

QUALITY, PERCEPTION AND SUSTAINABILITY OF OSUN STATE SCHOOL UNIFORM

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ABSTRACT

The similar uniform adopted by the Osun State government, O-uniform, showed no distinction between one public school and another, like the former uniforms. The study assessed the quality, perception and sustainability of O-uniforms. Fabric samples were analysed. Two hundred students in public schools and ten supervisors/directors participated in the study. A set of questionnaires and key informant interviews were used to collect data. The data collected were analysed using descriptive statistics such as frequency and percentage. The result of fabric analysis showed that the dark brown (DB) fabric was 100% polyester woven with 758 denier warp yarns and 356 denier weft yarns, while the Kampala sample (KD) is 100% cotton with 16 Tex warp yarns and 2 Tex weft yarns. They had very high light fastness among other qualities. Students had a positive perception of the uniforms. They agreed that the uniform helped in identity ($\bar{x} = 2.70$) and reduced the financial burden of purchasing new uniforms ($\bar{x} = 2.54$). However, they preferred the colour and design of former uniforms which included ties, caps and cardigans. The directors submitted that O-uniform was not sustainable because it promoted crimes among students. The study recommends that policymakers and educators should consider sustainability factors in selecting uniforms. Students should be allowed to express themselves in their appearance.

Keywords: *Quality, O-uniform, perception, public schools, sustainability*

BACKGROUND TO THE STUDY

Varieties of school uniforms are usually adopted among elementary and high schools to make it easy to recognise students belonging to particular schools. Some states enforce students to use a single, standardized uniform in all schools for identity (Woo, Tam, Bonn, & Tagg, 2020).

Nigeria has not had any record of such single uniform since independence. However, in 2012, Osun State adopted a single uniform called O-Uniform. The uniform went into obsolescence in 2018 when a new administration took over the state.

Before the inception of the O-uniform in the state, each school had a particular uniform. The O-uniform however made it difficult to differentiate students. One of the objectives of the O-uniform was to revamp the entire educational system in the state, support poor parents and stimulate the local economy (State of Osun, 2020).

A uniform is any outfit in specified colour made of tops and bottoms and used in educational

institutions (Zhang & Wang, 2015). It could be formal or informal (Kelly, 2018). Uniforms are used to identify people in various occupations, differentiate groups, classify status, and celebrate social and cultural events (Diyaolu & Omisakin, 2018; Diyaolu, 2010).

O-uniforms consist of brown shorts on brown shirts for boys and brown pinafore for girls in the elementary section. The middle school has brown pinafore with a *Kampala* blouse or shirt while the high school is a yellow shirt or blouse with a brown skirt or shorts.

Varieties of uniforms contribute to better discipline in school operations. Drew (2021) opined that students in uniform are better listeners. It decreases violence and theft, helps students concentrate on their school work, and aids school officials recognise intruders who come to the school (DeMitchell, 2015).

However, the introduction of O-uniform generated issues regarding its quality, perception and sustainability. Previous studies on O-uniform by Arowosegbe (2019) and Atolagbe, Umaru, Oyedeji, & Oparinde (2018) did not document the technical quality of the fabrics and their sustainability. What are the technical qualities of the materials used for the O-Uniform? How do the students perceive the new uniform compared with previous ones? What sustainability factors led to the obsolescence of O-uniform?

Therefore, the study examined the technical qualities of O-uniform, the perception of students about the uniform and the sustainability of the uniform. The study bridges the gap of information on O-uniform and reveals its technical qualities. It can guide the government and school owners on requirements for future policies on school uniforms.

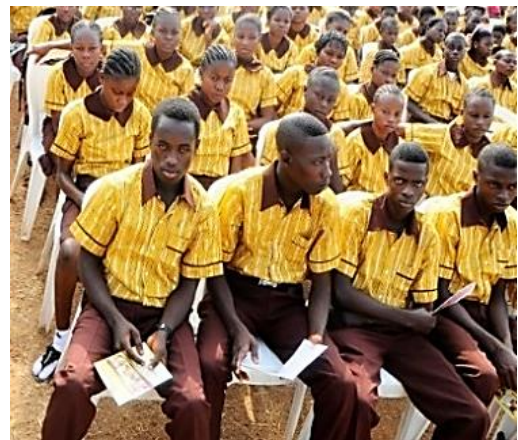


Plate 1: Public primary and secondary school students wearing O-uniform

METHODOLOGY

Osun State is situated in South-west Nigeria. It is located at 7°30'0"N 4°30'0"E (State of Osun 2020). The study employed laboratory analysis and survey.

