



## RESEARCH ARTICLE

### FACTORS INFLUENCING GIRLS ATTITUDE TOWARDS BREAST SELF-EXAMINATION

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#### Abstract

The study investigated the factor influencing the girl's attitude towards BSE, and breast size dissatisfaction was examined as a possible determinant of BSE practice attitude. Two hundred and thirty-three ( $n=233$ ) female undergraduates pooled from three tertiary institutions in Nigeria participated in the study. The respondents completed self-report measures on attitude towards BSE practice and the Breast Size Rating Scale. A simple regression analysis was conducted on the data. The result revealed that breast size dissatisfaction statistically predicted BSE practice. The conclusion and practical implications of the study are discussed.

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#### Introduction: -

Breast cancer is the most typical cancer death source in women across the world (Key et al, 2001). The incidence is increasing worldwide (Brewster et al, 2014). It is a rare cancer in men (Labrèche et al., 2020). Breast cancer refers to the common set of breast lump subtypes with distinct molecular and cellular origins and clinical behavior. (Chalasani, 2020), thus, it denotes cancers originating from breast tissue, especially from the inside lining of milk ducts or the lobules, which provide milk to the ducts (Sharma et al, 2010). The negative effect of breast cancer could be more than reported because women's risk begins as early as their middle stage through to the last years. A significant number of women are diagnosed every year (Keshtgar et al, 2010). Breast cancer is the most recurrently diagnosed life-threatening cancer in women and the leading cause of cancer death among women (Chalasani, 2020). Thus, it represents an essential burden on our societies (Labrèche et al., 2020). Although, medical advances have changed the approach from a previously incurable condition into a surgical disease and have allowed the development of systemic treatments, hormonal therapies, and targeted drugs (Feliipe et al, 2017).

Although breast cancer is rare among young girls, young girls must adopt the self-examination culture to detect possible breast cancer symptoms. A study has shown that the percentages of young women with risk factors linked to breast cancer were high (Memon et al, 2015). BSE is an inexpensive and straightforward approach to reducing the death risk associated with breast cancer (Tazhibi & Feizi, 2014). Early diagnosis of breast cancer is one of the best approaches to prevent this disease (Sun et al., 2017). For example, most breast cancers are diagnosed at late stages due to a lack of awareness and formal screening programs (Ranasinghe et al., 2013). Improved public awareness and improved screening have led to earlier detections at stages amenable to complete surgical resection and curative therapies (Sharma, Dave, Sanadya, Sharma, & Sharma, 2010). Although various scientific and technological cancer screening approaches such as mammography exist, its associated cost and accessibility have been a challenge, especially in developing countries, including Nigeria. Nevertheless, BSE, which includes regular palpation of the

breast and aimed to make women conversant with the normal appearance and feel, is recommended to detect breast cancer early.

In Nigeria, breast self-examination has been widely researched. However, previous studies indicate that BSE practices deficient, especially among the young ones and the attitude towards self-examination is in the negative direction. Accumulating evidence suggests that Nigerian girls are knowledgeable about breast self-examination. However, the practice of BSE remains low (see Akande et al., 2005; Alabi et al., 2018; Ibitoye & Thupayegale-Tshwenegae, 2019; Ifechukwude, 2019), thereby indicating a negative attitude. For instance, Usman et al. (2020) found that a more significant proportion of girls have heard about breast cancer and breast self-examination but the inadequate knowledge of the correct procedures of breast self-examination results in poor attitude & practice of BSE.

Attitude is a psychological construct denoting one's evaluation of any aspect of one being. Perhaps, attitude represents the human ability to appraise a given part of one's socio-world favorably or unfavorably. A person's attitude comprises the belief, emotional and behavioral domains. Indeed, research has shown that attitude is an essential variable in BSE practice (Negeri et al., 2017; Noor et al., 2018). Previous studies have implicated several factors influencing attitude towards breast self-examination. For instance, Shallo and Boru (2019) reported that breast self-examination was predicted by educational levels, breast cancer awareness, and knowledge about breast self-examination. Shrestha et al. (2018) found an association between age, religion, profession, and attitude towards breast self-examination. One study found forgetfulness, procrastination, laziness, lack of time, fear of discovering a lump, and no trust in their practice ability as factors affecting the practice of BSE (Okolie, 2012). Agbonifoh (2016) included course of study, type of tertiary institution, and knowledge of BSE as factors impacting the practice of BSE. Additionally, Azuogu et al. (2019) reported that having a close relative diagnosed with breast cancer encouraged female undergraduates to prevent the occurrence of breast cancer, thus enabling the practice of breast self-examination.

There is a general concern that breast size dissatisfaction could influence young girls' attitudes towards BSE. This assumption is based on interaction with female undergraduates in a large Nigerian university. Perhaps, girls with large breasts could be more concerned about breast cancer than their counterparts with small breasts. However, there is no explicit inclusion of breast size as a cancer risk factor (Jansen et al., 2014). The purpose of the current study is to investigate the influence of breast size dissatisfaction on BSE attitude. However, we expected that breast size dissatisfaction would predict attitude towards BSE among female undergraduates.

## **Method: -**

Two hundred and thirty-three (n=233) female undergraduates from three public universities in Nigeria participated in this study. Our choice of only female students is due to the study purpose. Participants were between the ages of 16 and 28 years, with a mean age of 22.56 years (SD = 2.57). A cross-sectional survey design was adopted.

