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Recommended Citation

Barr, Madeline; Bissell, Blythe; Grafton, Kathryn; O'Neal, Kelly; and Heiden, Kathleen, "The Product Analysis of Women's Athletic Tops" (2019). *ANS Research Symposium*. 44.

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The Product Analysis of Women's Athletic Tops

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The purpose of this project was to determine how apparel construction affects the fit, performance, and cost of a garment.

To find the sizing, garments were measured at the waist, hip, bust, and arm length before laundering and after 10 launderings. The original and washed measurements were compared to each other as well as the standard sizing measurement to determine fit for each brand. To determine the construction of the garments, the type of seams used to construct each brand were evaluated based on the Federal Standards for seam type and stitching classes. To compare garment labels, aesthetic similarities between our four brands were compared, and they each had very similar characteristics. Differences in fiber content, country of origin, care requirements, fabric construction, and size, as well as differences in tag appearance based on color and print were also evaluated. The cost to manufacture each athletic top was determined based on the construction characteristics of the tops including materials, trimmings, labor, packaging, as well as duties and taxes.

When comparing size and fit between the four athletic tops, the Champion, BCG, and Under Armour brands all met their standard sizing charts, but the Avia brand did not. The Avia brand measured larger than its standard, but it shrunk by one inch after laundering, which made it meet its standard size. The Champion brand shrunk two inches. The basic construction of all four garments are very similar. The main costing difference between each garment is their country of origin.

Based on research, the Avia brand athletic top is the overall best brand out of the four analyzed. It had very little shrinkage, and it was the closest to meeting its standard size in bust, waist, hip, and sleeve length measurements. Laundering had very little effect on how the Avia top measured up to its standards. At the bust and waist, the shrinkage due to laundering actually helped meet the sizing standards. Avia also excelled in cost because it had the lowest selling price after all costs were calculated. Each of the brands performed very similar, but Avia's total cost is much less.