Laboratory analysis: The three major fabrics used in the production of O-uniform were collected from the government-approved agency and analysed at the Textile Testing and Quality Control Laboratory, Yaba College of Technology, Lagos State, Nigeria. The analysis included descriptive analysis, wash fastness, rubbing stain test and light fastness. The tests were carried out according to the British Standard Handbook 1974, under standard atmospheric conditions.

Survey: A survey was conducted among middle and high school students in Ile-Ife, Osun State. Two educational zones were stratified and four secondary schools were randomly selected. 50 students in mid/high classes were randomly selected to make a total of two hundred students. A questionnaire was used to collect information on their perception and preference for O-uniform. In addition, ten supervisors/directors of education were purposively selected from ten educational districts. Key informant interview was used to collect information on sustainability issues surrounding the O-uniform and factors that led to its extinction.

Data were analysed using descriptive statistics such as frequency, percentages and means.

RESULTS AND DISCUSSION

Technical Report on the Fabrics



Plate 2: Brown fabric sample, Dark brown fabric and *Kampala* design

Table I: Analytical Description of O-Uniform fabrics

| | Fabric type | Sample code | Fibre type | Weave structure | Fabric set/ cm | | linear density Tex/Denier | |
|---|--------------------|--------------------|-------------------|------------------------|-----------------------|------------|----------------------------------|--------------------|
| 1 | Dark brown | DB | 100% PE | Plain Weave | Warp 20 | Weft 20 | Warp 758 denier | Weft 356 denier |
| 2 | Brown | B | 100% PE | - | 20 | 20 | 349D | 324D |
| 3 | Kampala Design | KD | 100% Cotton | Dobby weave | 140 | 60 | 16Tex | 2 Tex |

Descriptive analysis

Table I shows the analytical description of O-uniform fabrics. The sampled fabrics (DB and B) are 100% polyester. While DB has 758 deniers for warp yarns and 356 deniers for the weft yarns, sample B has 349 deniers warp yarns and 324 denier weft yarn. Sample KD is a 100% cotton fabric with 16 Tex warp yarns and 2 Tex weft yarns. These fabric parameters, along with weight and dimensional stability are important in selecting school uniforms (Danquah, 2018). Cotton and polyester are usually produced in Nigerian textile mills, making them readily available for uniforms (Diyaolu, 2018). Cotton is comfortable to wear and absorbs heat, making it conducive for school uniforms.

Table II: Fabric Qualities

| Tests | Gray scale Results | | |
|---------------------------|---------------------------|-----------|-----------|
| | B | DB | KD |
| Washfastness | 5 | 5 | 5 |
| Washfast Change in shade | 5 | 5 | 3 |
| Rubbing stain/wet | 5 | 4 | 4 |
| Rubbing stain/dry | 4 | 4/5 | 3/4 |
| Lightfast rating | 4 | 4 | 3 |
| Lightfast Change in shade | 5 | 5 | 4 |

Remarks: 3=Good; 4=Very Good; 5=Excellent

Wash-fastness test

Table II shows the wash fastness standard rating test of the fabrics. Samples DB and B have a Greyscale fastness rating of 5 (excellent) and the change in shade test was also rated 5. This indicated excellent results, meaning that the fabrics were able to retain the colour without fading. Similar result was obtained in the analysis of Diyaolu (2018). Musa, Yakubu & Danfulani (2010) submitted that fabrics from Nigerian mills used in the production of uniforms exhibit good colorfastness. The quality of washfastness is desirable in school uniforms owing to constant washing.

Rubbing stain test

The grey scale rating for sample DB (wet) was 4 while the dry condition was between 4 and 5 (very good). The samples have a very high resistance to stains. The study of Raji, Chima, & Adamu (2007) corroborates this assertion on the property of some fabrics with grayscale 4 to 5.

Light fastness test

Lightfastness is the degree to which a printed or dyed material resists exposure to sunlight. The results of the light fastness test using the blue wool standard rating showed that fabrics DB, B and KD have the following blue wool standard rating: DB (4 = Very Good), B (4 = Very Good) and KD (3 = Good). The change in the shade of the fabrics (DB and B) when exposed to light was excellent while KD was very good. A fabric that cannot retain its colour when dried in the sun is of low quality (Teli & Vilia, 2015).

From the foregoing, the fabrics used for the O-uniform met minimum standard of lightfastness, and rubbing stain tests.

