

E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@jjfmr.com

Assessing the Knowledge and Perceptions of Skin-Lightening Among Students At Simon Diedong Dombo University of Business and Integrated Development Studies (SDD UBIDS); A Case Study of the Faculty of Integrated Development Studies (FIDS)

Thomas Azagsiba Agana¹, Beyuo Alfred Naamwintome² Michael Pervarah³

^{1,2,3}Simon Diedong Dombo University of Business and Integrated Development Studies (SDD UBIDS), Wa, Ghana.

Abstract

Despite the numerous serious harmful consequences attributed to skin lightening outlined in medical and public journals, there is documentary evidence that many Ghanaians indulge in the practice. The main objective of the study was to assess the knowledge and perceptions of skin lightening among students of the Faculty of Integrated Development Studies (FIDS) of Simon Diedong Dombo University of Business and Integrated Development (SDD-UBIDS). The study adopted both quantitative and qualitative research designs. Qualitative data were gathered through in-depth interviews and presented using illustrative quotes, analyzed and interpreted in the form of narratives and descriptions based on the thematic areas. Quantitative data were gathered using questionnaires and analyzed using Statistical Packages for Social Scientist version 20 (SPSS v.20) and presented as charts, tables and percentages. The study revealed that 71% of respondents were unaware of the lethal chemicals and abrasive agents present in skin-lightening or bleaching products and the dangers they pose, while 29% were aware of these harmful constituents' causes. Respondents were asked about the medium through which they learned about skin bleaching. Forty-two respondents cited the Internet as their source of knowledge. In comparison, 30 respondents mentioned friends, 23 referred to celebrity endorsements on radio or television, three noted billboards, and two indicated family. Hence, respondents use the products without question. Based on the findings, this study recommends that the University Counselling Unit should organise workshops on self-esteem, body positivity, and coping strategies that can empower students to navigate societal pressure and build resilience against negative self-perception.

The University Counselling Unit should organise workshops on self-esteem, body positivity, and coping strategies that can empower students to navigate societal pressure and build resilience against negative self-perception.



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

Keywords: Knowledge and perceptions, skin lightening, students of SDD-UBIDS, Northern Ghana

1. Introduction

Skin lightening, also known as skin bleaching, skin whitening, skin brightening, or skin toning (Osei et al., 2018; Rosen & Givens, 2022), is now a widespread practice among individuals of all races. It refers to the use of chemical agents to lighten the skin's complexion (Osei et al., 2018). According to Peltzer, Pengpid, and James (2016), skin lightening is the practice of using chemical substances to lighten skin tone. It entails using materials such as chemicals, soaps, herbs, fade creams, and other agents strong enough to create a quick change in the colour of the skin (Amankwa et al., 2016). The widespread practice of skin lightening, although dating back to prehistoric times (Rusmadi, Ismail & Praveena 2015), has become prevalent in recent times (January et al., 2018), particularly in Asian and the Caribbean (Rosen & Givens, 2022) and African Countries (Yusuf et al., 2019).

There are several skin-whitening products used on a wider scale today than in the past. Modern methods of skin whitening treatments vary widely, to the point where clients can select from a very wide range of skin bleaching techniques for their skin based on their preferences. Besides bleaching the skin of the face and neck, some people also bleach the skin of the armpit (Frothingham, 2023), and genital area (Miller, 2022). Skin-lightening products work by reducing the production of the pigment in the skin called melanin (Masum, Yamauchi, & Mitsunaga, 2019), which gives the skin its dark complexion. These products come in the form of body lotions, creams, bath soaps, tablets, and injections.

The worldwide use of skin-lightening products is motivated by the notion that a lighter gradation of skin tone results in greater prestige and opportunities, so much so that, this notion has resulted in an epidemic of skin-lightening product consumption, both within and between racial/ethnic groupings (Peltzer, Pengpid, & James, 2016). A lighter skin complexion is not just regarded as a sort of symbolic capital (Peltzer, Pengpid, & James; 2016; January et al., 2018); it is also linked to attractiveness, beauty and desirability, particularly among females (Peltzer, Pengpid, & James, 2016; Lartey et al., 2017; January et al., 2018).

In sub-Saharan Africa, the incidence of skin-lightening remains high, having been prominent for over four decades (Davids et al. 2016; Lartey et al., 2017). According to Rahiman, Davids, and Thomas (2021), the use of skin-lightening products for cosmetic purposes has become widespread among women with dark skin tones in sub-Saharan Africa. Sagoe et al (2019), estimated a skin-lightening prevalence of 27.1% in Africa. January et al. (2018), in their study in Zambia, reported a prevalent use of skin lightening creams of 20%. In Somaliland, Yusuf et al (2019), reported that 51.6% of participants admitted to current use. Ahmed and Hamid (2017), in a survey conducted at the University of Sudan, found out that 8 out of 10 Sudanese undergraduate ladies had used skin lightening products. Jacobs et al. (2016), argue that in majority of sub-Saharan African countries, colonialism has reinforced the belief that lighter complexion is superior. Hence, a reason for people resorting to skin lightening.

In Ghana, skin-lightening is a prominent practice. Most Ghanaian women believe that their beauty is incomplete if their skin remains black; hence they go to great lengths to bleach their skin with chemicals, soaps, lotions, and other products to make it lighter (Amankwa et al., 2016). In Osei et al. (2018), 65.6% of participants admitted to using skin-lightening products. Asumah et al (2022), reported a 26.3% prevalence of skin bleaching among young adults. Lartey et al. (2017), recognized a prevalence of 50.3% in their study of three urban communities in Accra.



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

Although skin-lightening products are frequently marketed as advantageous, adverse effects from prolonged use have been shown to impact the skin barrier and physiology (Darj et al., 2015), and cause health problems (Osei et al., 2018; January et al., 2018). The use of skin-lightening creams has been found to lead to ochronosis, rashes and systematic effects such as diabetes mellitus, hypertension and even psychosis (January et al., 2019). In addition, users of skin lightening products are more prone to ailments caused by bacteria, fungi, parasites, and viruses due to the removal of the skin layer (Peltzer, Pengpid & James, 2016). Moreover, multiple studies link excessive use of skin-lightening products with poor mental health, depressive symptoms, and trauma symptoms (Peltzer & Pengpid, 2017). This can be attributed to the chemicals used in the skin lightening products, particularly mercury and hydroquinone (Peltzer, Pengpid & James, 2016). Hydroquinone works by severely reducing melanin formation, leaving the skin depigmented. Exogenous ochronosis and other skin disorders have been linked to long-term usage of hydroquinone (Simmons et al., 2015). Increased mercury levels in the blood have been linked to the therapeutic and cosmetic usage of mercury-containing products. One of the most serious side effects of using mercury-containing skin-lightening products is kidney damage (Osei et al., 2018).

Despite the serious health risks, skin-bleaching products remain in high demand (Osei et al., 2018). Peltzer and Pengpid (2017) revealed a significant incidence of skin-lightening product use in a large sample of university students. January et al. (2018), in a survey of female university students in Zimbabwe, recorded a prevalent use of skin lightening products. Agyemang-Duah et al. (2019) reported that 40.9% of respondents had practised skin toning within the last 12 months. These studies (Peltzer & Pengpid, 2017; January et al., 2018; Agyemang-Duah et al., 2019) show that skin lightening is prevalent among university students. Given that SDD-UBIDS is a relatively young public university, we found it necessary to study this subject about the subject matter.

