Development of Slopers for Women with Disproportionate Figures: A Case study for Swaziland

By

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Introduction

- Prevalent body types
- Definition of proportionate figure
- Definition of disproportionate figure
- Sizing system currently utilized in Swaziland.
- Theoretical background for the study.

Purpose

- Dissatisfaction of apparel currently sold in retail outlets for women with bottom heavy figures.
- To explore the development of new slopers for this cohort of women, with the view to propose a new sizing category or nomenclature for the sizing charts.

Objectives

- To develop basic blocks for disproportionately figured women.
- To compare the fit of test garments sewn from developed slopers and standard slopers for four sizes.
- To propose a sizing category nomenclature for this stratum of consumers.

Methodology

- Descriptive research design
- Sample of 30 purposively selected students were taken body m/m.
- Means in each size category were used to draft slopers, and to make test garments.
- A model in each size category fitted the test garments made from standard and non standard slopers.
- Fit evaluation was done using a 6-point rating scale.

Results

- Sloper development for disproportionate figures.
  - No disparity on bust measurements.
  - Difference of two sizes on waist m/m of std. and new slopers.
  - Difference of three sizes on hip m/m of std.and new slopers.

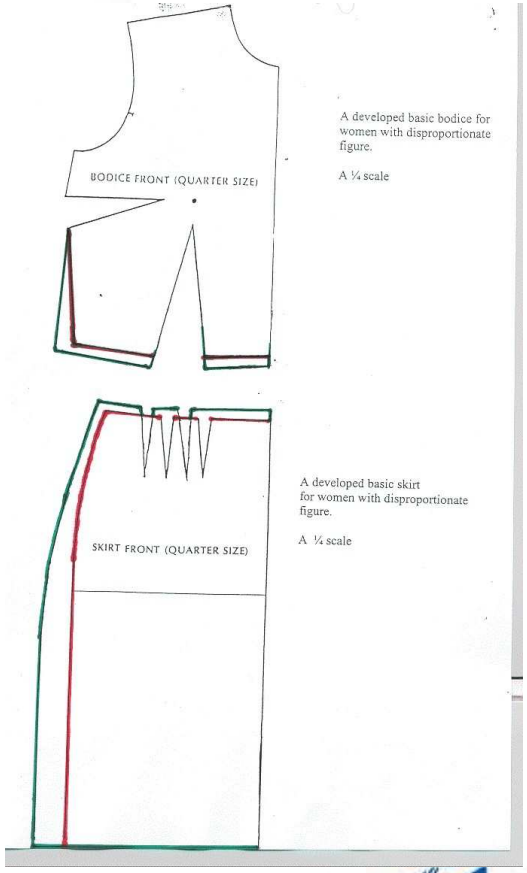


Table 1: Mean body m/m of bust, waist and hip for std. and developed slopers.

Size	34	36	38	40	42	44	46
Std. Bust m/m (cm)	84	88	92	97	102	107	112
New Bust m/m (cm)	84	88	92	97			
Std. Waist m/m (cm)	64	68	72	77	82	87	92
New Waist m/m (cm)	75	78	82.5	87			
Std. Hip m/m (cm)	89	93	97	102	107	112	117
New Hip m/m (cm)	102	107	112	117			

Fit Evaluation of skirts on test garments

- 90% rated the skirt made from new sloper as generally acceptable and 10% as unacceptable for sizes 34 & 38.
- 96.6% rated the skirt made from new sloper as generally acceptable and 3.4% as unacceptable for size 36.
- 86.6% rated the skirt made from new sloper as generally acceptable and 13.3% as generally unacceptable for size 40.
- 100% rated the skirts made from std. slopers as unacceptable.

Table 2: Percentage distribution on fit attributes of developed skirt test garments for sizes 34-40.

FIT Attributes	SIZE 34B		SIZE 36B		SIZE 38B		SIZE 40B	
	Gen. Accept.	**Not Gen. Accept.**	**Gen. Accept.**	**Not Gen. Accept.**	**Gen. Accept.**	**Not Gen. Accept.**	**Gen. Accept.**	**Not Gen. Accept.**
Ease	100	0	100	0	67	33	67	33
Balance	83	17	100	0	83	17	83	17
Set	100	0	100	0	100	0	83	17
Line	67	33	83	17	100	0	100	17
Grain	100	0	100	0	100	0	100	0
Total Ave	90%	10%	96.6%	3.4%	90%	10%	86.6%	16.8%

Fit Evaluation of bodices on test garments

- 86.8% rated the bodice made from the new sloper as generally acceptable and 73.6% rated the one made from std. sloper as unacceptable for size 34.
- 86.4% rated the bodice made from the new sloper as generally acceptable and 76.6% rated the one made from std. sloper as unacceptable for size 36.
- 96.6% rated the bodice made from the new sloper as generally acceptable and 86.4% rated the one made from std. sloper as unacceptable for size 38.
- 83.2% rated the bodice made from the new sloper as generally acceptable and 100% rated the one made from std. sloper as unacceptable for size 40.

