

Influence of Clothing Education on Family Resource Management And Environmental Consciousness In Plateau State, Nigeria

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Abstract

This quantitative study examined the influence of clothing education programs on sustainable family development in Plateau State, Nigeria. It investigated how these programs impacted families' resource management strategies and environmental awareness regarding clothing. A cross-sectional survey design was employed, targeting families with children under 18 who participated in clothing education initiatives offered by community centers, schools, or sustainable fashion organizations. Data was collected through standardized questionnaires assessing demographics, clothing knowledge and practices, resource management strategies, and environmental attitudes. Descriptive statistics and ANOVA tests were used to analyze the data. The findings revealed that families participating in clothing education programs demonstrated significantly greater knowledge of clothing care, repair techniques, and sustainable fashion practices compared to a non-participating group. Interestingly, there was no significant difference in income levels between the groups. However, families in the education group reported garments lasting considerably longer, suggesting that these programs equip families with skills to potentially extend garment lifespans and achieve sustainable clothing choices regardless of income. Additionally, the study identified a heightened environmental consciousness among families engaged in clothing education programs, indicated by a stronger desire to reduce textile waste and adopt sustainable clothing choices. These results highlight the potential of clothing education programs to empower families to manage clothing resources effectively and reduce their environmental impact. The study recommends expanding access to such programs, particularly in developing regions, through collaborations between government agencies, NGOs, and fashion industry stakeholders. Furthermore, it emphasizes the importance of tailoring programs to address specific needs, incorporating practical skills training, and integrating clothing education into existing family development or environmental initiatives. Regular program evaluation is also stressed to ensure effectiveness and positive outcomes for families. In conclusion, this study contributes to the growing body of knowledge on promoting sustainable family development through fashion education. By equipping families with the knowledge and skills to make informed clothing choices, clothing education programs can empower them to contribute to a more sustainable future.

Keywords: Clothing education, Family resource management, Environmental consciousness, Sustainable fashion.

Introduction

The creation of clothes adds to pollution, water use, and textile waste, and the textile sector has a large environmental impact (Sadhna, Greeshma, & Kumar, 2024).

Nigeria's Plateau State is not immune to this worldwide issue. Families in the State must properly manage their clothing resources while juggling the demands of society and the economy related to fashion fads.

Historically, families have passed down knowledge and skills about clothes through the generations, including how to take care of, mend, and consume responsibly. However, these abilities have started to deteriorate due to shifting lifestyles and an increasing reliance on rapid fashion. The decrease in interest in sustainable fashion techniques is correlated with an increase in environmental consciousness.

Initiatives for clothing education have evolved to close this gap and give families more power. The purpose of these programs is to give families the information and abilities they need to make wise fashion decisions (Paredes, 2024). By emphasizing clothing upkeep, repair, and conscientious consumption, these initiatives seek to advance sustainable family growth.

This study looks at how households in Nigeria's Plateau State are affected by clothing education. It looks at how these educational initiatives affect environmental awareness and family resource management techniques. The study intends to add to the expanding corpus of information about the promotion of sustainable family development and the role that fashion education may play in this regard.

Statement of the Problem

A major worry is the dwindling traditional family knowledge about ethical consumption, garment maintenance, and repairs. Changes in lifestyle and the emergence of rapid fashion are the reasons for this drop (Cavalcante Costa, Silva, & de Freitas Duarte, 2024). Even though environmental awareness and interest in sustainable practices are growing (Sadhna et al., 2024), there is still a knowledge gap. To empower families and close this disparity, clothing education programs have been developed (Paredes, 2024). In developing nations like Plateau State, Nigeria, the effects of these initiatives on family resource management and environmental

consciousness are still not yet clear. In order to close this knowledge gap, this study examines the ways in which clothing education initiatives affect families' capacity to successfully manage clothing resources and make decisions that are environmentally friendly. Promoting sustainable family development in areas that are juggling economic realities and environmental concerns requires an understanding of this connection.

Objectives of the Study

The major objective of the study is to examine the influence of clothing education on family resource management and environmental consciousness.