Against this backdrop, this study aims to assess the knowledge and perceptions of skin-lightening among students at Simon Diedong Dombo University of Business and Integrated Development Studies (SDD-UBIDS). The findings of this study will provide important insights into the phenomenon of skin-lightening, contributing to enriching scholarly discourses on the phenomenon. Furthermore, the study will also inform policy formulation and advocacy aimed at addressing the troubling pervasive of skin bleaching.

2. Literature review

This section dealt with relevant literature on the subject matter; Knowledge of students on skin lightening, perception of students on skin lightening, negative effects of skin lightening, Motivation for skin lightening, etc and related theory to the subject matter.

2.1 Knowledge of students on skin lightening

Ahmed and Hamid (2016), conducted a study amongst 19 female University students, aged between 16 and 25 years old, in four universities in Sudan; to assess their perception regarding an ideal body image. In the Sudanese culture, light skin and full-figure are adored. Most participants and their friends confessed to not knowing the constituents of the products they used to lighten their skin. A few of the respondents have seen victims who ended up with undesired consequences as a result of skin lightening (Ahmed & Hamid 2017). Some participants used a mixture of several creams made by shopkeepers; these comprised unidentified creams with unknown adverse effects. Others discontinued usage of these products once they realized the hazardous health consequences, or experienced undesirable effects themselves (Ahmed & Hamid 2016).



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

January et al. (2018), in their study results, revealed that 61.7% of the students, expressed satisfaction with their skin colour. On skin tone, 83.3% preferred the light skin tone and the other 16.7% preferred the dark skin tone. Almost all (94.9%) women knew of someone who uses skin-lightening creams and 5.1% did not know of anyone who uses skin-lightening creams.

Participants who reported to be bleaching their skin were 81 giving a prevalence of skin bleaching of 31.6% in the study. Of the women who did not bleach their skin, 36% reported that they would consider skin bleaching given that the side effects of skin bleaching were very minimal. Just above half of the women (52.3%) who reported to bleach their skin admitted they knew about the side effects of skin bleaching. Of the women using skin-lightening agents, 92.6% reported applying them topically and the rest used injections and tablets. A total of 66.6% of those who applied skin bleaching products topically reported to be applying the products at least twice daily. All the participants who reported using injections and tablets also reported using them once monthly and once every day respectively. Sunscreen use was reported to be low with only 27.2 % of the participants reporting to be using it when exposed to the sun (Nyoni-Kachambwa et al., 2021). Another study conducted by Rahiman, Davids, and Thomas (2021), indicated that 75% of participants reported that they were aware of the negative effects of skin lightening. These results are similar to the results reported by Keakile (2016), who suggested that tertiary-educated individuals are more likely to familiarize themselves with issues of social interest and are therefore more aware of the negative consequences associated with the practice. In Egbi and Kasia (2021), the study discovered that about (82.7%) knew that there were adverse effects associated with use of skin-lightening products (SLP), five (4.5%) did not know there were adverse effects while (12.7%) were not certain. In terms of responses given on complications of SLP, only (21.9%) of respondents knew that kidney disease was a possible complication. While (15.5%) thought kidney complication was not a possibility, (28.2%) were not certain. About (15.5%) of participants correctly identified liver failure as a possible complication. While (16.4%) thought liver failure could not occur with SLP, (34.5%) respondents were uncertain. 'Cancer' was identified as a possible complication of SLP in (64.5%) of respondents while (9.1%) were uncertain. About (20.9%) of respondents also correctly identified fetal toxicity as a complication of SLP while (7.3%) believed it was not but (33.6%) of respondents were uncertain. Only (0.9%) respondents correctly identified diabetes mellitus as a possible complication of SLP. While (28.2%) did not think diabetes was a possible complication, (30%) respondents answered that they were not certain. About (50.0%) of respondents claimed that they knew the ingredients in SLP while (46.4%) did not. (3.6%) participants gave no response. The harmful ingredient implicated by respondents were hydroquinone in (42.7%), mercury (26.4%), arsenic (10.0%), steroid (8.2%), chromium (3.6%), and cadmium (2.7%) responses (Rahiman, Davids & Thomas 2021). The sources of information about SLP among users were the internet and social media (Egbi & Kasia 2021).

2.2 Perception of students on skin lightening.

A survey conducted by Cécile et al., (2018), showed that female school teenagers practising voluntary or involuntary use of skin-lightening products, either aimed at obtaining "beautiful skin", or desired to be fashionable or intended to attract the attention of men. Nyoni-Kachambwa et al., (2021), in their study reported that participants routinely bleached their skin to be attractive, fashionable and because they liked "their fair skin". This preference for a lighter complexion is not exclusive to negroids, as the same phenomenon is observed among Asians. Similar results were reported by Rusmadi, Ismail and Praveena (2015), in Malaysia among university students. The study reported that 85.3% of the female students used skin-lightening products primarily to attract the attention of men and secondly to marry the desired partner.



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

January et al., (2018), found that the respondents gave more than one perception of what they thought was the meaning of skin tone: 93.3% thought light skin was a symbol of beauty, 65% thought light skin was a sign of wealth and 23.3% agreed that light skin symbolized power.

A qualitative study of the motives behind skin bleaching in Tanzania elicited six important themes: the removal of pimples, rashes, and skin disease; to have soft skin; to look European, White and beautiful. Additional themes addressed the removal of the adverse effects of extended skin bleaching; to satisfy one's partner and/or attract male friends; to satisfy and impress peers (Sagoe et al., 2019). Ahmed and Hamid (2016), in their study, found that, when participants were asked to state their view regarding Beauty, all the participants believed that being light skin was considered a very important component of beauty; it was also necessary for married women to spice their marriages with black henna applications. Most of the participants, however, felt that in the Sudanese society, there is too much value on physical attractiveness, to the neglect of non-physical and personality qualities, such as a woman's education, mental capacities and strengths. Others believed that a combination of both physical attractiveness and moral values was necessary to complete a woman. A strong theme to emerge from the interview data was the perception that light skin color was a powerful component of beauty that created and magnified other features, while dark skin diminished or erased any other existing features of beauty (Ahmed & Hamid 2016). 'Well, the prime concern for the Sudanese when it comes to beauty is skin color. They don't just admire the light skin color; they adore it. It influences their overall view of beauty. A good-looking girl with dark skin would be considered ugly. On the contrary, an ordinary girl with an average amount of beauty but with a light color will be considered beautiful' (Ahmed & Hamid 2016). Yusuf et al., (2019), in their study, indicated that SLP use in this population may be influenced by certain beliefs including lighter skin color gives a woman more confidence, helps her have better job opportunities, and increases her chances of getting married. Although many of the participants who have used SL products use them to treat pigmentary disorders, over one-third have used them only to achieve a lighter skin color in the absence of a pigmentary disorder. The vast majority of participants, including those who have used SL products, realize that SL products may cause undesirable local and systemic adverse effects.