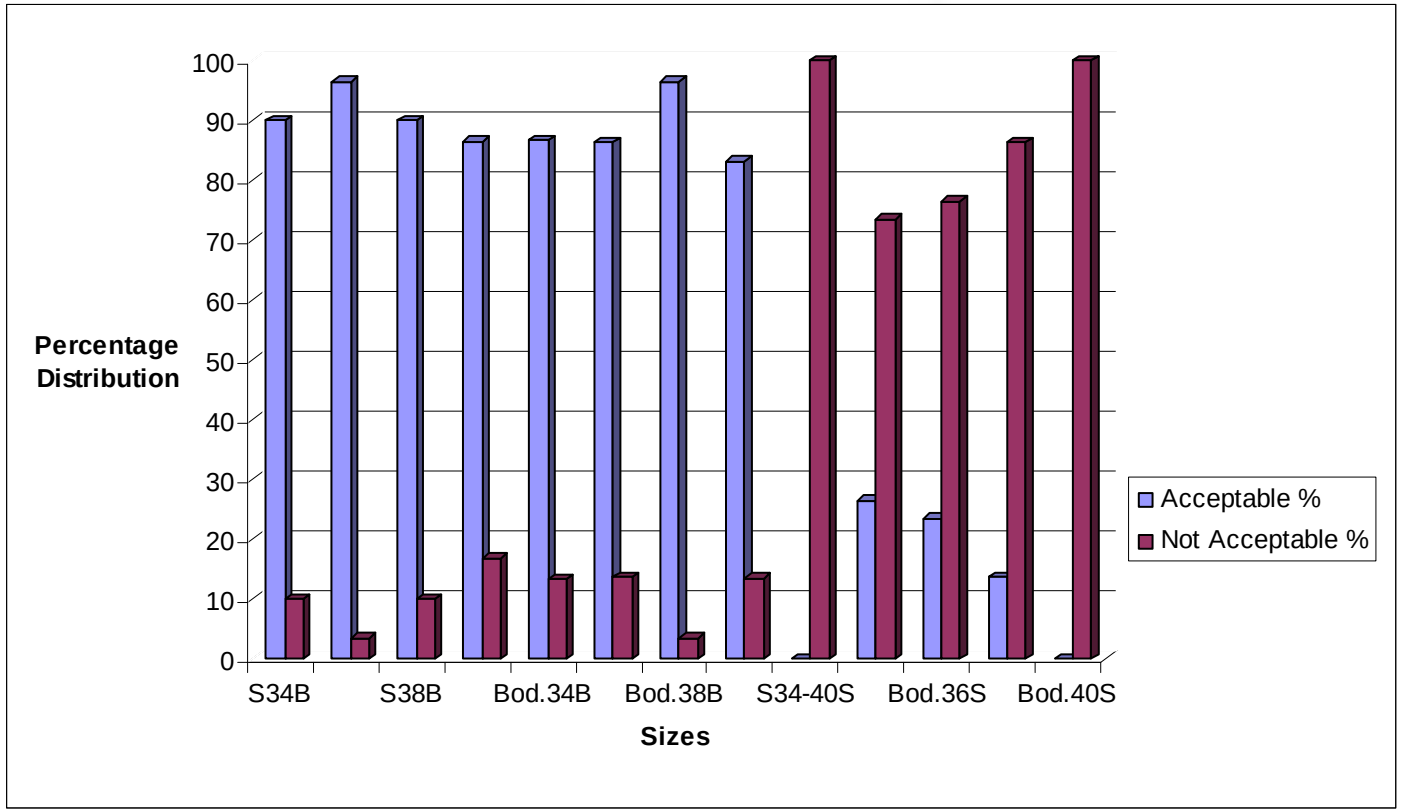
Table 3: Percentage distribution on fit attributes of developed bodice test garments for sizes 34-40.

FIT Attributes	SIZE 34B		SIZE 36B		SIZE 38B		SIZE 40B	
	Gen. Accept.	Not Gen. Accept.	Gen. Accept.	Not Gen. Accept.	Gen. Accept.	Not Gen. Accept.	Gen. Accept.	Not Gen. Accept.
Ease	100	0	83	17	83	17	83	17
Balance	67	33	83	17	100	0	67	33
Set	100	0	83	17	100	0	83	17
Line	67	33	83	17	100	0	100	0
Grain	100	0	100	0	100	0	83	17
Total Ave	86.8%	13.2%	86.4%	13.6%	96.6%	3.4%	83.2%	13.4%

Discussion

- All test garments made from new slopers were generally acceptable.
- Test garments made from standard slopers were unacceptable / dissatisfactory, particularly the skirts.
- Dissatisfaction associated with instrumental outcomes as opposed to expressive outcomes.
- Few studies conducted on disproportionate figures. Study by Desmarteau (2000).

Figure 1: Mean values of acceptability and non-acceptability of test garments



Conclusion

- Waist and hip measurements of new slopers varied considerably from std. slopers.
- Panelists generally accepted test garments made from new slopers, with minimal alterations.
- Strongly recommend a new sizing (B) nomenclature for the bottom heavy women.

Recommendations

- Replicate the study using a larger sample for generalisation of findings.
- Local designers or manufacturers to try out the developed slopers for bottom heavy figures.

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