Body cathexis and fit preferences of young South African women of different body shapes and ethnicity

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Abstract

Young African (109) and Caucasian (125) women of different body shapes self-reported their perceptions of an ideal figure, body cathexis and fit preferences through a questionnaire. The hourglass shape was perceived by all shapes as the ideal and was further confirmed by a chi-square test ($p > 0.05$), which showed no association between participants' body shapes and perceived ideal figure. All the shapes reported dissatisfaction with their mid and lower body parts. Close fit was preferred by most shapes, except Caucasian rectangle that preferred semi-fitted apparel at the abdomen. The results clearly pointed to the influence of body shape and ethnicity on the satisfaction with selected body parts. However, body shape did not seem to influence apparel fit preference. Apparel manufacturers need to better understand the interrelationship between body shapes, body cathexis and fit preferences to adapt manufacturing and marketing strategies to improve fit needs of their target markets.

Keywords: Body cathexis; fit preference; body shapes; ethnicity; African and Caucasian

1. Introduction

Body cathexis refers to the satisfaction with one's overall body; and it can either be negative or positive. Negative cathexis is dissatisfaction with one's body, and positive cathexis is the opposite (Secord & Jourard, 1953). Fan (2004) recorded a positive correlation between body cathexis and apparel fit satisfaction. Shin and Istook (2007) showed that female consumer populations have varied body sizes and shape characteristics which impact body cathexis. Fan (2004) further found that average-sized women are more satisfied with both their bodies and apparel fit than larger-bodied ones. The same study reported high correlations between cathexis, as well as waist, and hip circumferences. Furthermore, a larger-bodied woman with a positive attitude towards her body, has high self-esteem and confidence, and is likely to have a higher body cathexis than a slimmer woman who has a negative body cathexis, low self-esteem, and confidence (Manuel, Connell, & Presley, 2010).

Due to societal pressure, average-sized consumers compare their bodies to the ultra-thin ideal body, thus, becoming more dissatisfied with their bodies (Keiser & Garner, 2012). Women of different ethnicities have different body shape characteristics (Lee, Istook, Nam,

& Park, 2007; Makhanya, De Klerk, Adamski, & Mastamet-Mason, 2014), and may exhibit different cathexis levels. The latter may be attributed to them comparing their bodies to culturally ideal bodies (Boyington, Johnson, & Carter-Edwards, 2007). Alexander, Connell, and Presley (2005) found a negative correlation between age and body cathexis. Plutt (2011) further suggested that apparel consumers of different ethnicity are likely to have different ready-to-wear (RTW) apparel fit preferences. Rudd and Lennon (2000) revealed that women use apparel to manage their appearances, thus, improving their body cathexis.

RTW apparel manufacturers need to understand the relationship between body shapes, body cathexis, and apparel fit preference of the different body shapes prevalent within their target markets. When these relationships are taken into consideration during apparel designing and manufacturing, they may lead to the production of well-fitting apparel styles. These, in turn, may result in improved apparel fit; fit satisfaction; and subsequently, to consumer loyalty, repeat purchases, and increased revenue for both manufacturers and retailers. Currently, there are a few multi-cultural studies conducted in South Africa on the concepts investigated in this study. Although most of these phenomena have been studied in the USA (Fan, 2004; Robinson, 2003), they still need to be explored within a Southern African context. The data and findings of this study could, therefore, form a research base for the South African apparel manufacturing sector and contribute towards its sizing and fit theory; and the apparel fit satisfaction of the ethnically diverse consumer population.

The South African sizing system was adapted from an old British one (Strydom & De Klerk, 2006) which resulted in ill-fitting apparel (Makhanya et al., 2014). According to Ashdown (2007), an effective sizing system should base apparel designing and production on the different body shapes prevalent within a target population. Yet, the South African industry, like a majority of apparel industries worldwide, does not cater for figure shape variations (Strydom & De Klerk, 2006). Furthermore, Manuel et al. (2010) indicated that body shape influences body cathexis and apparel fit preference. Therefore, exploring the interrelationship between these factors may create consumer awareness, and be beneficial during apparel selection.

This study, therefore, investigated the association of body shape and perception of an ideal figure; body cathexis and fit preferences of young African and Caucasian women of different body shapes.

1.1. Hypothesis

The study tested the following hypotheses, at the 0.05 level of significance:

- H_0: There is no significant association between participants' body shapes and their perception of an ideal figure
- $H_{1:}$ There is a significant association between participants' body shapes and their perception of an ideal figure

2. Literature review

2.1. Body shape, body cathexis, and appearance management

Various methods have been used to classify women's figures over the years; the commonly used one being the ratios or relationships between specific parts of the human body. The bust to waist, bust to hip, and hip to waist measurement ratios (drop values) are regarded by many studies as key indicators of the different body shapes (Simmons, Istook, & Devarajan, 2004). Each of these shapes suggests an overall contour of the body and its proportions and patterns of weight distribution (Rasband & Liechty, 2006).