2.3 Negative effects of skin lightening.

The side effects of skin lightening with harmful chemicals can be serious. Within communities, skin bleaching trends have great health and cultural implications (Adewoyin, 2020). (Adewoyin, 2020), emphasized that such side effects are due to exposure to chemicals such as mercury and hydroquinone. As noted by the WHO (2019), the effects of inorganic mercury in skin bleaching products include kidney damage, skin rashes or discoloration, scarring and reduction in the skin's resistance to bacterial and fungal infections. According to Egbi and Kasia (2021), the identified side effects included skin irritation, discoloration, skin irritation, sunburn, skin veins, skin peeling and acne. Others were rashes, atrophy, infections, ochronosis and stretchmarks. Adewoyin (2020), added that the use of chemicals to bleach the skin could lead to serious skin and health conditions that include skin cancer and tender skin that may be difficult to stitch when required, such as following surgical procedures or accidents resulting in deep cuts. Other effects of the use of skin bleaching creams include slow healing from wounds, thinning of the skin, acne, osteoporosis, and muscle weakness (Mohiuddin, 2019). Adewoyin (2020), documented the dangers inherent in using dangerous skin bleaching chemicals. Other side effects mentioned include hypertension, diabetes, and infertility (Adewoyin, 2020). Adewoyin (2020), maintained that skin whitening chemicals cause irreversible skin damage, as well as renal and liver damage. Atadokpédé et al., (2015), concluded that bleaching the skin is a public health concern. There are increasing risks of serious health-related



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

problems associated with the use of skin cream agents, including skin damage, cancers, and liver and kidney failure (Adewoyin, 2020). A variety of cutaneous and systemic adverse reactions were reported by the participants (Yusuf et al., 2019). It is evidenced from the literature reviewed for this study that the health consequences of skin-lightening creams might be categorized as premature ageing, skin cancer, vulnerability to skin injuries, damage to internal organs, and mercury poisoning.

2.4 Motivation for skin lightening.

People are normally moved to engage in a particular lifestyle due to numerous reasons. With skin-lightening, the literature points to light skin as a beauty aesthetic, light skin as a symbol of prestige and light skin as advantage to attract marriage.

2.4.1 Light skin as beauty aesthetics.

The color of the skin tends to influence the perception of beauty among black women. The is the notion that proximity to whiteness is considered the measure of beauty among some black women. In South Africa among some black South Africans, a black girl is called a 'yellow bone', which according to new trends is a beautiful light-skinned black girl. Many black women experience violence and are demeaned because of skin color preferences in society. The history of colonialism and apartheid in South Africa shows that black skin color was denigrated by the colonizers and as such black skin was not seen as beautiful or attractive (Motseki, 2019). Skin lightening products are used to treat pigmentary disorders.

2.4.2 Light skin as a symbol of prestige.

Previous studies indicate that very early in the development of black social structures, the quality of 'lightness' became associated with the highest social and occupational class (Motseki, 2019). The pattern continues today. Often in black society light-skinned people are considered better and more civilized or open-minded as compared to dark-skinned people. Moreover, it is often believed that lightskinned people are even more fluent in English than dark skinned people. It is believed in some quarters that the more fluent people are in English, the more they are educated and intelligent (Motseki, 2019).

2.4.3 Light skin as advantage to attract marriage.

Some researchers argue that black women have faced issues of beauty and skin color historically and that this problem is still continuing today. It is believed that light-skinned women have better chances of getting married to more successful men as compared to dark-skinned women (Motseki, 2019).

2.5 Social learning theory.

This study adopted the Social Learning Theory (SLT) and the Rational Choice Theory (RCT). The Social Learning Theory was propounded by Albert Bandura (1977). The theory suggests that much learning takes place through observing the behavior of others. Bandura proposed that individuals develop general behavior and attitudes by modelling the behavior of others. Individuals learn or model behavior, values, attitudes, and skills through the observation of other individuals, or through observations of electronic, print media and new media. The theory suggests that a lot of learning takes place through observation first, prior to doing it personally. Thus, observing the behavior of others influence adolescents' behavior. Therefore, through exposure to an advertisement on Television, Print, Internet which projects fair-skinned ladies, women's perceptions, and attitude is affected making them believe that a fair-skinned person is more acceptable in society. Social Learning Theory recognizes that much of human behaviors are learned through watching other people (Apuke, 2018). Accordingly, Yuan and Lou (2020), remarked that youths are affected once they are exposed to the media. Such exposure leads to changes in knowledge, attitude,



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

and behavior. By implication, female youths and women tend to imitate their fellow who engages in bleaching as well as the media which projects light-skinned ladies as the most appropriately accepted in the society (Apuke, 2018). As the theory suggest, the more a person is exposed to certain behaviors the more he/she tends to copy them. The advent of social media has made it easier for women to get exposed to various adverts that projects light skin female advertisers, therefore, their perception is influenced into believing that lightening of the skin is a good practice (Apuke, 2018).

3. Methodology

The mixed method (qualitative and quantitative) was adopted for this study. We used the mixed approach because the study requires both qualitative and quantitative data. A combination of both can improve on evaluation by ensuring that the limitations of one type of data are balanced by the strengths of another. The mixed method provided tools for the researchers to study complex phenomena within their context using a variety of data sources. This ensured that the issue was not explored through one lens, but a variety of lenses which allowed for multiple facets of the phenomena to be revealed and understood. A total of 100 students were contacted for data.

The primary data was obtained through questionnaire administration and interviews. The significance of this is to enable the researchers to obtain the empirical evidence necessary for the study. Surbhi (2016), noted that the primary data collection is under the direct control and supervision of the investigator which makes it real data. As such, the study sourced primary data through the administration of questionnaires among students in the Faculty of Integrated Development Studies (FIDS) to assess their knowledge and perceptions of skin lightening. The study sourced secondary data from websites and reports prepared by research scholars.

Purposive and snowball sampling techniques were employed to obtain the 100 students. The importance of purposive sampling is that it helps gain much information from those who have much information or experience in the study area. It also saves time. Kalu (2019), noted that, in qualitative data collection, purposive sampling is used so that individuals are selected because they have experienced the central phenomenon. This sampling technique was used when questionnaires were administered to respondents who had visible signs of having bleached their skin. We were able to contact 47 students purposively. There were also instances that we had to use snowball sampling. The reason for choosing this technique is because, the nature of the academic calendar has made students not readily available on campus and difficult to access, as they are in the field for the third-trimester program. Hence, identifying a potential target sampling unit leads us in getting others. The snowballing method was used to contact 53 students. The qualitative data was presented by using illustrative quotes, analyzed using the interpretative approach and interpreted in a descriptive form based on the thematic areas. This helped generate available information necessary for the study. Quantitative data was obtained through the use of questionnaires and presented in the form of frequency distribution tables and charts. Percentages were analyzed through the use of Statistical Package for Social Sciences (SPSS) version 20. This is to ensure easy visualization and the interpretation of data.

4. Findings and discussions

This section dealt with the demographic characteristics of respondents, findings and discussions on knowledge on skin lightening, sources of knowledge on skin bleaching and skin toning, awareness of lethal chemicals and abrasive agents in bleaching products, perceptions of FIDS students of SDD-UBIDS



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

on skin lightening, perceptions of treatment with lighter complexion and opinions on bleaching as a beauty factor.