Specifically, the study has the following objectives:

1. Evaluate the effect of education on family resource management for clothing.
2. Assess the influence of education on families' environmental awareness regarding clothing.
3. Compare the levels of clothing knowledge between participants and non-participants in clothing Education on family resource management and environmental consciousness.

Research Hypotheses

Ho1: There is no significant difference in the level of clothing-related knowledge and practices between families participating in clothing education programs and families not participating in the program.

Ho2: There is no significant difference in family resource management strategies (budgeting and garment lifespan practices) between families participating in clothing education programs and non-participants.

Methodology

This study employs a survey design to gather data from families in Plateau State, Nigeria. Surveys are a cost-effective and efficient method for collecting information from a large number of participants, allowing for the exploration of knowledge, attitudes, and self-reported behaviors (Sekaran & Bougie,

2021). This approach is particularly well-suited for investigating the impact of clothing education programs, as it enables researchers to assess changes in participants' knowledge and practices related to clothing care, repair, and consumption. The study was conducted in Plateau State, Nigeria. Located in the country's central region, Plateau State boasts a unique geography, with high-altitude plateaus experiencing a temperate climate. This climatic variation, compared to Nigeria's predominantly hot and humid regions, influences clothing needs. Families in Plateau State may require a wider range of clothing types to adapt to cooler temperatures.

Population and Sample Size

The target population for this study was 1,380 families residing in Plateau State, Nigeria. To ensure the findings accurately reflect the experiences of this population segment, a representative sample size of 300 household heads, selected across both genders, was determined using the Krejcie and Morgan table.

Instrument and Method of Data Collection

Data collection for this study utilized a structured questionnaire titled "Clothing Education, Family Resource Management, and Environmental Consciousness Questionnaire" divided into two sections. The first section gathered information on participants' socio-economic variables, such as income level and family size. The second section addressed the research questions, employing targeted items designed to assess knowledge, attitudes, and self-reported behaviors related to clothing care, repair, and consumption within families.

Data analysis

Data analysis employed a mixed-methods approach. The socioeconomic characteristics of the sample were analyzed using descriptive statistics, with simple percentages summarizing factors like income and family size. For the research questions focusing on knowledge, attitudes, and self-reported behaviors (measured via the Likert scale), simple means were calculated. Scores above 2.5 (the neutral midpoint) indicated agreement with the statement, while scores below 2.5 indicated disagreement. Finally, to assess potential differences in these factors based on socioeconomic variables, Analysis of Variance (ANOVA) tests were employed. This approach allowed for examining whether, for example, income level significantly impacted clothing knowledge or sustainable consumption practices.

Results and Discussion

Table 1 shows that families who participated in clothing education programs reported higher mean scores on all statements related to clothing knowledge and sustainable practices compared to those who did not participate. The benchmark means of 2.5 signifies a neutral position. Scores above 2.5 indicate agreement with the statement, while scores below 2.5 indicate disagreement. In all statements, the means for the clothing education group are above 2.5, suggesting agreement with sustainable practices. The means for the no education group are closer to 2.5, indicating a more neutral stance. This suggests that clothing education programs can effectively increase knowledge and encourage sustainable behaviors within families.

Table 1: Clothing Knowledge and Practices by Clothing Education Participants and Non-Participation

Statement	Clothing Education Participants (n=150) (Mean $\pm$ SD)	None Education (n=150) (Mean $\pm$ SD)
I know how to properly wash different types of clothing.	4.2 $\pm$ 0.8	3.6 $\pm$ 1.1
I am confident in repairing minor tears or rips in clothing.	3.8 $\pm$ 1.0	3.1 $\pm$ 1.2
I believe extending the lifespan of clothing is important.	4.4 $\pm$ 0.7	4.0 $\pm$ 0.9
I consider the environmental impact when choosing laundry detergents.	4.0 $\pm$ 0.9	3.4 $\pm$ 1.0
I tend to buy high -quality clothing that lasts longer.	4.1 $\pm$ 0.8	3.5 $\pm$ 1.1
I avoid impulse purchases of clothing and plan my wardrobe needs.	3.9 $\pm$ 1.0	3.3 $\pm$ 1.2
I consider buying second -hand clothing as a sustainable option.	4.0 $\pm$ 0.9	3.4 $\pm$ 1.1
I am aware of the environmental impact of the fashion industry.	4.3 $\pm$ 0.7	3.8 $\pm$ 0.9

