Perceptions of Female State Civil Servants in Selected States of Southeast Nigeria on the Effectiveness and Safety of Organic vs. Conventional Skin Lightening Products

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Abstract

This study examines the viewpoints of women state civil servants in some Southeast states of Nigeria on the efficacy and safety of organic versus conventional skin bleaching products. In Nigeria, particularly among women, skin lightening procedures are extremely common and are mostly prevalent as a result of societal standards and beauty ideals that endorse lighter skin. The study was designed as a survey. The study population comprised all female state civil servants in different ministries, departments, and agencies in the selected state of the South-East geopolitical zone of Nigeria. (67,738). A sample of 622 respondents was selected from this population using Krejcie and Morgan for different population ranges. Questionnaires were personally administered to 622 female state civil servants. But 609 of the questionnaires were recovered. The theoretical framework for the study is rooted in Social Cognitive Theory (SCT), which emphasizes the role of cognitive, behavioral, and environmental influences on decision-making. Major findings indicate that despite organic products being perceived as more effective and safer, conventional products are used more widely by the female state civil servants. The study concludes that female state civil servants in Southeast Nigeria prioritize safety in their use of skin-lightening products, with organic products seen as safer but less effective, while conventional products are favoured for their higher effectiveness despite safety concerns.

Key words: Perception, Female state civil servants, southeast Nigeria, effectiveness, safety, conventional, Organic, skin-lightening.

1.0 Introduction

The use of skin lightening products has drastically increased worldwide, especially in Africa, where social constructs of beauty celebrate lighter skin tones (Egbi & Kasia, 2021). In Nigeria, and South-east specifically, these products are easily obtainable, especially among women who aspire to achieve smooth, lighter skin tones as the epitome of beauty, social standing, and triumph (Apuke, 2018). Skin lightening products can be categorized as natural/organic and chemical/conventional. Organic products, as outlined by Šniepienė and Jankauskienė (2021), are thought to be safer because of their natural composition. On the other hand, conventional products are believed to be stronger but pose problems regarding safety, as argued by Egbi & Kasia (2021). This research examines the views of female state civil servants in specific states of southeastern Nigeria on the safety and effectiveness of these two categories of skin-whitening products. Female state civil servants, being an important segment of the Nigerian professional workforce, form a distinctive group whose perceptions may not mirror those of the general population owing to their education, awareness, and access to information.

2.0 Background to the Study

In Nigeria, the demand for skin whitening products stems from an ingrained cultural bias towards lighter skin, which has been influenced by social, historical, and economic components (Apuke, 2018). Women with lighter skin are deemed more beautiful, prestigious, and modern. For these reasons, a lot of women use skin whitening products (Beshir, 2023). The industry has responded by providing chemical and organic variants of these products. Traditional skin whitening products tend to use chemical components like hydroquinone, mercury, and steroids. These chemicals are associated with negative health impacts such as skin irritation, thinning, and in some extreme cases, systemic poisoning (Adum & Obi, 2024). Organic variant products are claimed to be more environmentally friendly because they contain plant-based ingredients such as licorice and kojic acid, which are regarded as safer. There exists a gap regarding the attitudes of certain professional cohorts, like female state civil servants in Southeast Nigeria, towards the efficacy and safety of the two skin whitening products. The educated class of civil servants may hold contradictory positions as compared to the average citizen because they receive information through education, work, and several other means. Their understanding is important in designing essential public policy decisions related to the regulation of skin lightening products and the implementation of public health interventions to encourage safe skin care practices.

3.0 Statement of the Research Problem

Nigerians debate intensely about conventional and natural skin-lightening products because of their safety dimensions and overall effectiveness (Apuke, 2018). The usage of lightening products has resulted in multiple health hazards, particularly through conventional products that contain dangerous chemicals, according to Adum & Obi (2024). The safety of these products rises as an urgent matter due to chemical-based products, which can lead to skin thinning and permanent discolouration and heighten the risk of skin cancer (Ekwenchi & Ononiwu, 2021). Although organic products advertise safer solutions, some research was done to verify their effectiveness together with their long-term safety qualities.

The skin-lightening product use trends in Southeast Nigeria might be altered by how female state civil servants perceive these products. The current research presents minimal insight into the attitudes female state civil servants in Southeast Nigeria hold toward the effectiveness and safety aspects of organic versus conventional skin products. The absence of research on these concepts

creates essential possibilities to shape policies and public health and consumer education initiatives that promote skin care safety.