4.1 Demographic characteristics of respondents

Data was gathered from both male and female students ranging from the ages of 18-35 plus in the Faculty of Integrated Development Studies (FIDS). First, a synthesis of all data collected was done and categorised as shown in Table 4.1 below.

Table 4.1 Demographic characteristics of respondents

Variable	Characteristics	Frequency	Percentages (%)
Sex $(N = 100)$	Male	52	52
	Female	48	48
Total		100	100
Age $(N = 100)$	18 – 24	42	42
	25 - 35	40	40
	35+	18	18
		100	100
Total			
Marital status	Single	54	54
Tylarian status	In a serious relationship	18	18
	Married	20	20
	Engaged	7	7
	Divorced	1	$\frac{1}{1}$
		100	100
Total			
Program of	BA Development Communication	29	29
study	BA Integrated Development Studies	28	28
	BA Environment and Resource Studies	19	19
	BA African Discourse Studies	9	9
		100	100
Total			

Source:(Field survey, July, 2023)

From the field data gathered, 52% of the total sample were females. The relatively higher proportion of female respondents suggests a certain level of gender diversity within the surveyed group. The remaining 48 respondents, constituting 48% of the total, were males. This gender composition provides a balanced representation between the two sexes, contributing to a more comprehensive understanding of the population's characteristics.

The data reveals that 41 out of the 100 respondents (41%) of the total sample, belong to the 18-24 age range. This suggests a significant representation of young adults within the study, potentially reflecting a



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

focus on topics that resonate with this demographic. A close second, 40 respondents (40%) of the total, fall within the 25-34 age range. This indicates a nearly equivalent representation of respondents in this age bracket, further reinforcing the prominence of young and early middle-aged adults in the sample. The remaining 18 respondents (18%) of the total, are categorized as being 35 years old and above. This group includes individuals from a diverse age range, likely contributing to a broader perspective in the study's findings.

The data reveals a spectrum of marital and relationship statuses, each with its unique significance. The largest group among the respondents is those who identified as "Single," comprising 54 individuals. This group likely encapsulates a diverse range of life stages and personal choices, reflecting the growing trend of prioritizing personal growth and independence before committing to a long-term partnership.

"In a serious relationship" stands as the second most common status, with 18 respondents falling within this category. This status underscores the presence of committed relationships that might be on the cusp of transitioning into more formal arrangements. The prominence of this category speaks to the modern fluidity of relationships, where individuals often engage in deep emotional connections without necessarily adhering to traditional labels.

Among the respondents, 20 individuals marked "Married" as their status. Marriage, often considered a cornerstone of societal norms, still holds a meaningful place in the lives of many. The data suggests that a considerable portion of the respondents have chosen this path, which could indicate stability, legal commitment, and a desire for a lifelong partnership.

A smaller yet notable group of 7 respondents indicated their status as "Engaged." This category captures the anticipation and excitement of a forthcoming marriage. Engagements are often seen as a bridge between singlehood and marriage, reflecting a commitment to take the next step in the journey of a shared life.

Interestingly, the data also includes 1 respondent who identified as "Divorced." While this is the least represented category, it carries significant emotional weight. Divorce symbolizes the end of a legal and emotional partnership, highlighting the complexities and challenges that relationships can entail.

4.2 Knowledge of skin lightening

In the provided section of this chapter, the primary focus centres on the comprehensive presentation of collected data concerning respondents' knowledge about practices related to skin lightening. Specifically, attention is directed towards their capacity to differentiate between two prevalent practices in this domain: skin bleaching and skin toning. This demarcation holds significant importance as it serves to highlight the extent of respondents' understanding of these practices and the potential implications associated with them. The empirical data is visually depicted in Figure 4.1, where the participants' responses to the inquiry, "Can you differentiate between skin bleaching and skin toning?" are systematically categorized into two distinct options: "Yes" and "No".



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

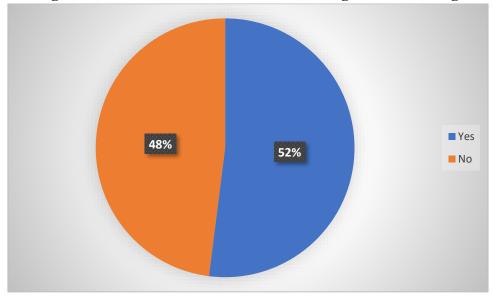


Figure 4.1 Differences between skin bleaching and skin toning

Source: (Field survey, July, 2023)

The findings, as visually represented in Figure 4.1, reveal that out of the surveyed participants, a total of 52 individuals asserted their ability to effectively differentiate between the concepts of skin bleaching and skin toning. In contrast, 48 respondents expressed their incapacity to make this particular distinction. The findings are in line with Asumah et al., (2022), whose study revealed that the majority of their respondents were knowledgeable of skin lightening and could differentiate between skin bleaching and skin toning. The differentiation between skin bleaching and skin toning embodies a significant facet to contemplate within the broader context of skincare practices and the cosmetics industry. Skin bleaching encompasses the utilization of diverse products or treatments engineered to lighten the skin complexion by diminishing the concentration of melanin – the pigment accountable for skin coloration. This objective is achieved through a multitude of mechanisms, such as the restraint of melanin production or the removal of preexisting melanin. Notably, this practice has often been associated with potential health risks due to the utilization of components like hydroquinone, corticosteroids, and mercury compounds. When employed devoid of proper regulation or guidance, these ingredients can instigate adverse effects on both skin health and overall well-being (Gonzalez, 2015; Puri, 2017).

Skin bleaching, as indicated by respondents, involves the process of altering the natural colour of the skin using chemical products. The consensus among respondents is that skin bleaching leads to a change in the original skin colour. This process often employs creams and cosmetics that contain chemicals to lighten the complexion, resulting in a noticeable difference in skin tone. It's perceived to go beyond the surface, potentially damaging the skin and leaving behind patches or spots.

In contrast, skin toning refers to the employment of products or treatments that primarily target the enhancement of skin tone uniformity, the mitigation of hyperpigmentation, and the augmentation of radiance. Distinct from skin bleaching, the emphasis of skin toning practices is to uphold the natural skin coloration as opposed to inducing significant lightening. This objective is commonly realized through the integration of ingredients like alpha hydroxy acids (AHAs), beta hydroxy acids (BHAs), vitamin C, and niacinamide. These components facilitate exfoliation and the turnover of skin cells, thereby contributing to the attainment of a more harmonious and vibrant complexion (Ditre et al., 1996; Farris, 2005).



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

Conversely, skin toning, as elucidated by respondents, revolves around enhancing the skin's texture and appearance without attempting to modify its inherent colour. The majority of respondents agreed that skin toning helps in clearing dark spots, addressing discoloration, and improving the overall skin tone. It is characterized by the application of products like toners and lotions that aim to create a smoother and more even complexion, often associated with maintaining the skin's natural vibrancy.

The discernible division between respondents who displayed the ability to distinguish between these practices and those who did not could be attributed to a plethora of factors. These potential factors encompass variations in educational backgrounds, differential exposure to skincare information, cultural influences, and personal experiences. Individuals who possess a more comprehensive understanding of skincare and cosmetic products are more likely to exhibit the capability to discriminate between these practices. This enhanced capacity may stem from their exposure to pertinent information via diverse channels such as media outlets, healthcare professionals, and beauty experts (Hexsel et al., 2018).