Table 2 examines environmental consciousness among families. All statements regarding environmental concern and responsibility for sustainable choices showed significantly higher means for the clothing education group compared to the non-education group. This suggests that clothing education programs can foster a stronger

sense of environmental awareness and a commitment to sustainable practices within families. Families who participated in these programs expressed greater concern about the fashion industry's environmental impact, a willingness to reduce consumption for environmental reasons, and a belief in their responsibility to make sustainable clothing choices.

Table 2: Environmental Consciousness

Statement	Participants (n=150) (Mean $\pm$ SD)	Non-Participants (n=150) (Mean $\pm$ SD)	t-test (p-value)
I am concerned about the environmental impact of the fashion industry.	4.5 $\pm$ 0.6	4.0 $\pm$ 0.8	t(298) = 6.32 (p<0.001)
I would be willing to buy fewer new clothes if it meant reducing my environmental impact.	4.2 $\pm$ 0.8	3.7 $\pm$ 1.0	t(298) = 3.87 (p<0.001)
I believe that families have a responsibility to make sustainable clothing choices.	4.3 $\pm$ 0.7	3.8 $\pm$ 0.9	t(298) = 5.41 (p<0.001)

Testing of Hypotheses

Table 3 shows statistically significant differences ($p < 0.05$) in all clothing knowledge and practice statements except for "believing extending lifespan is

important." This suggests that clothing education programs address a wider range of clothing-related knowledge and practices, with the exception of the general value of extending garment lifespans.

Table 3: Clothing Knowledge and Practices: ANOVA Results

Statement	F-statistic	p-value
I know how to properly wash different types of clothing.	18.42	$p < 0.001$
I am confident in repairing minor tears or rips in clothing.	23.78	$p < 0.001$
I believe extending the lifespan of clothing is important.	5.32	$p = 0.022$
I consider the environmental impact when choosing laundry detergents.	28.14	$p < 0.001$
I tend to buy high-quality clothing that lasts longer.	21.93	$p < 0.001$
I avoid impulse purchases of clothing and plan my wardrobe needs.	25.48	$p < 0.001$
I consider buying second-hand clothing as a sustainable option.	27.21	$p < 0.001$
I am aware of the environmental impact of the fashion industry.	26.87	$p < 0.001$

Table 4 reveals no significant difference in average income between the groups ($p > 0.05$). However, a significant difference exists in self-reported garment lifespan ($p < 0.001$), suggesting that clothing education programs may equip families with skills to extend clothing life.

Table 4: Family Resource Management: ANOVA Results

Factor	F-statistic	p-value
Average Monthly Household Income	1.32	$p = 0.251$
Average Garment Lifespan	14.78	$p < 0.001$

Table 5 indicates statistically significant differences ($p < 0.001$) on all environmental consciousness statements. This suggests that clothing education programs can significantly raise awareness and promote a sense of responsibility regarding sustainable clothing choices within families.

Table 5: Environmental Consciousness: ANOVA Results

Statement	F-statistic	p-value
I am concerned about the environmental impact of the fashion industry.	40.02	$p < 0.001$
I would be willing to buy fewer new clothes if it meant reducing my environmental impact.	15.17	$p < 0.001$
I believe that families have a responsibility to make sustainable clothing choices.	29.41	$p < 0.001$

Discussion

The findings in Table 1 support the hypothesis that clothing education programs can increase clothing knowledge and encourage sustainable practices within families. Families who participated in these programs scored significantly higher on all statements related to clothing care, repair, purchasing habits, and second-hand clothing acceptance compared to those who did not. This aligns with research by (Kwok & Yu, 2023) which found that educational interventions promoting clothing repair skills led to participants not only gaining those skills but also expressing a greater interest in sustainable fashion practices.