Makhanya et al. (2014) classified body shapes by assigning each with defining parameters using mean ± standard deviation within the maximum and minimum drop values of bust minus waist, and hip minus bust. The resulting defining parameters were as follows:

- Triangle: Mean to Maximum drop values i.e. 12.6 cm ≤ hip – bust ≤ 29.8 cm,
- Inverted triangle: Hip – bust < 0,
- Hourglass shape: Mean ≤ bust – waist ≤ Max i.e. 18 cm ≤ bust – waist ≤ 26.6 cm,
- Rectangular shape: Mean (18 cm) – 3 × SD (12.3 cm) < bust – waist < mean i.e. 5.6 cm < bust – waist < 18 cm and
- Apple shape: Minimum ≤ bust – waist ≤ Mean (18 cm) – 3 × SD (12.3) i.e. −3.7 cm ≤ bust – waist ≤ 5.6 cm

Body shape is one of the main determinants of a woman's perception of her physical attractiveness. Fan (2004) pointed out that consumers' dissatisfaction with fit, results from ill-fitting apparel, and may be attributed to body dissatisfaction. The same study confirmed that women are generally dissatisfied with their lower torso and, as a result, are less satisfied with apparel fit on the lower part of the body. Individuals with a larger lower torso, for example, hourglass, triangle, and oval/round/apple shapes (Rasband & Liechty, 2006), tend to compare themselves with the slimmer ideal body; resulting in negative body cathexis, and subsequently dissatisfaction with RTW apparel fit on their lower torso (Robinson, 2003). Furthermore, Chattaraman and Rudd (2006) showed that the upper body parts usually record higher body cathexis and fit satisfaction.

The different body shapes are characterised by the following: the triangle has a smaller upper body and larger lower body, the inverted triangle has a larger upper body and smaller lower body, and the hourglass has an average to fuller bust and hips and a very small waist. The rectangular body shape has an almost equal width from the shoulders to the hips and the apple body shape has fuller and round bust, waist and hip circumferences that are almost equal.

The study by Alexander et al. (2005) found that the inverted triangle was more satisfied with their smaller lower body than both the hourglass and triangle shapes, whose lower bodies were larger than an average figure. Furthermore, the hourglass shape was dissatisfied with their smaller waist, whilst the rectangular shape was dissatisfied with their larger waist. These findings, therefore, show a relationship between body shape and cathexis.

According to Fitzgibbon, Blackman, and Avellone (2000), it is evident that body cathexis is positively related to one's body size and shape, and to the culturally perceived ideal shape and size. Robinson (2003) recorded that, generally, very few women match the ideal body size and shape. Apparel designers and product developers, therefore, need to understand the different body shapes and body (part) cathexis of their target market, and the kind of fit required (Anderson et al., 2001), in order to produce apparel that meet consumer fit needs. Moreover, women are more satisfied with their clothed bodies than with their nude ones, and may therefore use clothing to improve their level of satisfaction (Fan, 2004; Grippo & Hill, 2008).

2.2. Body shape and apparel fit preference

Garment fit can be classified into the following categories: closely fitted, fitted, semi-fitted, loosely fitted, and very loosely fitted (Keiser & Garner, 2003). Consumer fit preferences vary from a desire for closely fitted apparel for body emphasis, to a desire for loose fit that gives comfort (Pisut & Connell, 2007). Fit is, therefore, a subjective concept as an individual's fit perception, personal preference, attitudes, and desired look influence one's fit preference (Alexander et al., 2005). Comfort and aesthetics are some of the factors that contribute to consumers' clothing and fit preference. Other factors include: current fashion trends, cultural influences, age, sex, body shape, lifestyle, and the fashion industry's perceptions of an ideal and fashionable figure. Changes in these elements may result in changes in personal fit preference too (Plutt, 2011).

Apparel fit satisfaction is the main attribute consumers consider when purchasing apparel products, even though women are often not satisfied with RTW apparel fit. Likewise, satisfaction or dissatisfaction with apparel fit results when consumers compare their apparel expectations to its performance (LaBat, Salusso, & Rhee, 2007). Failure to attain these fit expectations often results in consumer dissatisfaction with both their bodies as well as apparel fit (Robinson, 2003). Only a few individuals, in a target market, match the size and shape of a fashion figure. As a result, a substantial number of consumers are, then, dissatisfied with RTW apparel fit. However, consumers may use clothing to reduce the difference between an individual's perceived ideal figure and her actual body, in an effort to attain an aesthetically ideal figure (Robinson, 2003).