Within the context of the presented data, it is crucial to acknowledge that the capacity to differentiate between skin bleaching and skin toning potentially correlates with heightened awareness of the associated risks linked with skin bleaching. Respondents who have the ability to distinguish between these two practices are more likely to possess a deeper understanding of the potential hazards posed by skin bleaching. Furthermore, they are more attuned to the significance of opting for safer skincare alternatives like skin toning (George & Kumar, 2011).

4.3 Sources of knowledge on skin bleaching and skin toning

In this section of the chapter, the focus shifts to an exploration of the sources of knowledge that individuals draw upon concerning skin bleaching and skin toning practices.

The findings highlight a range of avenues through which individuals acquire information about skin bleaching and skin toning; the internet, celebrities, friends, billboards and family. These sources offer a glimpse into the complex interplay between personal networks, media exposure, and external influencers in shaping individuals' perceptions and understanding of these practices as indicated by the social learning theory.

The prevalence of the internet as a dominant source of information, underscores the substantial impact of digital platforms on modern information dissemination. Egbi and Kasia (2021), and Rahiman, Davids and Thomas (2021) in their survey revealed that the internet is a dominant source of skin bleaching products and information which is in line with the study findings. The digital age has granted individuals unparalleled access to a vast array of online resources, ranging from reputable medical websites and articles to social media platforms and beauty blogs. This proliferation of information sources can empower individuals to educate themselves about the nuances of skin bleaching and skin toning, making informed decisions regarding their skincare practices (Smith & Anderson, 2019).

Furthermore, the influence of celebrity endorsements on TV and radio, indicates the significant sway that public figures hold over popular perceptions of beauty and skincare practices. Celebrity endorsements can wield considerable persuasive power, often associating certain products or practices with societal ideals of attractiveness. However, it is important to note that such endorsements might not always be based on expert advice or scientific evidence, potentially leading to misconceptions or misguided choices among the audience as reported by Scheufele and Tewksbury (2007).

The role of friends as a source of knowledge, highlights the significance of personal relationships in disseminating information about skincare practices. Friends often share their own experiences and recommendations, shaping each other's perceptions and potentially reinforcing certain viewpoints. The



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

peer-driven nature of this information exchange can have both positive and negative implications. While it can foster a sense of community and shared experiences, it might also perpetuate misinformation if not grounded in accurate knowledge (Pitt & Muldrow, 1995). The inclusion of billboards and family as sources of knowledge, reminds us of the multifaceted nature of information exposure. Billboards can serve as visual stimuli in public spaces, contributing to the collective awareness of certain practices. Family, even though representing a relatively minor source, still holds significance as an early influencer in an individual's life, shaping foundational perspectives and attitudes.

The data reflects the dynamic interplay between digital platforms, celebrity endorsements, interpersonal relationships, and traditional advertising. As individuals navigate this complex landscape of information, it becomes crucial to critically evaluate and verify the accuracy of sources to make informed decisions about their skincare practices.

4.4 Knowledge on lethal chemicals and abrasive agents in bleaching products

We delved into the divergent levels of knowledge on lethal chemicals and abrasive agents in bleaching products among the respondents. It revealed a heightened knowledge regarding the presence of lethal chemicals and abrasive agents, such as hydroquinone, mercury, and arbutin, within skin bleaching products. A smaller proportion of respondents demonstrated not only recognition of these potentially harmful constituents but also an understanding of the associated dangers they pose to skin health. This finding goes contrary with Rahiman, Davids and Thomas (2021), study reports which indicated that majority of their respondent were aware of the lethal chemicals and abrasive agents that are constituents of these products (Hydroquinone, Mercury, Arbutin) and the danger these products pose. A majority (65%) of the respondents reported a lack of awareness regarding the existence of these hazardous elements in bleaching products and the potential risks linked to their usage. This disparity in awareness underscores a crucial gap in knowledge within the surveyed population, signifying the urgent need for comprehensive education initiatives and awareness campaigns. These initiatives would aim to disseminate accurate information about the chemical composition of certain skin bleaching products and the potential adverse effects that can arise from their usage. This implies that, there is relatively low awareness level among university students which indicates that a significant portion of the student population might not be fully informed about the potential health risks associated with these chemicals. This inadequate of awareness could lead to students unknowingly using products containing these harmful substances.

The implications derived from this data analysis extend to realms of consumer education, public health, and regulatory frameworks. The findings underscore the paramount importance of fostering awareness among individuals about the constituents prevalent in bleaching products, thereby equipping them with the necessary knowledge to make well-informed decisions concerning their skincare practices. Additionally, these results signal an opportunity for regulatory bodies and healthcare professionals to play an active role in not only educating the public but also through health communication, advocating for safer alternatives to potentially harmful skincare practices.

4.5 Perception of FIDS students of SDD-UBIDS on skin lightening

The primary objective of this inquiry is to unravel the multifaceted ways in which students perceive their natural skin colour and their subsequent level of satisfaction or dissatisfaction with it. The ensuing data collected within this framework not only provides valuable insights into the attitudes harboured by the students but also serves as a reflective mirror to comprehend their self-image in relation to their skin colour.



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

We also embarked on a comprehensive exploration of the distribution of natural skin colours among the respondent cohort, categorizing the responses into discernible shades of skin tone, specifically "Chocolate," "Dark skin," and "Light skin." A careful scrutiny of the frequency counts engenders a complex shade of diversity in skin tones that is clearly woven into the fabric of the student body.

Evidently, the data reveals a noteworthy and appealing substantial segment of respondents, totalling 55 out of 100 individuals, who self-identify their natural skin colour as "Chocolate." This designation accordingly denotes a range of medium to dark skin tones. Complementing this, an equally significant cohort of 32 respondents unhesitatingly embraced the label of "Dark skin," thereby underscoring the substantial presence of individuals within the sample who possess deeper and richer skin tones. In contrast, a more modest cluster of 13 respondents ascribed to themselves a "Light skin" shade. This mosaic of responses articulates the captivating variance in skin tones prevalent within the student community. The resonance of this distribution with the broader discourse on beauty ideals resounds vividly, thereby underscoring the profound and undeniable richness of diversity in the perceptual paradigms of attractiveness across diverse cultural and societal contexts. This multifaceted spectrum of skin colours becomes a poignant testimony to the complex interplay that exists between individual self-perception, the nuanced shade of societal constructs surrounding beauty, and the complex dynamics at play in the formation of personal and collective identity.

The insights provided by this data analysis align closely with the findings of Charles (2018), who delves into the interrelationship between perceptions of skin colour, societal norms, and personal identity. Charles explains how these perceptions are deeply linked with established cultural and societal norms, influencing individual conceptions of attractiveness and self-worth. This, in turn, underscores the importance of understanding the multiplicity of factors that contribute to the formation of self-perception and the contextual landscape in which it evolves.