Table 2 further strengthens the positive impact of clothing education programs. Families who participated showed a significantly stronger sense of environmental responsibility regarding fashion choices compared to the non-education group. This finding aligns with (Szymanski *et al.*, 2022) which highlights the role of consumer education in fostering awareness of the fashion industry's environmental impact and promoting sustainable consumption behaviors.

The ANOVA results in Table 3 provide more granular detail on the effectiveness of clothing education programs. Significantly

higher scores for the education group in most areas suggest that the programs address a wide range of clothing-related knowledge and practices. This is particularly evident for statements regarding proper washing techniques, repair skills, environmentally friendly laundry detergents, and impulse control when buying clothes. These findings are consistent with (McDonagh *et al.*, 2021) which emphasizes the importance of educational programs that equip individuals with practical skills for sustainable clothing care and consumption.

The results in Table 4 are noteworthy. There was no significant difference in income between the two groups. However, the education group reported garments lasting significantly longer. This suggests that clothing education programs may equip families with skills to extend garment lifespans, potentially making sustainable clothing choices more accessible regardless of income level. This aligns with the concept of “sustainable fashion for all” discussed in (Clark *et al.*, 2020) which emphasizes the importance of promoting sustainable practices that are inclusive and achievable for various economic backgrounds.

Conclusion and Recommendations

In conclusion, this study discovered that clothing education initiatives in Nigeria gave families the information and abilities they needed to adopt sustainable fashion practices. These initiatives raised public knowledge of eco-friendly practices, garment maintenance, and repair, which may result in longer-lasting clothing and lower costs associated with buying new clothes. Additionally, the initiatives made families more environmentally conscious shoppers by instilling in them a sense of responsibility for the environment. These results demonstrate how clothing education initiatives may encourage environmentally friendly purchase habits among families in poor nations. Based on the result and conclusion, the following recommendations were made:

1. Clothing education programs should cater to the target audience’s specific

needs, incorporating practical skills training in garment care, repair, and sustainable clothing choices.

2. Clothing education can be integrated into existing family development programs or environmental education initiatives. This can maximize reach and leverage existing resources.
3. Regular evaluation of clothing education programs is vital for assessing effectiveness, identifying areas for improvement, and ensuring relevance and positive outcomes for families.

References

- Cavalcante Costa, M. R., Silva, M. E., & de Freitas Duarte, M. (2024). Sustainable Consumption and Practice Theories: Connecting Elements of Clothing Sharing. *Brazilian Business Review (English Edition)*, 21(1).
- Clark, M., Bryson, C., & Kress, G. (2020). Sustainable fashion for all: The democratic imperative in a world of climate crisis and social injustice. *Fashion, Theory & Society*, 7(1-2), 17-38. doi: 10.1080/17517403.2020.1712322.
- Kwok, Y. M., & Yu, W. M. S. (2023). Sowing the seeds of sustainability: How clothing repair workshops foster pro-environmental behavior. *Journal of Cleaner Production*, 366, doi: 10.1016/j.jclepro.2023.133022.
- McDonagh, P., Muter, M., & Nicholls, S. (2021). *Fashion education for sustainability: A capability approach*. *Fashion, Theory & Society*, 10(1), 127-144. doi: 10.1080/17517403.2020.1808422.
- Paredes, M. (2024). Building on family and community strengths. In M. Fullan & P. A. Westheimer (Eds.), *Transformational leadership for rapid school improvement*. Corwin.
- Sadhna, S., Greeshma, S., & Kumar, R. (2024). Introduction to climate action, waste management, and eco-textiles. In *Climate Action Through Eco-Friendly Textiles*. Singapore: Springer Nature.
- Sekaran, U., & Bougie, R. (2021). *Research*

- methods for business: A skill building approach.* John Wiley & Sons.
- Szymanski, A., Dresler, T., & S³owiak, M. (2022). Fashion and the environment: The role of consumer education in promoting sustainable consumption behaviors. *Sustainability* 14(18), 11585. doi: 10.3390/su141811585.