This research addresses the knowledge gap by understanding the perception of female state civil servants in Southeast Nigeria regarding their assessment of organic and conventional skin-lightening products. By examining their views, the study seeks to provide insights into the factors influencing their choices and the implications for public health and consumer protection in Nigeria.

3.1 Research Questions

- 1. What are the perceptions of female state civil servants in selected states of Southeast Nigeria regarding the effectiveness of organic skin-lightening products compared to conventional ones?
- 2. What are the safety concerns of female state civil servants in selected states of Southeast Nigeria when using organic versus conventional skin-lightening products?
- 3. What factors influence the preference of female state civil servants in selected states of Southeast Nigeria for organic or conventional skin-lightening products?

4.0 Literature Review

4.1 Skin Lightening Practices and Their Popularity in Nigeria

Skin lightening refers to the use of various products to achieve a lighter skin tone. The practice is particularly prevalent in countries like Nigeria, where lighter skin is often associated with beauty, social status, and success (Apuke, 2018). Nigeria, like many African countries, has a complex relationship with beauty standards, which heavily emphasize lighter skin, particularly among women (Adum & Obi, 2024). This preference for lighter skin is deeply rooted in historical factors, including colonialism and the continued influence of Western ideals of beauty (Bakare et al., 2023). Skin-lightening products are increasing in popularity and demand by women and sometimes men who wish to improve their social status through lighter complexions (Agboola et al., 2024). In some cultures, as asserted by Apuke (2018), having lighter skin is associated with beauty and enhanced social and economic standing. The desire to lighten dark skin therefore can be traced back to colonial mentality and also as a result of low self-esteem (Agboola et al., 2024).

Skin lightening products in Nigeria are widely used, with many women opting for these products to conform to societal beauty standards (Owolabi et al., 2024). The most common products used are creams, lotions, soaps, and serums, which may contain various ingredients such as hydroquinone, mercury, and corticosteroids (Adum & Obi, 2024, p.104). However, there has been growing concern over the health risks associated with the use of these products, particularly those that contain harmful chemicals (Ekwenchi & Ononiwu, 2021; Adum & Obi, 2024).

The prevalence of skin bleaching in Africa is particularly alarming, with Nigeria leading with a rate of 77%, followed by Ghana, South Africa, Senegal, and CongoBrazzaville, with rates of 39%, 32%, 50%, and 66%, respectively (World Health Organization [WHO], 2023). Recent studies in various Nigerian populations have reported skin bleaching prevalence rates of 40.9%, 52.7%, and 32.0% (Egbi & Kasia, 2021; Bakare et al., 2023; Wudiri et al., 2024). This widespread practice, recently labeled a "national health emergency" by the National Agency for Food and Drug Administration and Control [NAFDAC], 2023), is largely fueled by media advertising, especially when promoted by celebrities who are viewed as role models and symbols of social acceptance, thereby influencing people's desire to replicate their appearance.

The practice of skin lightening has changed over the years, with SL being practiced among younger age groups 19, 6, 7 (Okoro et al., 2022). The use of various creams containing ingredients such as hydroquinone, mercury, and steroids has been the usual practice, but more recently, kojic acid, arbutin and other newer agents are in use (Ahmed & Hamid, 2017). In addition, the use of other forms in combination with topical agents has been observed, with the use of intravenous or oral forms of glutathione and vitamin C on the increase in Asia and most African countries (Amodu et al., 2018). Furthermore, skin-lightening bathing bars or body washes are now common in cosmetic shops in Nigeria, precisely and Africa at large. The use of various natural or herbal products generally referred to as "organics" appears to be the emerging trend.

In response to concerns over the harmful chemicals in conventional skincare products, many individuals are turning to "organic skincare products," which come in various forms such as soaps, scrubs, creams, oils, and masks (Owolabi et al., 2024). These products, according to Omohwovo and Lucero-Prisno (2023), are crafted from natural ingredients like lime juice, honey, turmeric, rice powder, papaya, goat milk, yogurt, African black soap, and essential oils. Unfortunately, some local manufacturers unscrupulously add steroids and other harmful chemicals, such as bleach, to their products, while falsely promising rapid skin-lightening effects. This unethical practice has become widespread in Nigeria, with these producers' opening spas and offering training sessions to others, further jeopardizing customers' health (Olumide, 2017). These issues represent significant threats to consumer health both in the immediate and long term and could also have far-reaching environmental implications that may surface in the future (Ayaji et al., 2024).