Upon navigating the landscape of these responses, a compelling pattern emerges, punctuating the emotional area covered by the students. A prevailing sentiment of contentment echoes through the majority of the respondents. This is impressively summarized by the overwhelming majority of 88% of respondents who voiced a resounding "Yes," signifying their satisfaction with their existing skin colour. This significant cohort underscores a collective sense of self-assuredness and positivity that many respondents harbour towards their own skin tone. This finding aligns with Ahmed and Hamid (2016), findings which indicated that majority of their respondents were satisfied with their skin tone. In a fascinating contrast, a relatively smaller yet noteworthy subset comprising 12% of respondents chose to voice a contrary sentiment. These individuals expressed a distinct and honest sense of dissatisfaction with their present skin tone. This expression of discontent resonates with the complex interplay of societal influences, personal aspirations, and norms of beauty that cast their shadow upon the realm of self-image. This subset becomes a nuanced focal point through which to examine the influence of societal pressures and standards on individual perceptions.

The resounding positivity that emanates from the "Yes" responses may be seen as a testament to the students' affirmation of their identity and an appreciation of their unique features. The seemingly modest count of "No" responses, though numerically minor, carries a substantial weight in highlighting the persistent influence of external factors on the emotional well-being of individuals. This observation aligns with the notion expounded by scholars such as Hall (1995), who elaborate on the power of media in shaping societal ideals of beauty. Media representations, cultural narratives, and prevailing beauty standards all converge to weave a complex shade that influences individual self-perception. The striking



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

dynamics unveiled by findings gives a reflection between personal identity and societal constructs, thereby underscoring the profound resonance of personal perceptions with broader societal norms.

The insights derived from the data gathered cast a revealing light on the complex landscape of self-esteem and self-perception that the students navigate in relation to their own skin colour. These findings serve as a clear lens through which we can comprehend the multi-faceted emotions and self-reflective considerations that underpin the students' self-image in the context of their appearance. The substantial majority of respondents who express satisfaction with their skin colour serve as a resounding testament to the generally positive self-image embraced by a significant portion of the sampled group.

This prevalent sentiment of contentment points towards a collective affirmation of individual identity and a recognition of the inherent value of diverse skin tones. The students who indicate satisfaction with their skin colour likely exhibit a heightened sense of self-assuredness and comfort in their own skin. Their positive self-perception can be seen as a reflection of an internalized acceptance of their unique features, resisting external pressures and embracing the beauty inherent in their natural skin tone.

Conversely, the presence of respondents who voice dissatisfaction uncovers a more intricate layer of the narrative. It opens a window into the complicated interplay between individual perceptions and the prevailing societal standards of beauty. This division underscores the discernible tension between personal self-perception and the external constructs of beauty that are propagated by society. The individuals who express dissatisfaction with their skin colour may be revealing the influence of external ideals on their self-concept. This phenomenon resonates with the insightful observations of Hall (1995), who underscored the profound role played by media and cultural representation in shaping and reinforcing personal ideals of beauty. Hall's assertion that media wields a powerful influence in constructing beauty norms finds resonance here. Media representations, cultural narratives, and prevailing beauty standards converge to create a complex matrix that inevitably influences individual self-perception. The students' expressions of dissatisfaction may be a manifestation of the deep-seated effects of media imagery and societal norms that create an internalized comparison to prevailing beauty ideals.

4.6 Perception of treatment with lighter complexion

We made attempts to get responses regarding whether individuals think they would be treated better if they had a lighter complexion. The majority of respondents answered "No," while a smaller number answered "Yes." A subset of 14% (Yes) of respondents voiced a belief that they would indeed be treated better if they possessed a lighter complexion. This sentiment reflects the acknowledgement of prevailing societal biases that have historically associated lighter skin with notions of beauty, privilege, and a more favourable treatment. Conversely, the numerical majority lies in the group of 86% of respondents who asserted that they do not subscribe to the notion that they would receive better treatment solely due to having a lighter complexion. This substantial count underscores a collective doubt towards the perpetuation of colour-based biases. It serves as a testament to the awareness and conscious rejection of the insidious notion that one's complexion should determine their worth or the quality of treatment they receive.

The findings extracted resonate with broader discourses on colourism and perceptions of privilege. The belief in differential treatment based on complexion reflects a deeply entrenched societal construct that equates lighter skin with beauty, superiority, and opportunities. This notion is further compounded by historical legacies and media representation that have contributed to the perpetuation of colour-based prejudices.



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

The substantial majority of respondents who reject this notion align with the ongoing conversations challenging colour-based biases. The rejection of such biases may stem from a growing awareness of the damaging effects of colourism on self-esteem and social dynamics. The recognition that one's worth should not be determined by external features stands as a testament to the evolving sensibilities that aim to dismantle entrenched notions of beauty and privilege.

4.7 Opinion on bleaching as a beauty factor

We tried to find a significant window into the prevailing opinions surrounding the contentious issue of skin bleaching as a perceived beauty factor. The central question was: "Is bleaching seen more as a beauty factor?" This query probes the intricate relationship between beauty standards and the practice of skin bleaching, shedding light on the societal perceptions that underpin this practice. Respondents were provided with two distinct responses, namely "Yes" and "No," to articulate their views on this matter. Upon a careful analysis of the responses, a distinctive narrative emerges, articulating the diverse perspectives and viewpoints held by the participants. The frequency counts documented a vivid representation of these opinions. 34% of respondents expressed the belief that bleaching is indeed viewed as a beauty-enhancing factor. This sentiment reveals a prevailing acknowledgement of societal beauty standards that have historically favoured lighter skin tones, often associating them with notions of attractiveness and desirability.

Conversely, the numerical majority is found among the group of 66% of respondents who asserted that they do not perceive bleaching as a significant beauty factor. This substantial count indicates a collective doubt towards the idea that altering one's skin tone through bleaching inherently enhances one's attractiveness. This viewpoint reflects a growing awareness of the potential risks, consequences, and ethical concerns associated with skin bleaching, a practice that has been linked to adverse health effects and reinforcing colour-based biases. This finding is contrary to January et al., (2018), Peltzer and Pengpid (2017) and Cecile et al., (2018) which revealed that the majority of their respondents admitted that skin lightening or bleaching is more of a beauty factor.

The revelations drawn from above echo broader discussions on beauty ideals and the role of societal standards in shaping individual perceptions. The belief in bleaching as a beauty factor is deeply linked with historical legacies, media representation, and cultural narratives that have perpetuated the myth that lighter skin equates to heightened beauty and social acceptance. Scholars such as Charles (2018), and Muthee et al. (2020), have undertaken in-depth investigations into the intersection of skin bleaching, beauty standards, and identity.

The larger count of respondents who resist viewing bleaching as a significant beauty factor signifies a growing consciousness regarding the ethical and health-related implications of altering one's natural skin tone. This rejection of the notion that beauty is intricately tied to skin complexion reflects a broader societal shift towards appreciating diversity and redefining traditional notions of attractiveness.

Ethical considerations

Administrative approval for the study was sought from the faculty. Respondents provided both verbal and written consent. Consenting to participate in the study did not bond respondents and they had the liberty to withdraw at any point of the data collection process. We observed the ethical principles for medical research involving human subjects

5.1 Conclusions

Advertisements on TV/radio, billboards, family and friends play very influential roles with regards to the



E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

knowledge and perception of skin bleaching. The old notion that women are the only culprits with reference to skin lightening is no longer true. Men are greatly involved as evident in this study. The majority of the respondents are not aware of hazardous constituents in skin-bleaching products. The nuanced interplay between personal perceptions and societal norms plays a role in the use of skin-lightning products.