## **Measures: -**

### **Attitude towards BSE:**

Attitude towards breast self-examination was measured with a scale designed to assess the level of one's attitude towards breast self-examination. The scale consists of 10 items that measure attitudes and feelings about BSE. Items were rated on a 5-point Likert-type scale (1 = Never, 5 = Always). A higher score on this scale indicates positive attitude. The instrument was validated following a pilot study, and .87 Cronbach's alpha was obtained.

### **Breast size dissatisfaction:**

Breast size dissatisfaction was measured using the Breast Size Rating Scale (BSRS), developed by (Swami et al., 2015). The scale consists of 14 computer-generated images of varying breast sizes with a dissatisfaction question. A higher score indicates dissatisfaction. In this study, Cronbach's alpha .88 was recorded.

## **Procedure**

Female undergraduates from three different tertiary institutions were recruited for the study with female research assistants' aid. The participants were mainly pooled from the hostels and classrooms. A total of 283 female undergraduates were approached and asked to participate in a study aimed at gaining a better understanding of their feelings about BSE. In all, 266 female students out of the 283 approached consented to take part in the study. Thus,

the scales were administered to them. Two hundred and forty-seven (247) copies of the scale administered were completed and collected immediately. However, only the adequately filled questionnaires (i.e., 233) were subjected to statistical analysis. The remaining 14 were rejected due to improper completion. Overall, the response rate was 92.75%.

### Result: -

Table showing the result of the simple regression analysis conducted to determine breast size dissatisfaction on BSE attitude.

	B	95% CI for B		SEB	$\beta$	$R^2$	t	Sig
		LL	UL					
Constant	1.849	1.785	1.913	.033			56.699	.000
BSD	-.739	-.826	-.652	.044	-.740	.548	-16.726	.000

Note. BSD= Breast Size Dissatisfaction; B = Unstandardized regression coefficient; CI = Confident Interval; LL = Lower Limit; UL = Upper Limit; SEB = Standardized error of the coefficient;  $\beta$  = Standardized coefficient;  $R^2$  = Coefficient of determination. \* $P < .000$ .

A simple regression analysis was conducted to determine the predictive role of breast size dissatisfaction on girls' attitude towards BSE. The study revealed that breast size dissatisfaction statistically significantly predicted the participant's attitude towards BSE at  $F(1,231) = 279.754$ ,  $P < .000$ . Thus, our expectation that breast size dissatisfaction will significantly predict BSE's attitude was supported, which means that female students who scored higher on the Breast Size Dissatisfaction Scale showed a more negative attitude towards BSE than their counterparts who scored lower on the scale.

### Discussion: -

The current study was concerned with investigating breast size dissatisfaction as a factor influencing girls' attitudes towards breast self-examination. The simple regression analysis revealed that breast size dissatisfaction statistically significantly predicted girls' attitudes towards BSE. The result is consistent with the report of Anglia Ruskin University (2020), which stated that most women who showed dissatisfaction with their breast size admitted they were less likely to practice breast self-examination and were less confident about detecting changes with their breasts. The probable explanation for this outcome could be attributed to the common belief that only women with large breasts are at the risk of breast cancer. Breast cancer is a complex health condition that has been associated with several risk factors, such as demographic factors, reproductive, hormonal, hereditary, aging, race, and lifestyle (Hortobagyi et al., 2005; Momenimovahed & Salehiniya, 2019). The literature on the large size of the breast and breast cancer stage remains controversial (Sellaheewa et al., 2008). Jansen et al. (2014) noted that there is direct and indirect evidence suggesting that breast size is an essential factor in the risk of developing breast cancer. The result of this study suggests more elaborate enlightenment relating to breast cancer and the associated risk factors.

### Limitations, strengths, and future directions

This study encountered a particular limitation that needed to be reported. For instance, the sample size, comprising only young females from tertiary institutions, posed a limit to the current study's generalizability. In addition, the data used for the analysis was solely self-report, thereby raising the issue of common method variance. This study contributes to the cancer literature by identifying breast size dissatisfaction as a vital factor in BSE, thus, broadening our understanding of the low BSE practice among young girls in Nigeria. Moreover, to the best of our knowledge, no study has attempted to examine the role of breast size dissatisfaction in BSE practice in the Nigerian context; hence, the justification for this current study. Future researchers should endeavor to utilize data from more comprehensive sources and establish a cause-effect relationship.

### Practical implication

In our view, the current finding is capable of providing valuable data to the ongoing National Cancer Control Plan (NCCP 2018-2022) by the Federal Ministry of Health Nigeria. Also, the finding can support the Nigerian Cancer Society (NCS) to achieve their various objectives relating to cancer detection, prevention, and education.

### Conclusion:-

This study is focused on assessing the factor influencing the girl's attitude towards breast self-examination. Whereas breast size dissatisfaction was examined as a factor that could determine attitude towards BSE. Indeed, our expectation was affirmed by the result of the study. Therefore, it is concluded that breast size dissatisfaction is an essential determinant of attitude in relation to BSE practice among young females in Nigeria. However, the result may not be generalized across multifaceted Nigeria's culture. It is recommended that future research expand the representative sample to include girls other than undergraduates.

### Ethical considerations

The current study tried to abide by the ethical standards in the process. The participants were fully informed about the study's purpose, and their involvement was made voluntary.

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