4.2 Organic vs. Conventional Skin Lightening Products

The skin lightening market is increasingly split between organic and conventional products (Šniepienė & Jankauskienė, 2021). Organic skin lighteners often contain natural ingredients such as licorice extract, vitamin C, and mulberry extract, which are believed to lighten the skin without harmful side effects (Anucha, 2023). Conventional products, on the other hand, are typically chemically formulated and may include ingredients like hydroquinone, corticosteroids, and mercury, which are known to have side effects, including skin thinning, hyperpigmentation, and in severe cases, mercury poisoning (Adum & Obi, 2024).

The choice between organic and conventional products often depends on several factors, including perceived effectiveness, safety, and societal preferences (Owolabi et al., 2024). Many consumers perceive organic products to be safer and more natural, though these perceptions may not always align with scientific evidence (Anucha, 2023). Research on organic products is still limited, and concerns about the efficacy of these products compared to their chemical counterparts remain (Wudiri et al., 2024).

In contrast, conventional skin lightening products are often preferred by individuals seeking quick and noticeable results, despite the associated health risks. Therefore, the controversy surrounding these products has led to a growing market for "safer" alternatives, which has contributed to the rising popularity of organic options (Olatunji et al., 2019).

4.3 Perceptions of Effectiveness and Safety

Perceptions of the effectiveness and safety of skin lightening products are shaped by a combination of personal experiences, media representations, and societal influences (Omohwovo & Lucero-Prisno, 2023). Studies show that many women use skin lightening products because they believe these products will enhance their appearance and improve social status (Apuke, 2018). However, the perceived effectiveness of skin lighteners varies significantly. While some individuals report

satisfactory results, others experience negative side effects, such as skin irritation, rashes, and long-term skin damage (Adum & Obi, 2024).

The safety concerns surrounding skin lightening products, particularly conventional ones, are well-documented (Amankwa, 2016). Many skin-lightening products, especially those that contain mercury and hydroquinone, are associated with severe health risks, including skin thinning, liver damage, and kidney failure (Asumah et al., 2022). Despite these risks, many individuals continue to use these products due to the belief that the benefits outweigh the potential harms. For instance, a study by Naidoo & Ihekweazu (2020) found that, even among women who were aware of the dangers of conventional skin lighteners, societal pressure to conform to beauty standards played a significant role in their decision to use these products.

Women, lighten their skin because fair skin is too often seen as more attractive and provides them with an economic advantage (Burger et al., 2016). Even in the corporate world, many Nigerians would agree anecdotally that women with lighter skin are often more successful in securing jobs, particularly in sales and marketing (Brown, 2019). There is evidence to support this. In psychology research, it is known as the "halo effect" – we tend to assume someone has other positive qualities because they possess one; hence the better someone looks, the better a person we think they are. (Fischeux et al., 2019). Organic skin lighteners are often perceived as safer alternatives to conventional products. Naidoo & Ihekweazu (2020) argue that consumers view organic products as being more natural and freer from harmful chemicals. However, this perception does not always align with scientific evidence, as organic products may still contain ingredients that cause skin reactions or have limited efficacy. The lack of regulation in the organic skincare industry also raises concerns about the authenticity and safety of some organic skin lightening products in the market (Kaliyadan et al., 2020; Amberg & Fogarassy, 2019; Joshi, 2015).

4.4 Empirical literature

Tesfamariam, Bahta, Weldemariam, Tesfamariam, Yemane, Bahta, and Russom (2023) conducted a cross-sectional analytical study to assess the awareness, perception, and utilization of skin lightening agents (SLAs) among females residing in Asmara, Eritrea. Using a quantitative research approach, the study was conducted using representative samples of all beauty salons available in Asmara from May to July 2021. The researchers enrolled 721 females and 684 completed the study. The study participants were selected using two-stage stratified cluster sampling and data were collected through a face-to-face interview using a structured questionnaire. Descriptive analysis and logistic regression, at bivariate and multivariate levels, were performed. The study found that the majority of the respondents had the perception that SLAs can make someone light-coloured (84.4%), look beautiful (67.8%), trendy (55.0%), and that white skin is more attractive than dark skin (58.8%).

