



Age, Income, Ethnicity, and Breast Cancer: A Look at College Women's Perceptions Regarding Self-Breast Examinations and Mammograms



Veronica R. Macias and Leticia Arellano-Morales, Ph.D.
University of La Verne

ABSTRACT

Despite the increased number of women diagnosed with breast cancer annually, many women do not perform self-breast examinations and mammograms. Consequently, the current study sought to examine college women's perceptions regarding self-breast examinations and mammograms. One hundred forty-five college women participated in the current study, and completed a demographic questionnaire and Champion Health Belief Model (1984). Findings suggested that African American women were more likely to perform self-breast examinations compared to all other ethnic groups. Furthermore, non-traditional aged students were more likely to receive a mammogram compared to traditional aged students. Lastly, women with close family relatives diagnosed with breast cancer did not feel susceptible to developing breast cancer while women with lower incomes were less likely to perceive health motivation as reason for performing a self-breast examination.

INTRODUCTION

According to the American Cancer Society (2005), approximately 40,410 women will die from breast cancer in the year 2005. In addition, ninety-five percent of new breast cancer cases occurred as well as 97% of breast cancer deaths in women forty years of age or older between 1998 to 2002. Although the American Cancer Society publishes breast cancer statistics, these statistics largely pertain to European and African American women. According to the Susan G. Komen Breast Cancer Foundation, every ethnic group is at risk for developing breast cancer, yet certain groups tend to develop breast cancer more often than others. According to the Komen Foundation, possible differences in specific risk factors are due to: differences in the biology of the breast, differences in breast cancer screening rates, lack of awareness concerning mammogram screening, cost of insurance, and lack of access to screening facilities. The Susan G. Komen Foundation also recommends monthly breast examinations beginning for women at age 20. Women who have a history of breast cancer in their family should start screening earlier and have screenings performed more often than women without a breast cancer history in their family. Lastly, clinical breast exams should be obtained every three years for women beginning at age 40 regardless of age, ethnicity, and income.

METHOD

Participants

- Sample Size 145 female college students
- Age (M =28.09) (SD = 9.63)

Participants' Ethnicity

- African American ~ 26.9%
- Asian American/PI ~ 4.8%
- Biracial ~ 3.4%
- European American ~ 30.3%
- Hispanic/Latina ~ 29.7%
- Other ~ 4.8%

Health Practices

- 22% received a mammogram
- 70% practiced a self-breast examination within the last year
- 78% knew how to perform a self-breast examination

RESULTS

Hypothesis One

The first hypothesis proposed that European American were more likely to report higher rates of mammograms compared to Latina/Hispanic and African American women. A Pearson Chi-Square did not support this hypothesis ($X^2(5, N = 145) = 0.261, p > .05$). European American (31.8%), Latina/Hispanic (20.9 %), and African American (20.5 %) women reported relatively the same amount of mammograms. See Figure 1 below.