Table III: Students' perception of O-uniform

| Perception | Strongly agree | Agree | Disagree | Strongly disagree | Mean Score |
|--|----------------|------------|------------|-------------------|------------|
| O-uniform helps in identity | 62 (31%) | 64 (32%) | 26 (13%) | 48 (24%) | 2.70 |
| I wear it because it is mandatory | 30 (15%) | 42 (21%) | 61 (30.5%) | 67 (37.5%) | 2.17 |
| It improves my academic performance | 45 (22.5%) | 84 (42%) | 34 (17%) | 37 (18.5%) | 2.68 |
| Wearing O-uniform makes me feel proud | 63 (31.5%) | 65 (32.5%) | 34 (17%) | 38 (19%) | 2.76 |
| It promotes the standard of my school | 52 (26%) | 80 (40%) | 33 (16.5%) | 35 (17.5%) | 2.74 |
| It helps to reduce financial burden | 43 (21.5%) | 71 (35.5%) | 37 (18.5%) | 49 (24.5%) | 2.54 |
| The uniform is very durable | 46 (23%) | 85 (42.5%) | 26 (13%) | 43 (21.5%) | 2.67 |
| It increases social crime | 48 (24%) | 55 (27.5%) | 41 (20.5%) | 56 (28%) | 2.47 |
| I am always eager to remove my uniform | 69 (34.5%) | 61 (30.5%) | 31 (15.5%) | 39 (19.5%) | 2.80 |
| I look smart in O- uniform | 82 (41%) | 70 (35%) | 20 (10%) | 28 (14%) | 3.03 |
| People appreciate it when I put it on | 61 (30.5%) | 74 (37%) | 32 (16%) | 33 (16.5%) | 2.81 |
| It fades in the sun | 49 (24.5%) | 60 (30%) | 41 (20.5%) | 50 (25%) | 2.54 |

| | | | | | |
|----------------------------------|---------------|---------------|---------------|------------|------|
| O-uniform bleaches when washed | 45 (22.5%) | 38 (19%) | 54 (27%) | 63 (31.5%) | 2.32 |
| It tears easily | 42 (21%) | 46 (23%) | 52 (26%) | 60 (30%) | 2.35 |
| It easily gets burnt when ironed | 39 (19.5%) | 57 (28.5%) | 53 (26.5%) | 51 (25.5%) | 2.42 |
| It has a poor abrasive quality | 46 (23%) | 49 (24.5%) | 55 (27.5%) | 50 (25%) | 2.45 |

Table III shows the result of the student's perception of O-uniform. There was a generally positive perception in favour of the uniform. Students agreed that the uniform helped in identity ($\bar{x}=2.70$), contributed to academic performance ($\bar{x}=2.68$), and made them feel good ($\bar{x}=3.00$). They supported the fact that O-uniform reduced the financial burden of purchasing new uniforms ($\bar{x}=2.54$) and that they looked smart on them ($\bar{x}=3.03$). They attested to the fact that people appreciated their uniform on them ($\bar{x}=2.81$). However, 51.5% agreed that it increased social crime, faded in the sun after drying (54.5%), bleached after washing (41.5%) and had poor abrasion (47.5%). Dulin (2016) submitted that uniforms alone cannot be used to determine students' academic performance. It has been debated that school uniforms make it easy to identify students who engage in social crime (Roguski, 1997). However, similar uniforms among all public schools have made it difficult to trace and identify students who commit crimes at a particular school. According to Sowell (2012), school uniform affects performance in subjects such as English Language, Mathematics and Arts as the majority asserted that O-uniform improves their academic performance. Atolagbe *et al.*, (2018) mentioned that the O-Uniform helped students perform better in the West African Examination Council. The perception of the students on the quality characteristics is subjective to the laboratory analysis established in this study. Previous studies also showed that while 50.7% of the students in Osun state had a negative perception of O-uniform, 49.3% had a positive perception (Olukayode, 2019).