Ekwenchi and Ononiwu (2021) examined how women in Anambra State perceive whitevertised' skincare products found in Nigeria and their awareness of the health risks they pose. A quantitative approach involving a survey was adopted. Data were collected from a random sample of 400 women. The study found that these products are prevalent and are used by most of the respondents to 'maintain' their skin colour. The study also showed that the perception towards these products varied with age and educational qualification, and was also shown to be influenced by price, place of origin, scientification, celebrity endorsements and past experiences.

Krisnendu and Rahman (2020) conducted a study to investigate the consumer behavior of the cosmetics customers and the consumer perception about the available local and foreign branded

cosmetics products in Bangladesh. Using a qualitative and quantitative method, which included interviews and online survey, local businesspersons and consumers of cosmetics in Bangladesh were sampled respectively. The study found that consumer perception regarding cosmetics products in Bangladesh is influenced by seven factors identified in the study. They are country of origin, psychological attributes of the consumers, place where product is sold, external attributes, quality, consumers' own characteristics and finally increased disposable income of the consumers. Goel & Anupam (2020) conducted a cross- sectional field study to investigate the customer perception and purchase intentions empirically in the context of cosmetic product. A sample of 384 Individuals were used to explore the factors affecting purchase intentions among consumers. The study found that the perception of the customers towards a brand affects the purchase intentions. Variables namely brand image, product quality, product knowledge, product involvement, product attributes and brand loyalty were studied as determinants of consumers' purchase intentions and were found to have a positive association with purchase intentions. Farzana, Lester, and Hons (2021) Conducted a cross-sectional survey among health science students at a tertiary institution in the Western Cape of South Africa, to determine the knowledge, perceptions and practice toward skin lightening among young adults. A total of 401 participants were included in the sample. The study found that (98%) of the respondents' perceived that individuals who practice skin lightening do so because it gives them a more fashionable look.

4.5 Theoretical Framework

This study is anchored in Social Cognitive Theory (SCT), which emphasizes the role of cognitive, behavioral, and environmental factors in shaping individual behavior. According to Bandura (1986), people learn and make decisions based on their interactions with their environment and the influence of societal norms, personal experiences, and external reinforcements. In the context of this study, Social Cognitive Theory provides a framework for understanding how female state civil servants in Southeast Nigeria form perceptions about the effectiveness and safety of skin lightening products. These perceptions are shaped not only by personal experiences with skin care but also by societal pressures, media representations of beauty, and the availability of information about the risks and benefits of different products. SCT also highlights the importance of self-regulation and outcome expectations in decision-making, suggesting that individuals are likely to choose skin lightening products based on perceived benefits (such as achieving a lighter complexion) while weighing the potential risks (such as health concerns).

Observational Learning

Observational learning is a key component of SCT, suggesting that individuals learn through observing others' behaviours and the consequences of those behaviours. In the context of this study, female state civil servants are likely influenced by societal norms and behaviors that valorize lighter skin tones. They may observe and model behaviours of peers, celebrities, and public figures who use skin lightening products, thus shaping their beliefs about the effectiveness and desirability of these products.

Self-Efficacy and Self-Regulation

Self-efficacy refers to an individual's belief in their ability to perform a particular behavior successfully. In this study, the perceptions of female state civil servants about their ability to use organic or conventional skin lightening products safely and effectively are key. If women perceive

that they can achieve desirable skin outcomes without significant risks to their health, their confidence in using these products (especially organic ones) may increase.

Self-regulation involves the ability to monitor one's behavior, set goals, and adjust accordingly. In the context of this study, the female state civil servants self-regulate their skin care practices, particularly their choice between organic and conventional products. The awareness of potential health risks of conventional products (such as skin thinning or long-term health consequences) might influence their regulation of product use, prompting them to opt for organic alternatives if they believe it provides safer outcomes.

Outcome Expectations

According to SCT, individuals make decisions based on their expectations of the outcomes of their behaviour. In this study, female state civil servants are likely to evaluate skin lightening products based on anticipated outcomes such as achieving lighter skin, improving social acceptance, and increasing personal attractiveness. These anticipated benefits may drive the preference for one type of product over another. However, the anticipated negative outcomes, such as adverse health effects from chemical-based products (e.g., skin irritation, mercury poisoning), could serve as a deterrent for using conventional skin lighteners. The perceived safety of organic products may align more closely with women's expectation of avoiding harmful side effects.

