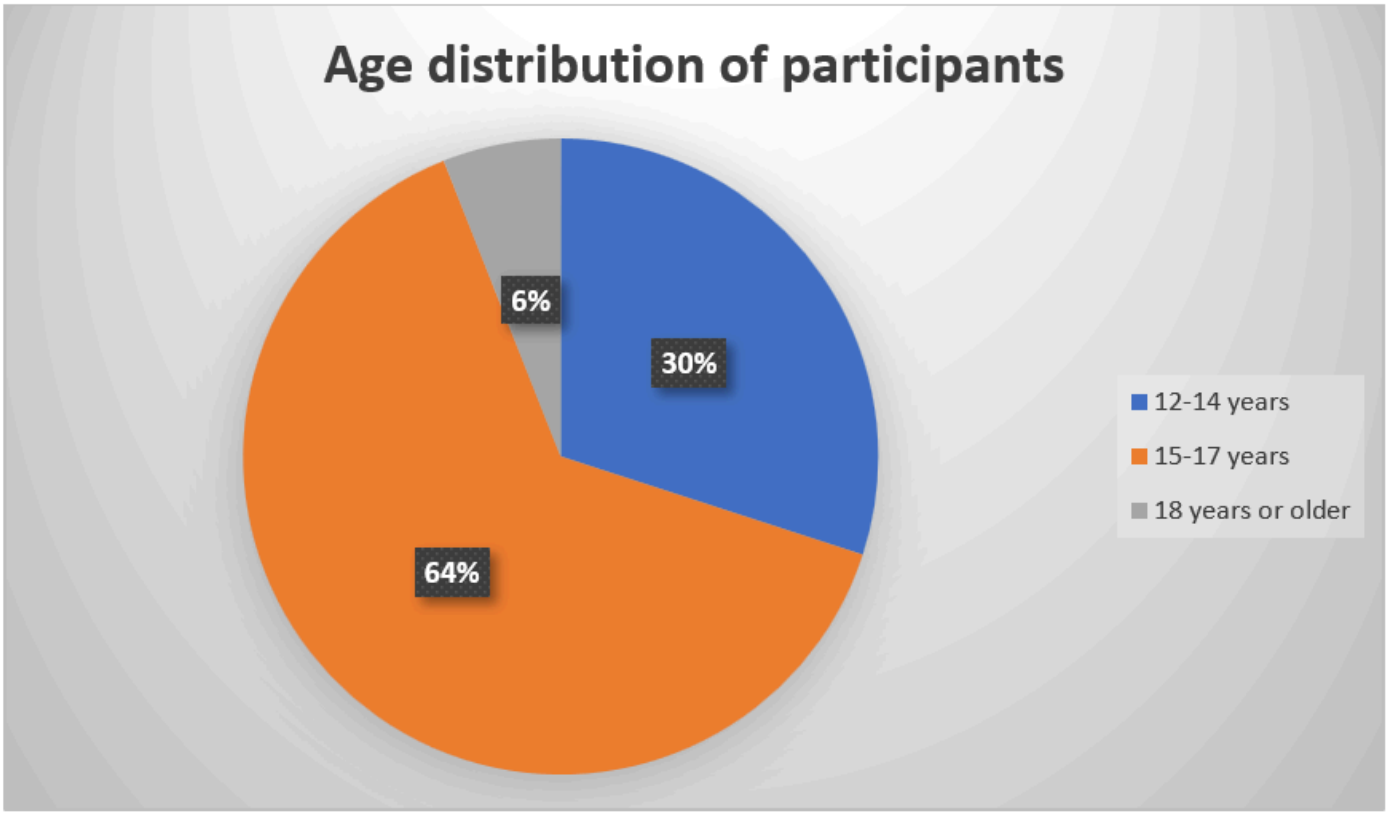


Figure 1

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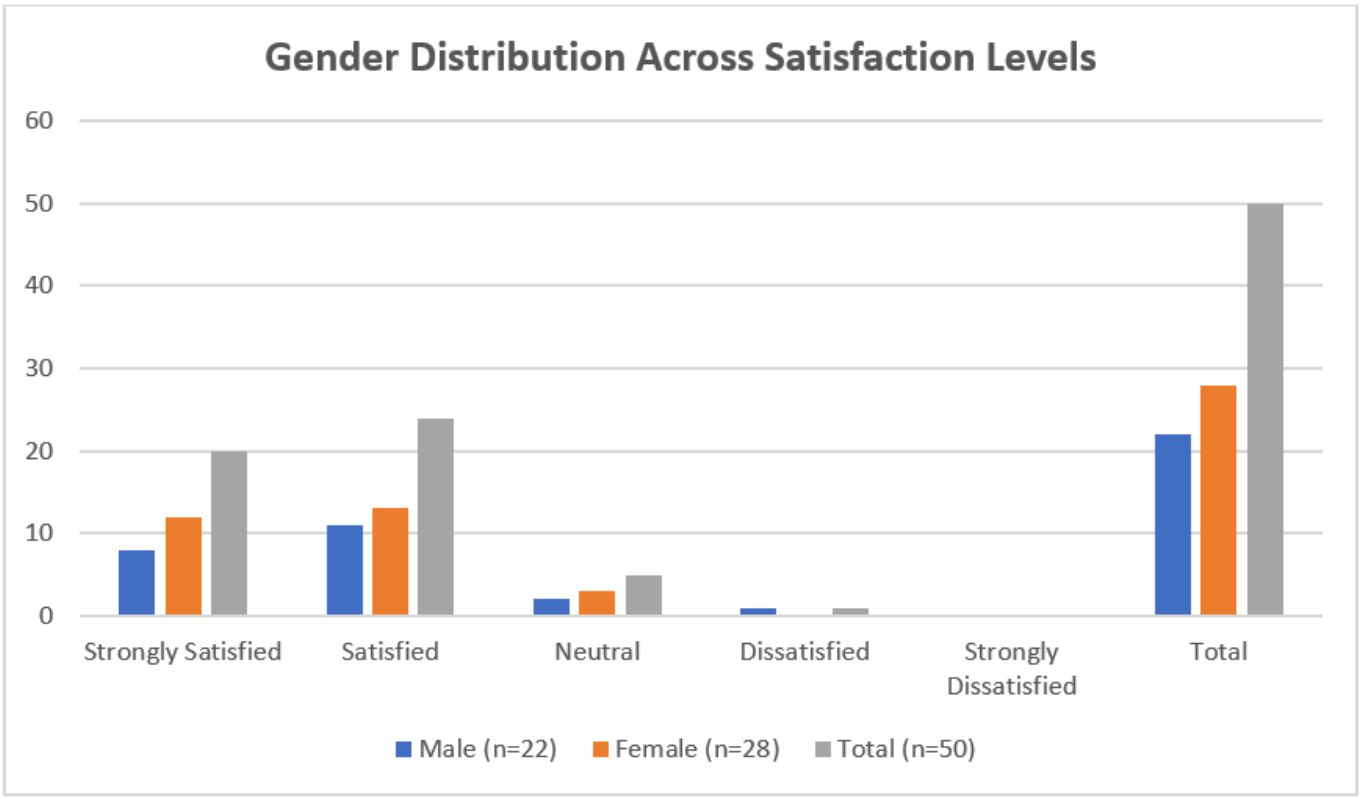


Figure 2