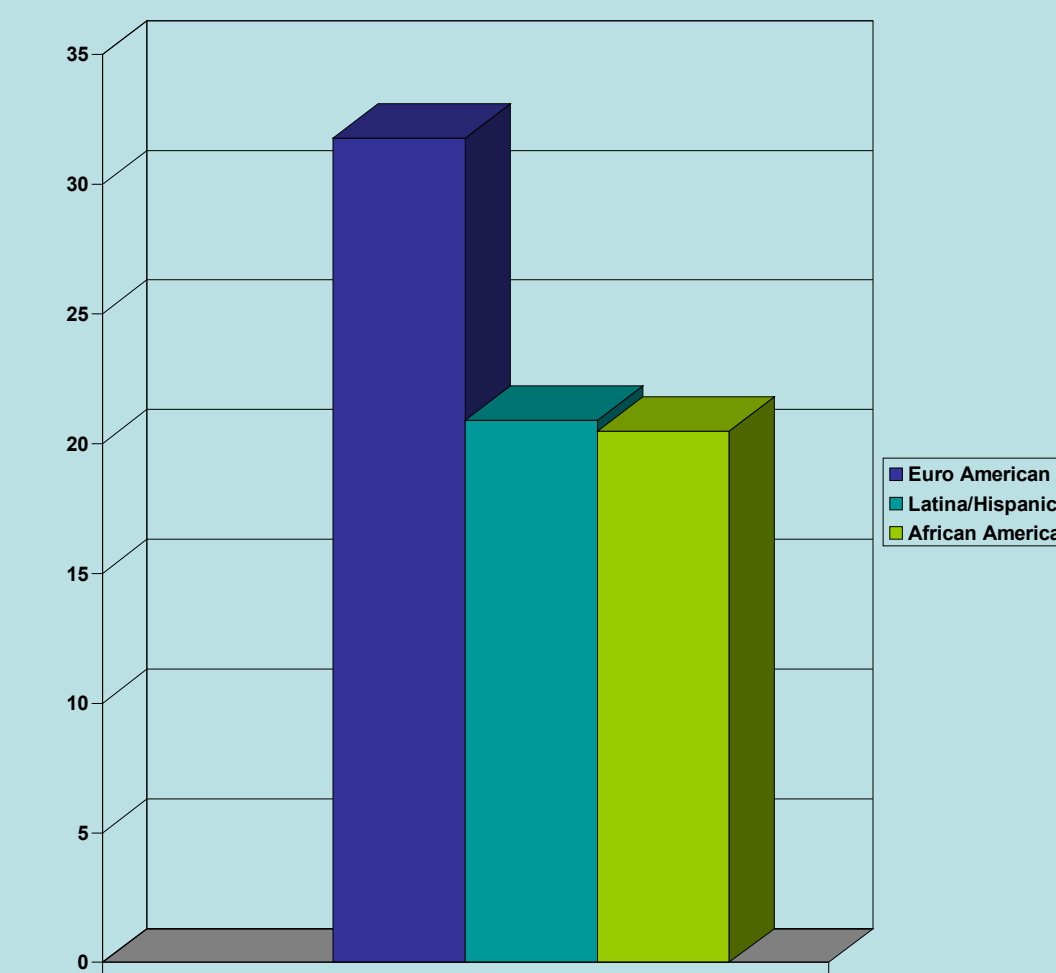


Figure 1: Mammogram Rates

Hypothesis Two

The second hypothesis proposed that European American women were more likely to perform self-breast examinations compared to other women. A one-way analysis of variance (ANOVA) revealed interesting findings ($F(5, 139) = 2.33, p < .05$). For example, European American women *did not* perform more self-breast exams (M = 2.70, SD = 1.70). Rather, African American women (M = 3.36, SD = 1.86) performed more self-breast exams, followed by Biracial (M =2.80, SD = 1.30), Latina/Hispanic (M = 2.49, SD =1.44), Asian American/PI, and Other (M = 1.71, SD = 1.66) women. See Figure 2.