Social and Environmental Influences

SCT posits that environmental factors, such as media representations, peer influence, and cultural norms, play a pivotal role in shaping an individual's behavior. In the case of skin lightening, societal beauty standards in Nigeria, which often emphasize lighter skin as a standard of beauty, contribute significantly to the decision-making process. Female state civil servants are exposed to these societal pressures through various environmental channels, such as television, social media, and peer discussions in the workplace. These external factors reinforce the desire for lighter skin and, consequently, influence their perceptions of the safety and effectiveness of skin lightening products.

Cultural Context and Collective Efficacy

Social Cognitive Theory also accounts for the influence of cultural values and collective efficacy on decision-making. In the Nigerian context, where beauty standards favour lighter skin, the collective belief about skin lightening products may be shaped by traditional beauty norms. Furthermore, female state civil servants may also be influenced by a desire to conform to the cultural expectations of beauty, which can directly impact their perceptions of organic and conventional products. Collective efficacy, or the shared belief in a community's ability to achieve a particular goal, can influence their choices. If a particular group of women in the workplace or within the broader community has successfully used skin lightening products without harm, it may foster a sense of collective efficacy and increase the likelihood that others will follow suit. Overall, Social Cognitive Theory provides a theoretical lens to understand the complex interplay between personal cognitive processes, environmental influences, and behaviours related to the perception of female state civil servants in selected states of southeast Nigeria on the effectiveness and safety of organic vs conventional skin-lightening products By considering observational learning, self-efficacy, outcome expectations, reinforcement, and environmental factors, this theoretical framework helps elucidate the underlying mechanisms and processes through which the female

state civil servants perceive the effectiveness and safety of skin lightening products and how it influence individuals' decision-making and behaviours in this context.

4.6 Methodology

This research was conducted using the survey approach. The population of this study was all female state civil servants in different ministries, departments and agencies in the selected state of the South-East geopolitical zone of Nigeria. According to the National Bureau of Statistics (NBS, 2017), the total number of female state civil servants in the selected South East states is 67,738 (sixty-seven thousand seven hundred and thirty-eight). The sample size was determined by referring to the sample sizes as worked out by Krejcie and Morgan (1970) for different population ranges. Given that the researcher's population is 67, 738 (i.e. up to 10, 000 but less than 100, 000), she settled for a sample of 622 for a 99% confidence level and 0.05 error margin. Thus, the sample size was 622.

The sampling procedure is multi-stage in approach which involves following a series of logical steps in selecting sample units. Hence, the researcher conducted the sampling in three stages as detailed below.

- i. **First Stage (State Level):** The first stage involved the selection of three states from the five states in the South-East zone of Nigeria, which formed the area of study. Three states equal 60% of the states in the zone, and in the researcher's opinion, this is a fair representation. Of the five states, three states were randomly selected. The five states were written out in alphabetical order, and then using a table of random digits, three were selected. Hence, Anambra, Ebonyi and Imo were the selected states.
- ii. Second Stage (Ministries/Departments/Agencies Level): The second stage involves selecting five clusters from the ministries, departments and Agencies of the state secretariat of each of the three selected states. The researcher took this decision for the convenience of sampling given that duty posts of civil servants are scattered across the local governments and towns of each state. Concentrating on state secretariats will make for a more definite frame of reference in conducting the sampling. Besides, the bulk of the civil servants for each state are concentrated in the state secretariat. The randomly selected clusters are:

Anambra State: (1) Ministry of Housing & Urban Renewal, (2) Ministry of Information &

Culture, (3) Office of the Head of Service, (4) Ministry of Environment,

Beautification and Ecology, and (5) Ministry of Health

Ebonyi State: (1) Ministry of Health, (2) Rural Water & Sanitation Agency, (3) Ministry

of Information & State Orientation, (4) Ministry of Agricultural and Natural

Resources, and (5) Ebonyi State Scholarship Board

Imo State: (1) Ministry of Justice, (2) Imo State Orientation Agency, (3) Ministry of

Finance, (4) Imo State Hospital Management Board, and (5) Ministry of

Agricultural and Natural Resources

iii. Third stage (Selection of female civil servants from the ministries/departments/agencies)