Skin-bleaching, as indicated by respondents, involves the process of altering the natural colour of the skin using chemical products. The consensus among respondents is that skin bleaching leads to a change in the original skin colour. This process often employs creams and cosmetics that contain chemicals to lighten the complexion, resulting in a noticeable difference in skin tone. It's perceived to go beyond the surface, potentially damaging the skin and leaving behind patches or spots.

The role of friends as a source of knowledge highlights the significance of personal relationships in disseminating information about skincare practices. Friends often share their own experiences and recommendations, shaping each other's perceptions and potentially reinforcing certain viewpoints.

A majority of the respondents reported a lack of awareness regarding the existence of hazardous elements in bleaching products and the potential risks linked to their usage.

Exploration of their perceptions on the subject matter, the natural skin colours among the respondent cohort, categorized the responses into discernible shades of skin tone, specifically "Chocolate," "Dark skin," and "Light skin." A careful scrutiny of the frequency counts engenders a complex shade of diversity in skin tones that is clearly woven into the fabric of the student body.

A substantial majority of respondents rejected the notion that aligns with the ongoing conversations challenging colour-based biases. The rejection of such biases may stem from a growing awareness of the damaging effects of colourism on self-esteem and social dynamics.

The numerical majority is found among the group of 66% of respondents who asserted that they do not perceive bleaching as a significant beauty factor. This substantial count indicates a collective doubt towards the idea that altering one's skin tone through bleaching inherently enhances one's attractiveness.

5.2 Recommendations

- The University Counselling Unit and Ghana Health Service (GHS) need to collaborate and organise comprehensive health promotions/educational campaigns on skin lightening.
- Given the limited awareness about hazardous constituents in skin bleaching products, there is an urgent need for comprehensive education campaigns. Workshops, seminars, and awareness sessions should be organized by the Students' Representative Council (SRC), to equip students with accurate information about the potential risks and consequences of skin bleaching.
- Also, the university should provide media literacy programs for students. Considering the significant
 influence of media, particularly the Internet and celebrity endorsements, on students' perceptions
 implementing media literacy programs is crucial. These programs can help students critically analyse
 media messages, recognize potential biases, and make informed judgments about the information they
 encounter.
- Recognizing the nuanced interplay between personal perceptions and societal norms, the university should provide Psychosocial support services to those who need it.

References

1. Adewoyin, A. A. (2020). Skin Bleaching Among Female University Students (Doctoral dissertation, Walden University).



- 2. Agyemang-Duah et al., (2019). Prevalence and patterns of skin toning practices among female students in Ghana: a cross-sectional university-based survey. BMC Research Notes, 12(1), 1-7.
- 3. Ali, A. (2020). Quantitative Data Analysis. University of Sindh, 1-10.
- 4. Alrayyes, S. F., Alrayyes, S. F., and Farooq, U. D. (2019). Skin-lightening patterns among female students: A cross-sectional study in Saudi Arabia. International journal of women's dermatology, 5(4), 246-250.
- 5. Amankwa et al., (2016). Skin bleaching and its negative effect on the physical appearance of the black skin (A case study of youthful ladies and women in the Ho Municipality in Ghana). Research on Humanities and Social Sciences, 6(12): 67-73.
- 6. Apuke, O. D. (2018). Why do women bleach? Understanding the rationale behind skin bleaching and the influence of media in promoting skin bleaching: A narrative review. Global Media Journal, 16(30), 1-4.
- 7. Asumah et al., (2022). Prevalence of skin bleaching and its associated factors among young adults in Ghana. Public Health and Toxicology, 2(1): 6. http://dx.doi.org/10.18332/pht/146947
- 8. Cécile et al., 2018. Frontiers in Dermatology and Cosmetology. Steroids, 2, 1-3.
- 9. Darj et al., (2015). "The fairer the better?" Use of potentially toxic skin bleaching products. African Health Science, 15: 1074-1080. http://dx.doi.org/10.4314/ahs.v15i4.4
- 10. Davids et al., (2016). The phenomenon of skin lightening: Is it right to be light? South African Journal of Science, 112: 1-5. http://dx.doi.org/10.17159/sajs.2016/20160056
- 11. Denscombe, M. (2017). EBOOK: The good research guide: For small-scale social research projects. McGraw-Hill Education (UK).
- 12. Ditre et al., (1996). Effects of alpha hydroxy acids on photoaged skin: A pilot clinical, histologic, and ultrastructural study. Journal of the American Academy of Dermatology, 34(2), 187-195.
- 13. Egbi, O. G., and Kasia, B. (2021). Prevalence, determinants and perception of use of skin lightening products among female medical undergraduates in Nigeria. Skin Health and Disease, 1(3), e46.
- 14. Etikan, I., Musa, S. A., and Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American journal of theoretical and applied statistics, 5(1), 1-4.
- 15. Farris, P. K. (2005). Topical vitamin C: a useful agent for treating photoaging and other dermatologic conditions. Dermatologic Surgery, 31, 814-818.
- 16. Frothingham, S. (2023). How to Lighten Your Underarms. Healthline. https://www.healthline.com/health/underarm-lightening
- 17. George, A., and Kumar, K. P. S. (2011). Review on management of cutaneous disorders using topical Niacinamide. International Journal of Pharmacy and Pharmaceutical Sciences, 3(Suppl 2), 35-40.
- 18. Gonzalez, S. (2015). Pathophysiology of Melanin Formation and Function. In Pigmentary Skin Disorders (pp. 15-28). Springer.
- 19. Hall, S. (1995). The Whites of Eyes: Racist Ideologies and the Media. In G. Dines & J. Humez (Eds.), Gender, Race, and Class in Media (pp. 18-22). SAGE Publications.
- 20. Haris et al (2020). Online promotion strategies that can increasenasi lemak wanjo, kampung baru's purchase intention.
- 21. Herfeld, C. (2022). Revisiting the criticisms of rational choice theories. Philosophy Compass, 17(1), e12774
- 22. Hexsel et al., (2018). Impact of Education on Sun Exposure Knowledge and Behavior Among Adolescents. Journal of Cutaneous Medicine and Surgery, 22(5), 525-530.