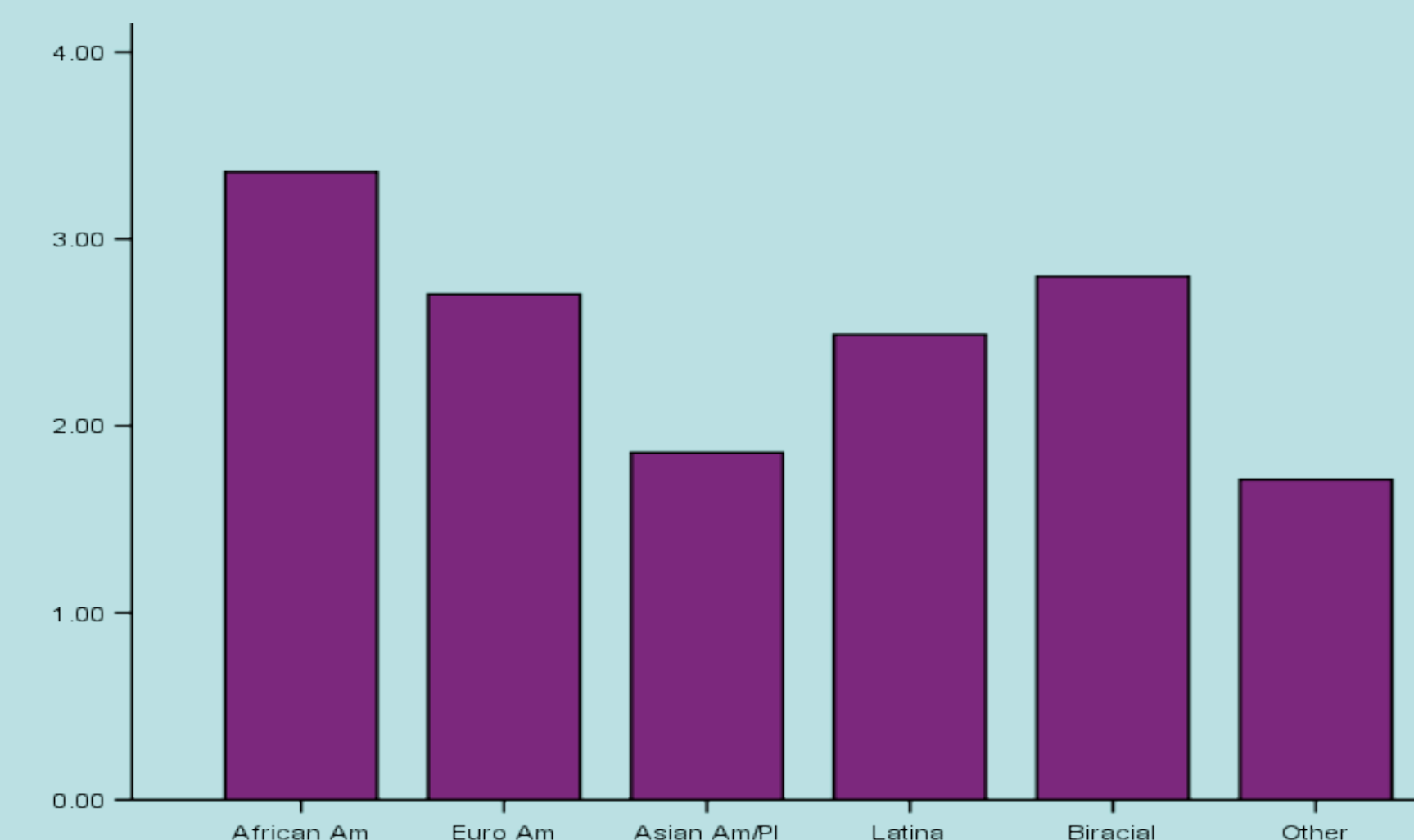


Figure 2: Breast Examination Means

Hypothesis Three

Hypothesis three proposed that non-traditional aged students were more likely report yearly mammograms compared to traditional aged students. A Pearson Chi-Square supported this hypothesis ($X^2(1, N=145) = 16.83, p < .05$). Non-traditional aged students (81.5%) were more likely to report yearly mammograms compared to traditional aged students (18.5%).

Exploratory Hypothesis Four

An exploratory hypothesis was conducted to determine if women with close friends previously diagnosed with breast cancer perceived themselves as more susceptible to breast cancer, compared to having close relative diagnosed with breast cancer. A factorial analysis of variance (ANOVA) revealed statistically significant findings ($F(3, 143) = 5.95, p < .01$). Women with close friends who were diagnosed with breast cancer (M = 16.67, SD = 5.09) felt more susceptible to developing breast cancer compared to having close relatives who have been diagnosed with breast cancer (M = 16.49, SD = 5.29).

Hypothesis Five

Hypothesis five proposed that women with lower incomes were less likely to perceive health motivation as a reason for performing a mammogram and self-breast examinations compared to women with higher incomes. A Pearson Product-Moment correlation supported this hypothesis. Income was significantly and positively correlated with health motivation ($r = .236, p < .01$). Women with lower incomes (M = 29, 825, SD = 36,073) did not perceive health motivations (M = 25.87, SD = 6.43) as reasons for performing a mammogram or self-breast examination.

DISCUSSION

Limitations

The current study was limited by the use of a non-randomized sampling procedure which limited our ability to generalize our findings to a larger population. The use of a relatively young sample and the scarcity of older women also limited our study. Lastly, the problematic nature of self-report measures may not accurately represent all research participants. Unfortunately, one's perceptions are not 100% accurate, thus skewing the accuracy and reliability of true results.

Future Research Recommendations

Future research should continue to examine college women's perceptions towards mammograms, self-breast examinations, and breast cancer. Many young females are unaware of the serious implications of breast cancer and the preventive measures to reduce their likelihood of developing breast cancer. Perhaps additional studies focusing on younger females may assist in changing their perceptions and behaviors towards breast cancer. Future advertisements and campaigns are needed to encourage younger women to take active approaches towards early breast cancer detection. In addition, research should examine how women were taught to perform self-breast examinations. It is unclear as to who teaches women how to perform self-breast examinations. Research should continue to focus on diverse women, representing diverse ethnic, linguistic, and socioeconomic realities. Researchers should examine why African American women perform more self-breast examinations compared to other women. Perhaps it is because past research has indicated that African American women are more likely to be diagnosed with breast cancer, which emphasizes the need for early detection among African American women.