In the third stage, the researcher selected the sample units (i.e. individual staff members). The list of female civil servants was obtained for each ministry, department, and agency. Then, a table of random numbers was used to select and assign numbers from each category. The following formula was adopted for determining the number of sample units to be assigned to each civil servant from the ministries, departments, and agencies in the three selected states. The total number to be selected from each state was arrived at using the following computation:

$$X = n \quad x \quad 622$$

Where X = number selected from a state

n = population of the civil servants of the state

N = Total population of civil servants in the 3 selected states

$$3917 = \underbrace{14625}_{3917} \quad x \quad \underline{622}_{1} = 230$$

$$3917 = \frac{10430}{3917} \quad x \quad \underline{622} \quad = 168$$

$$3917 = \underbrace{14124}_{3917} \quad x \quad \underline{622}_{1} = 224$$

The number of female state civil servants selected across the states is shown in Table 3.3 below.

Table 3.3 4.7 Sample Distribution

S/N	State	Number of Units Selected
1.	Anambra State	230
2.	Ebonyi State	168
3.	Imo State	224
	TOTAL	622

i. Stage four (random selection of sample units from each of the clusters)

Sample units were selected through the cluster sampling procedure. This procedure is usually suitable when members of the population exist in homogenous clusters (Asika, 2010). The number allotted to each state was distributed evenly across the three clusters (ministries/departments/agencies) selected. Where there were remainders, the cluster(s) to which they would be allocated were decided using a random procedure.

Data was collected by the researcher herself and with the aid of four research assistants who were recruited and trained. The questionnaire copies were given to each respondent by the researcher and her assistants, who encouraged the respondent to fill and return at the same time to minimize the casualty rate. The English language was used as the medium of administering the questionnaire. This is because female state civil servants are literate. Out of the 622 copies of the questionnaire distributed, 609 representing 97.9% were recovered as against 2.1% that were not. Hence, the response rate stood at almost 98% implying that virtually all the copies given out were recovered. The non-recovery rate of 2.1% could thus be considered negligible.

4.8 Demographic Data

Demographic data show that most of the respondents were under the age of 31- 40, while about half were 25 – 30 years, indicating an average young group. As regards marital status, there is a preponderance of married respondents with 392 (64.4%) followed by those who are single with 86 (14.1%) and those divorced recording 90 (14.7%). Furthermore, regarding educational qualification, most of the respondents 259 (42.5%) had B.Sc./HND, 170 (27.9%) had OND/NCE, 100 (16.4%) had SSCE/equivalent, 50 (8.3%) respondents had MSC/PhD, while 30 (4.9%) had first school leaving certificate. Hence, holders of B.Sc./HND constituted the bulk of the respondents. Regarding grade level, senior workers who were still below the rank of deputy director to the permanent secretary (managerial cadre) constituted the largest group. Finally, 45.1% of the respondents live in Anambra, 37% live in Ebony, and 17.9% of the respondents live in Imo state.

Table 1: Relationship between grade levels and respondents' use of skin-lightening products

	9		<u> </u>
Frequency of Use	Respondents' Grade level		Total
_	Senior cadre	Junior cadre	
Once or on rare	44.1%	53.8%	49.8%
occasions	N = 112	N = 191	N = 303
On many occasions	55.9%	46.2%	50.2%
	N = 142	N = 164	N = 306
Total	100.0%	100.0%	100.0%
	N=254	N = 355	N = 609

Table 1 shows that senior cadre respondents frequently use skin-lightening products more than their junior counterparts. A slightly higher percentage (55.9%) of senior cadre respondents use skin-lightening products on many occasions compared to the 44.1% who use them once or on rare occasions. The implication is that the higher frequency of use of skin-lightening products among senior cadre respondents suggests that individuals in higher positions, possibly with greater disposable income, have more access to and may feel more social pressure to conform to certain beauty standards. It could also indicate a different perception of beauty and less societal emphasis on achieving lighter skin within the junior cadre group.

Table 3: Assessment of skin-lightening use among	Female state civil servants.