Table IV: Distribution of respondents' preference between the former uniform and o-uniform

| S/N | Satisfaction | Former uniform | O-uniform |
|-----|--------------|----------------|------------|
| 1 | Colour | 150 (75%) | 50 (25%) |
| 2 | Style | 148 (74%) | 52 (26%) |
| 3 | Aesthetic | 151 (75.5%) | 49 (24.5%) |
| 4 | Prices | 141 (70.5%) | 59 (29.5%) |
| 5 | Hand/sole | 144 (72%) | 56 (28%) |
| 6 | Size | 149 (74.5%) | 51 (25.5%) |
| 7 | Top/beret | 149 (74.5%) | 51 (25.5%) |

Table IV shows the preference between the former uniform and the O-uniform. The majority (75%) preferred the colour of the former uniform while (74%) preferred the style of the former

uniform. The tie of the former uniform, socks and cap/beret were preferred by 74.5%, 70.5% and 74.5% respectively. It is evidenced that although students accepted the mandatory O-uniform, they preferred the former ones they were using. The former uniforms were in different colours and styles, especially among model schools in the state. The single uniform was reported to be unattractive (Woo *et al.*, 2020). Also, improper styles, monotonous colours and unsafe fabrics were complaints of students in elementary schools (Li, 2019). Zhang & Wang (2015) opined that school uniforms should enhance a sense of belonging and improve the aesthetic appearance of students. It can be inferred that students preferred the self-expressions in their former uniform probably due to its comfort, attractiveness and tidiness.

Sustainability of O-uniform

To enhance sustainability in school uniforms, indicators such as punctuality, discipline, and school safety are necessary for effectiveness (Dulin, 2016). All the directors mentioned that O-uniform was not sustainable. Olukayode (2019) opined that 61.1% of teachers in public schools viewed the uniform to be unsustainable. The sustainability issue was viewed from social, economic and environmental perspectives. Social issues have to do with crime, violence, theft, indiscipline and gangsterism. The following responses were recorded:

- i. Increase in crime among students: There was a high rate of crime among the students because there was no means of distinguishing one school from another. When a particular student commits a crime, it was difficult to trace the school of the student and apply necessary punitive measures. Cultism also crept in. Misidentification and gangsterism were reported to be prevalent among the students since the introduction of O-uniform (Olukayode, 2019). In contrast, Ramlee, Ahmed, & Muhammad, (2022) reported that the introduction of a mandatory uniform policy in Malaysia led to a significant decrease in the assault, fighting incidences and sex offences.
- ii. Lawlessness in schools: Students were noticed to abscond from schools. There were reports of students beating teachers and disappearing into the thin air because they could not be attached to a particular school uniform. A major reason for introducing uniforms as dress codes in public schools is to prevent violence and improve student behaviour. This was not the case with O-uniform (Dulin, 2016).
- iii. Loss of prestige of Model schools: Some schools that were model schools in the state lost their dignity and prestige. Richard, Olumide, & Adnan (2021) observed retrogression in the Osun state education system and pointed out that a single uniform policy disrupted the peaceful process of existing policy.
- iv. Single factory system: A regional centre for mass production of uniforms could be created using modern manufacturing infrastructure (Namba, 2018). This would allow more people to be involved in the production of O-uniform. Unfortunately, the production of O-uniform was limited to a single business entity, the Omoluwabi Garment Factory. The implication of producing O-uniform through one factory is that textile merchants and fashion designers who were benefitting from the production and

- design of the former uniform lost patronage. This is the economic aspect of sustainability that displeased other designers. Namba (2018) further established that “primary schools’ uniforms became available at affordable prices in Japan, while secondary schools used designated tailoring shops for their custom-made uniforms with school emblems and accessories.”
- v. Religious perspective: Religious crisis emanated from the O-uniform as Muslim students were mandated to use hijab in school. Others non-Muslims were also dressing to conform to their religion.
 - vi. Alumnus of schools lost interest in assisting the schools because the uniform was not distinctive as it used to be.

CONCLUSION

Students had a positive perception of O-uniform. The identity of the uniform is in the area of a singular uniform for the state. The study has established the fact that the students in public schools in Osun State preferred their former uniforms with different styles.

Also, the fabrics had excellent light fastness properties. The directors/supervisors affirmed that O-uniform was not sustainable in that it promoted crime, cultism and increased indiscipline among students. The economic benefits of other textile merchants were limited because the production, construction and distribution of O-uniform were carried out by a single firm, the Omoluwabi factory.

RECOMMENDATIONS

The study recommends that sustainability issues should be incorporated in selecting uniforms. This includes social, economic and environmental factors. Government should restrain from forcing a single uniform policy on students without considering the long-term implications. Environmental pollution can set in due to changing uniforms over and over again. When more textile materials are not well disposed of, they constitute pollution. Therefore, durable and appealing fabrics should be selected as uniform. Also, to allow for self-expression, dress items like caps and ties that are desirable to students should be incorporated. Sportswear can also be introduced as some private schools practice in Osun State.

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