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The Black identity, hair product use, and breast cancer scale [↗](#)

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Dede Tete¹, Marissa Ericson², Sabine Monice³, Lenna Dawkins-Moultin¹, Nasim Bahadorani⁴, Phyllis Clark⁵, Eudora Mitchell⁶, Lindsey S. Treviño¹, Adana Llanos⁷, Rick Kittles¹, Susanne Montgomery³

¹City of Hope Comprehensive Cancer Center, ²University of Southern California, ³Loma Linda University, ⁴California State University-Northridge, ⁵Healthy Heritage Movement, ⁶Quinn Community Outreach Corporation, ⁷Rutgers School of Public Health and Cancer Institute of New Jersey

1 Works for me [dx.doi.org/10.17504/protocols.io.4a8gshw](https://doi.org/10.17504/protocols.io.4a8gshw)



Dede Tete ⚡

ABSTRACT

Across the African Diaspora, hair is synonymous with identity. As such, Black women use a variety of hair products, which often contain more endocrine-disrupting chemicals than products used by women of other races. An emerging body of research is linking chemicals in hair products to breast cancer, but there is no validated instrument that measures constructs related to hair, identity, and breast health. The objective of this study was to develop and validate the Black Identity, Hair Product Use, and Breast Cancer Scale (BHBS) in a diverse sample of Black women to measure the social and cultural constructs associated with Black women's hair product use and perceived breast cancer risk. **Methods:** Participants completed a 27-item scale that queried perceptions of identity, hair products, and breast cancer risk. Principal Component Analyses (PCA) were conducted to establish the underlying factor structure, and confirmatory factor analysis (CFA) was used to determine model fit. **Results:** Participants (n = 185) were African American (73%), African, and Caribbean Black women (27%) aged 29 to 64. PCA yielded two factors that accounted for 61% of total variance. Five items measuring *sociocultural perspectives about hair and identity* loaded on Factor 1 and accounted for 32% of total variance ($\alpha = 0.82$; 95% CI = 0.77-0.86). Six items assessing *perceived breast cancer risk related to hair product use* loaded on Factor 2 and accounted for 29% of total variance ($\alpha = 0.82$ (95% CI = 0.74-0.86). CFA confirmed the two-factor structure (Root Mean Square Error of Approximation = 0.03; Comparative Fit Index = 0.91; Tucker Lewis Index = 0.88). **Conclusions:** The BHBS is a valid measure of social and cultural constructs associated with Black women's hair product use and perceived breast cancer risk. This scale is useful for studies that assess cultural norms in the context of breast cancer risk for Black women.

EXTERNAL LINK

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THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

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GUIDELINES

Questions provided by type of participants: stylist, young women, women with or without a history of breast cancer.

1

Participant type: Young women.

1. How important are hair styles for women like you? How important is your hair to you?
 - a. What is the meaning of hair in black culture as you see it?
 - b. Does that differ from what you see somewhat older women? If so , how?
 - c. How does dating fit into this?
2. How do you most often carry your hair?
 - a. Do you change it a lot?
 - b. How?
3. What made you choose your current hairstyle?
 - a. Was it for financial reasons, - explain?
 - b. Trends? How you see others doing their hair
 - c. Is there pressure to look a certain way—explain?
4. If you do your own hair:
 - a. Do you feel that you know enough about hair products to style your own hair?
 - b. What do you usually do?
 - c. Where do you get your information about hair styles, what products to use?
 - d. Do you feel you know enough about hair to style your own hair?
5. What are some of the popular styles today?
 - a. How do you learn about them, including what products to use?
 - b. Are they different from what your mom or older women you know have worn or wear today
6. If ever, how has the issue of BC come up for you in the past?
 - a. What are some of the causes of breast cancer?
 - b. What are your thoughts on the link between hair and cancer?
7. If you found out a product was harmful to your health, would you stop using it?
 - a. Why or why not? (benfits/barriers)
 - b. How do you see others reacting to such changes? Men? Women?
 - c. What would make you stop using a particular hair product completely?
8. How could we reach young women like you to talk about this use?
 - a. How do you think they would react?