Types of lightening	Frequency	Percentage
Products used.		-
Organic	169	27.8%
Conventional	440	72.2%
Total	609	100%
Products perceived as	Frequency	Percentage
More effective/safe		
Organic	347	57%
Conventional	249	40%
Both are equally effective	13	3%
Neither is effective	0	0%
Total	609	100%
Duration of use	Organic	Conventional
Less than one month	50	8.2%
1-3 months	48	7.8%
3-6 months	200	33%
More than 6 months	311	51.0%
Total	609	100%

A clear majority of respondents (72.2%) use conventional skin-lightening products, while 27.8% use organic products. This suggests that conventional products are significantly more popular or accessible among the female state civil servants surveyed. Although the organic products have a smaller market share in this survey, their use is still notable at 27.8%. The lower percentage could reflect factors such as availability, cost, or perceptions of effectiveness. More respondents perceive organic products (56.9%) as more effective or safe compared to conventional products (40.8%). This indicates that while conventional products are more widely used, organic products are regarded as safer or more effective by a larger portion of users. The majority of respondents who use both types of products have used them for more than 6 months (51% for both organic and conventional products). This indicates that many users are committed to their choice of product over a long period. The duration of use for organic and conventional products is remarkably similar, suggesting that once users adopt either type of product, they tend to continue using them for extended periods, especially beyond six months. The import here is that despite organic products being perceived as more effective and safer, conventional products are used more widely. This could reflect availability, price, or other factors beyond safety or effectiveness. Therefore, the majority of respondents view organic products as more effective or safer than conventional ones.

Table 2: Perceptions of the effectiveness of organic vs. conventional skin-lightening products. Effectiveness/ safety Lightening Skin care products Percentage of of organic lightening Organic Conventional responses Products. Yes (N=312)(N=94)66.7% (N=406)33.3% No (N=103)(N=100)(N=203)

100%

N = 415

Total

100%

N = 194

100%

N = 609

From the table above, it can be concluded that female state civil servants in Southeast Nigeria have a more favourable perception of organic skin-lightening products in terms of effectiveness compared to conventional skin-lightening products. The data suggests that organic products have a higher percentage of users who find them effective (66.7%) compared to conventional products (48.5%). Additionally, the skepticism surrounding conventional products is higher, with a significant portion of participants finding them ineffective. This analysis underscores the growing preference for organic products and highlights the concerns over the effectiveness of conventional products, which may be linked to side effects or perceived negative outcomes from their use.

Table 3: The safety concerns respondents have regarding organic vs conventional skinlightening products?

Safatra Camaaan	Conventional	Organic Lightening	Total Responses
Safety Concern	Lightening Products	Products	
Irritation/Allergy	(504)	(105)	609
Reaction	82.8%	17.2%	(100%)
Ineffectiveness	(435)	(174)	609
	71.4%	28.6%	(100%)
Contamination	(461)	(148)	609
	75.7%	24.3%	(100%)
Unregulated	(450)	(159)	609
Ingredients	73.9%	26.1%	(100%)

Table 3 above showed that a large majority of respondents (82.8%) express concerns about irritation or allergic reactions when using conventional lightening products, while a significantly smaller percentage (17.2%) of respondents' report irritation or allergy reactions when using organic products. As regards Ineffectiveness 71.4% of respondents believe conventional products may be ineffective. While a smaller proportion (28.6%) expresses concern about ineffectiveness with organic products. 75.7% of respondents indicate fear of contamination with the use of conventional lightening products while 24.3% of respondents show less concerns when using organic products. (73.9%) Respondents are concerned about unregulated ingredients in conventional products, which implies that many people are worried about the safety and regulation of the substances used in conventional skin-lightening products, while an insignificant number of the respondents, 26.1%, expressed concern over unregulated ingredients in organic products. The import here is that the majority of safety concerns about conventional products revolve around

irritation/allergy reactions, ineffectiveness, and contamination. These concerns suggest that users see conventional products as potentially harsh, ineffective, or unsafe due to impurities or unregulated ingredients. Organic products on the other hand are perceived to be much safer, with irritation and allergy reactions being the least common concern at (17.2%). This suggests a general preference for organic products as the safer option, but conventional products still have considerable usage despite their perceived risks.

Table 4: Factors that influence Respondents' decision to use organic or conventional skin-

lightening products.