- 23. Jacobs et al., (2016). Fifty shades of African lightness: a bio-psychosocial review of the global phenomenon of skin lightening practices. Journal of Public Health Africa, 7, 552.
- 24. January et al., (2018). Use of skin lightening creams among female University students in Zimbabwe: a preliminary survey. Medical Journal of Zambia, 45(1): 44-48.
- 25. Jerke et al., (2019, June). Too sophisticated even for highly educated survey respondents? A qualitative assessment of indirect question formats for sensitive questions. In Survey Research Methods (Vol. 13, No. 3, pp. 319-351).
- 26. Juneja, P. (2015). Secondary data. Management studies guide https://www.managementstudyguide.com/secondary_data. htm.
- 27. Kalu, M. E. (2019). Using emphasis-purposeful sampling-phenomenon of interest—context (EPPiC) framework to reflect on two qualitative research designs and questions: A reflective process. The Oualitative Report, 24(10), 2524-2535.
- 28. Keakile, K. M. (2016). Motivations, consequences and knowledge of skin bleaching: a study of perceptions of students of the University KwaZulu-Natal, South Africa (Doctoral dissertation).
- 29. Kidunda, E., and Pastory, D. (2022). examination of factors influencing the intention to adopt cryptocurrencies in Tanzania: Cryptocurrencies, Tanzania, Blockchain technology, Bitcoin. Business Education Journal, 11(1).
- 30. Kouotou et al., (2017) Skin Whitening among Cameroonian Female University Students: Knowledge, Attitudes, Practices and Motivations. BMC Women's Health [Internet]. https://bmcwomenshealth.biomedcentral.com/articles/10.1186/s12905-017-0385-z
- 31. Kuhon, F. (2020). A study on students' adversity quotient and Academic performance in english subject. Journal of Advanced English Studies, 3(1), 24-29.
- 32. Lartey et al., (2017). Use of skin lightening products among selected urban communities in Accra, Ghana. International Journal of Dermatology, 56: 32-39. https://doi.org/10.1111/ijd.13449
- 33. Maestripieri, L. A. R. A., Radin, A., and Spina, E. (2019). Methods of sampling in qualitative health research. Researching Health: Qualitative, Quantitative and Mixed Meth-ods, 83.
- 34. Masood et al., (2023). Linking enterprise social media use, trust and knowledge sharing: paradoxical roles of communication transparency and personal blogging. Journal of Knowledge Management, 27(4), 1056-1085.
- 35. Masum, M. N., Yamauchi, K., and Mitsunaga, T. (2019). Tyrosinase inhibitors from natural and synthetic sources as skin-lightening agents. Reviews in Agricultural Science, 7, 41-58.
- 36. Miller, K. (2022). What Is Vaginal Bleaching? Health. https://www.health.com/mind-body/vaginal-bleaching
- 37. Mohiuddin, A. K. (2019). Skin aging & modern age anti-aging strategies. PharmaTutor, 7(8), 22-70.
- 38. Morgan, D. L., and Nica, A. (2020). Iterative thematic inquiry: A new method for analyzing qualitative data. International Journal of Qualitative Methods, 19, 1609406920955118.
- 39. Motseki, M. C. (2019). Black erasure and celebrity peddling of whiteness: A study of skin bleaching among black women in South Africa (Doctoral dissertation).
- 40. Muthee et al., (2020). Prevalence and Factors Influencing Skin Bleaching Among University Students in Kenya: A Cross-sectional Study. Clinical, Cosmetic and Investigational Dermatology, 13, 693-700.
- 41. Nabaweesi, K. V., Nafuna, J., and Nanyonga, J. (2022). A Collection development policy for Avance International University Library (Doctoral dissertation, Makerere University).



- 42. Nyoni-Kachambwa, et al., (2021). A preliminary study of skin bleaching and factors associated with skin bleaching among women living in Zimbabwe. African Health Sciences, 21(1), 132-9.
- 43. Okoro, O. E., and Iwu, A. C. (2018). Awareness, Attitudes, and Practices of Skin Bleaching Among Female Students of the University of Port Harcourt, Nigeria. International Journal of Dermatology, 57(5), 560-567.
- 44. Olumide, Y. M. (2016). The Vanishing Black African Woman: Volume One: A Compendium of the Global Skin-Lightening Practice (Vol. 1). Langaa RPCIG.
- 45. Osei et al., (2018). Skin-lightening practices among female high school students in Ghana. Public Health, 155: 81-87. https://doi.org/10.1016/j.puhe.2017.11.016
- 46. Pandey, P., and Pandey, M. M. (2021). Research methodology tools and techniques. Bridge Center.
- 47. Peltzer, K., and Pengpid, S. (2017). Knowledge about, attitude toward, and practice of skin lightening products use and its social correlates among university students in five Association of Southeast Asian Nations (ASEAN) countries. International Journal of Dermatology, 56(3), 277-283. doi: 10.1111/jjd.13518
- 48. Peltzer, K., Pengpid, S., and James, C. (2016). The globalization of whitening: prevalence of skin lighteners (or bleachers) use and its social correlates among university students in 26 countries. International Journal of Dermatology, 55: 165-172.
- 49. Pitt, M. A., and Muldrow, T. A. (1995). Knowledge of Skincare: Differences Associated with Age and Sex. Journal of Applied Social Psychology, 25(10), 861-873.
- 50. Puri, N. (2017). A study of adverse effects of topical steroids in the form of skin-lightening creams and their remedies. Indian Journal of Dermatology, 62(4), 393-396.
- 51. Rahiman, F., Davids, L. M., and Thomas, A. (2021). A survey evaluating knowledge, perception, and use of skin lightening products among South African students. International Journal of Women's Dermatology, 7(5), 766-768.
- 52. Rosen, T., and Givens, J. (2022). Public interest in skin lightening across the United States, January 2015–December 2020. Journal of Cosmetic Dermatology, 21(5): 1931-1935. https://doi.org/10.1111/jocd.14919
- 53. Rusmadi, S. Z., Syed Ismail, S. N., and Praveena, S. M. (2015). Preliminary study on the skin lightening practice and health symptoms among female students in Malaysia. Journal of Environmental and Public Health, 2015. http://dx.doi.org/10.1155/2015/591790
- 54. Sagoe et al., (2019). The global prevalence and correlates of skin bleaching: a meta-analysis and meta-regression analysis. International journal of dermatology, 58(1), 24-44.
- 55. Sakyi, K.A (2020). Mixing qualitative and quantitative methods: the conversation continues. World Bank Blogs.
- 56. Scheufele, D. A., and Tewksbury, D. (2007). Framing, Agenda Setting, and Priming: The Evolution of Three Media Effects Models. Journal of Communication, 57(1), 9-20.
- 57. Sestino, et al., (2020). Internet of Things and Big Data as enablers for business digitalization strategies. Technovation, 98, 102173.
- 58. Simmons et al., (2015). Exogenous ochronosis: a comprehensive review of the diagnosis, epidemiology, causes, and treatments. American Journal of Clinical Dermatology, 16: 205e12.
- 59. Smith, A., and Anderson, M. (2019). Social Media Use in 2019. Pew Research Center.
- 60. Story, D. A., and Tait, A. R. (2019). Survey research. Anesthesiology, 130(2), 192-202.
- 61. Surbhi, S. (2016). Difference between primary and secondary data. Key Differences.



- 62. Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. How to choose a sampling technique for research (April 10, 2016.)
- 63. Wald, N., and Daniel, B. K. (2020). Enhancing students' engagement with abstract ideas through conceptual and theoretical frameworks. Innovations in Education and Teaching International, 57(4), 496-505.
- 64. World Health Organization. (2019). Preventing disease through healthy environments: Mercury in skin lightening products (No. WHO/CED/PHE/EPE/19.13). World Health Organization
- 65. Yuan, S., and Lou, C. (2020). How social media influencers foster relationships with followers: The roles of source credibility and fairness in parasocial relationship and product interest. Journal of Interactive Advertising, 20(2), 133-147.
- 66. Yusuf et al., (2019). Skin lightening practices, beliefs, and self-reported adverse effects among female health science students in Borama, Somaliland: A cross-sectional survey. International Journal of Women's Dermatology, 5(5), 349-355.