Exit questions: Is there any information about hair or health that you would like to see be more available in the community? Do you have any additional comments or questions?

2 Participant type: Women with history of breast cancer.

1. When someone brings up the topic of hair, what do you think about?
2. What do you think are the most popular hairstyles right now?
 - a. How important is it for a woman to have a certain hairstyle?
 - b. When do hairstyles matter or not matter?
 - c. What do people mean when they say someone has a "natural" hairstyle? Are these popular?
 - d. How much time does AA/B women spend doing their hair or getting their hair done?
3. What do you think are some of the most common hair products that AA/B women use?
 - a. What do you think about the products that are said to be "natural"?
4. How old were you when you first started doing your own hair?
 - a. What age were you when you first started using products in your hair?
 - b. Before you did your own hair, who did it for you?
 - c. What kinds of styles did they give you? What kinds of products did they use?
5. What does it mean to have "healthy" hair?
6. What does the general term of "health" mean to you?
 - a. What does it mean to have "good" or "bad" health?
 - b. What do you think are some of the causes of good or bad health?
7. What has been your experience with breast cancer?
 - a. Testing, diagnosis, treatment
8. Have you ever heard that hair products or ingredients in beauty products might be harmful to people's health?
 - a. If so, what health problems and what hair products
 - b. Have you heard they might affect a woman's risk of breast cancer?
9. If you found out certain ingredients in hair products were harmful to your health, do you think you would avoid using these products?
 - a. What if they were found in a product that you used often?
10. Do you think that if most women found out that certain ingredients in hair products were harmful, that they would stop using those products?
 - a. Would they share this information with other women they know?
11. If we found out that some hair products or ingredients are harmful to women's health, what do you think would be a good way to get the word out?

Exit Questions: Is there any information about hair or health that you would like to see be more available in the community? Do you have any additional comments or questions?

3 Participant type: Women without a known history of breast cancer.

1. When someone brings up the topic of hair, what do you think about?
2. What do you think are the most popular hairstyles right now?
 - a. How important is it for a woman to have a certain hairstyle?
 - b. When do hairstyles matter or not matter?
 - c. What do people mean when they say someone has a "natural" hairstyle? Are these popular?
 - d. How much time does AA/B women spend doing their hair or getting their hair done?
3. What do you think are some of the most common hair products that AA/B women use?
4. What kind of hair products do you use?
 - a. On a regular basis
 - b. Experiment with
 - c. How do you decide what products to use?
5. How old were you when you first started doing your own hair?
 - a. What age were you when you first started using products in your hair?
 - b. Before you did your own hair, who did it for you?
 - c. What kinds of styles did they give you? What kinds of products did they use?
6. What does it mean to have "healthy" hair?
7. What does the general term of "health" mean to you?
 - a. What does it mean to have "good" or "bad" health?
 - b. What do you think are some of the causes of good or bad health?
8. What do you know about breast cancer?
 - a. As a disease
 - b. In your community? What concerns have you heard?
 - c. Have you ever done anything regarding breast cancer for yourself or others?
9. Have you ever heard that hair products or ingredients in beauty products might be harmful to people's health?
 - a. If so, what health problems and what hair products
 - b. Have you heard they might affect a woman's risk of breast cancer?
10. If you found out certain ingredients in hair products were harmful to your health, do you think you would avoid using these products?
 - a. What if they were found in a product that you used often?
11. Do you think that if most women found out that certain ingredients in hair products were harmful, that they would stop using those products?
 - a. Would they share this information with other women they know?
12. If we found out that some hair products or ingredients are harmful to women's health, what do you think would be a good way to get the word out?

Exit Questions: Is there any information about hair or health that you would like to see be more available in the community? Do you have any additional comments or questions?



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