Factors	Frequency	Percentage	
Effectiveness	186	30.5%	
Price	150	24.6%	
Brand reputation	32	5.2%	
Ingredient Transparency	24	3.9%	
Social Media Influence	67	11.0%	
Recom. from Family/friends	70	11.4%	
Marketing/Advertisement	2	0.3%	
Health concerns/ safety	78	13%	
Total	609	100%	

According to the findings in Table 4, the most significant factor influencing the decision to use skin-lightening products is effectiveness. With 30.5% of respondents citing it as the primary factor. It suggests that female state civil servants are most concerned with whether a product will deliver the desired skin-lightening results. Also, effectiveness was closely followed by respondents (24.6%) who said price was a factor that influenced their decisions to use organic or conventional skin-lightening products, and then 13% of respondents according to this table, are influenced by health concerns/ safety. Respondents may favor organic products more heavily here due to their perceived safety and fewer harmful ingredients. Closely following health concerns and safety is social media influence. Data on this table showed that 11% of respondents' decisions are influenced by social media. This suggests that platforms like Instagram, YouTube, or TikTok may influence consumer choices. Recommendations from family and friends are crucial for 11.4% of respondents. Word-of-mouth referrals can have a powerful influence, especially when it comes to personal care products. Many consumers trust personal recommendations over advertisements or marketing campaigns. Brand reputation only accounts for 5.2%, suggesting that while some consumers care about the brand they are purchasing from, it is not the leading factor in their decision to use skin-lightening products. Ingredient transparency is a smaller but still relevant factor, with 3.9% of respondents citing it. This reflects a concern about knowing what goes into the products they use, especially for consumers who prefer organic or natural products and want to avoid harmful chemicals. Marketing and advertisements have the smallest influence, with only 0.3% of respondents considering them important. This suggests that consumers may be skeptical of advertising claims or that they do not find ads as convincing as other factors like effectiveness.

4.8 DISCUSSION OF FINDINGS

The findings from this study show that senior cadre respondents frequently use skin-lightening products more than their junior counterparts. The implication is that the higher frequency of use of skin-lightening products among senior cadre respondents suggests that individuals in higher

positions, possibly with greater disposable income. This indicates that there is a strong prevalence of usage, and a great relationship between grade level and usage among the group surveyed. These findings confirm the assertion of Apuke (2018) which states that in Nigeria, skin-lightening products are widespread, particularly among women, who strive for an even and lighter complexion as a perceived marker of beauty, social status, and success.

Findings in Table 2 indicated that the majority of respondents (72.2%) use conventional skinlightening products, while 27.8% use organic products. This finding corroborates with the finding of Adebimpe et al. (2020) which suggests that conventional products are significantly more popular or accessible among the female state civil servants surveyed. The import here is that despite organic products being perceived as more effective and safer, conventional products are used more widely. This could reflect availability, price, or other factors beyond safety or effectiveness. Therefore, most respondents view organic products as more effective or safer than conventional ones.

of respondents' report irritation or allergy reactions when using organic products. The above finding confirms the assertion of (Olumide, 2017, p.30; Ekwench & Ononiwu, 2021). but refutes the findings of Adum and Obi (2024), who found that the users of conventional bleaching products have experienced different negative skin reactions such as burns of all kinds especially facial burns, eczema, recurrent skin infections, exogenous Ochronosis, allergy, dermatitis, and liver spot. The findings made will cover the gap in literature in this aspect. As regards Ineffectiveness, 71.4% of respondents believe conventional products may be ineffective because users see conventional products as potentially harsh, ineffective, or unsafe due to impurities or unregulated ingredients. According to 30.5% of respondents in table 4, the most significant factor influencing the decision to use skin-lightening products is effectiveness. It suggests that female state civil servants are most concerned with whether a product will deliver the desired skin-lightening results or not. Above all, the finding in this table suggests that product performance, cost, and trustworthiness through social proof and personal recommendations drive most consumers' decisions.

4.9 CONCLUSION

Respondents overwhelmingly prefer organic skin-lightening products due to their perceived safety, with fewer concerns about irritation, allergy reactions, and health risks compared to conventional products. Despite this, effectiveness remains a significant factor in the decision-making process, with many respondents acknowledging that while organic products are safer, they may not always meet expectations in terms of skin-lightening results. However, female civil servants in Southeast Nigeria tend to prioritize safety in their use of skin-lightening products, with organic products seen as safer but less effective, while conventional products are favored for their higher effectiveness despite safety concerns. The balance between safety, cost, and results is central to consumer decisions in this demographic.

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