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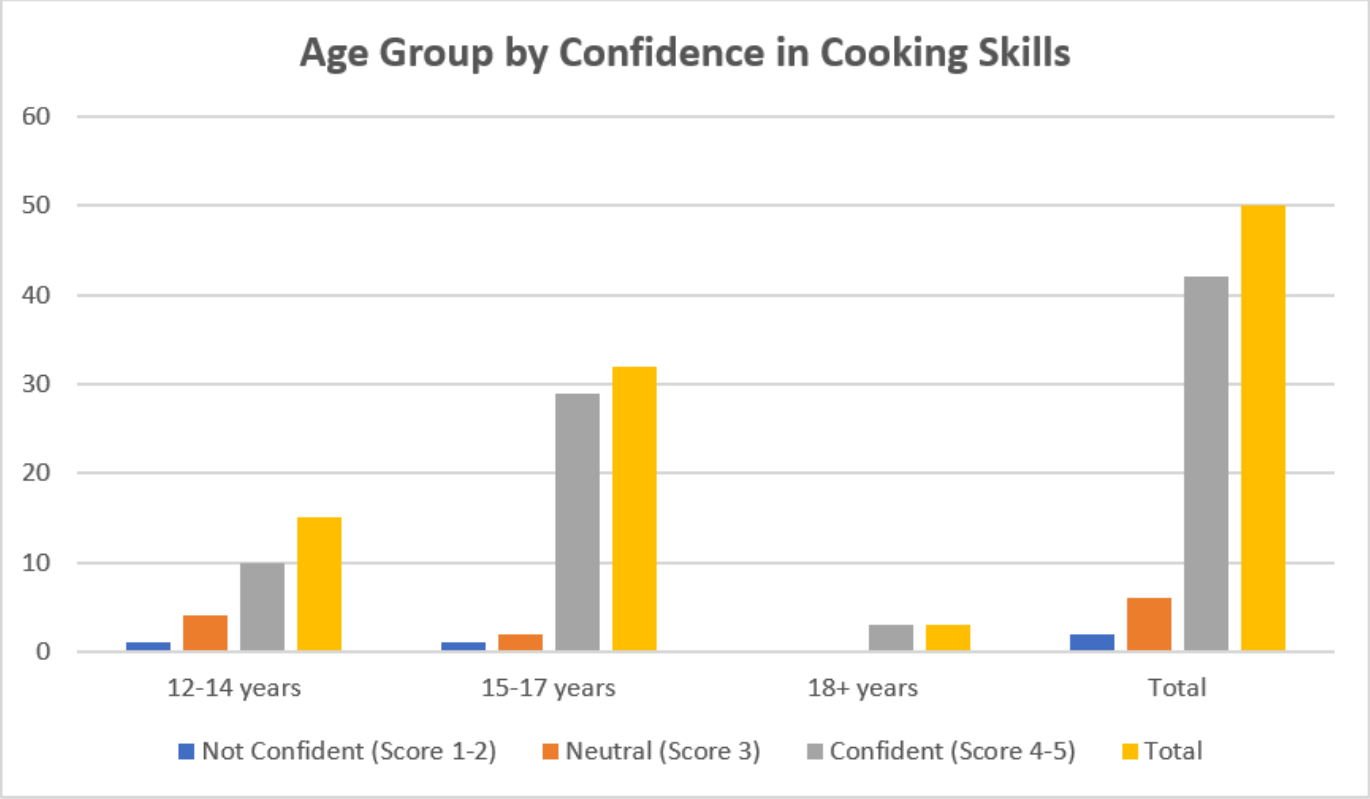


Figure 3

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