Makhanya et al. (2014) found different body shape characteristics among the predominant body shapes (triangle, hourglass and rectangle) among the young African and Caucasian women that participated in the current study. Individuals with different body sizes and shapes usually have different fit preferences (Alexander et al., 2005). From the same study, it was found that rectangular and hourglass shaped respondents preferred more fitted garments, whereas triangular shaped ones preferred loosely fitted garments especially on their lower torso. Keiser and Garner (2003) stated that fit preference is also influenced by age; as the same study revealed that younger fashion-conscious women in the USA preferred closely fitted apparel. In contrast, the mature, older women preferred loosely fitting apparel since their priority is apparel comfort over fashion image (Keiser & Garner, 2003). How people perceive their body size and shape influences their choice of clothing style, design, as well as the kind of apparel fit.

Plutt (2011) found that a relationship exists between body shape and both body part cathexis and apparel fit preference. Robinson (2003) also found that consumers may enhance their body image and self-esteem by selecting close-fitted apparel styles for body areas with high cathexis; and loose-fitted styles for body parts with low cathexis. Furthermore, certain apparel designs and styles may be used to alter appearance by creating an illusion of the desired size and shape of one's body and specific body parts.

Literature further suggests that women with higher body cathexis choose fitted clothing to accentuate their bodies; and those with lower body cathexis choose loose fitting apparel to conceal their bodies (Rudd & Lennon, 2000). Research conducted in the USA (Chattaraman, Simmons, & Ulrich, 2013; Manuel et al.,2010) studied the influence of body image and body cathexis on fit preference, and consumers' satisfaction with apparel fit. However, not much research on body cathexis and ready-to-wear (RTW) apparel fit preferences of different body shapes and ethnicities have been undertaken, especially in Africa.

3. Methodology

According to the scope and objectives of this study, a quantitative exploratory and descriptive research approach was utilised. The subjects were female apparel consumers of African and Caucasian ethnic origin, aged between 18 and 25 years (Generation-Y) who were enrolled at the University of Pretoria (UP) and Tshwane University of Technology (TUT) in Tshwane, a major city in South Africa. This choice was influenced by the fact that both African and Caucasian are the two main population groups in the Gauteng Province (Census, 2012) where this study was conducted.

3.1. Sampling

A total sample of 234 participants (109 African and 125 Caucasian women) aged 18-25years was obtained using the purposive and snowball sampling techniques. This sample size was guided by previous similar study conducted in the USA (Alexander et al., 2005). According to Keiser and Garner (2003), Generation-Y seeks fashionable apparel that is flattering to them. They purchase apparel for reasons including: being attractive and fashionable; showing off their physical attributes; satisfying their emotional needs; and to impress and be accepted by peers.

This study is utilising the same sample used by Makhanya et al. (2014), who classified the sample into three predominant body shapes as triangular, hourglass, and rectangular from the African and Caucasian groups. Since the focus of their study was to identify predominant body shapes, it disregarded the least common apple shape, f = 1(0.9%), leaving a sample of 233 (n_1 = 108 African and n_2 = 125 Caucasian). This was because the number of apple shaped participants was too small to allow for further multiple comparisons and statistical analysis testing relationships between the variables.

3.2. Data collection

The questionnaire that consisted of structured closed-ended questions was self-administered. To ensure reliability and validity, the questionnaire was pilot-tested on 25

African and 25 Caucasian women aged 18–25 years, and were reviewed by experts in the apparel field, respectively. After the review exercise, necessary modifications were made. The type of data collected included the consumer's ethnicity. Participants were also required to select a body shape they perceived to be ideal from body shape images provided in the questionnaire. Consumer's body part cathexis was measured using a 7-point body cathexis scale with 1- extremely dissatisfied, to 7- extremely satisfied. However, due to sparse data (cell count of < 5 expected frequency), the scale was condensed as follows: 1-extremely dissatisfied, 2-dissatisfied, and 3-slightly dissatisfied were merged into the dissatisfied category, 4-neither remained unmerged, and 5-slightly satisfied, 6-satisfied and 7-extremely satisfied were merged into the satisfied category. This resulted in three cathexis categories, namely: satisfied (5–7), neither (4) and dissatisfied (1–3). Participants had to indicate their RTW apparel fit preference on a 5-point nominal scale: 1- very loosely fitted to 5- very closely fitted. Again, due to the sparseness of data, the 5-point nominal scale was condensed to three points where, very closely fitted (5) and fitted (4) were merged into close fitted; semi-fitted (3) remained unchanged; and loosely fitted (2) and very loosely fitted (1) were merged into loose fit. The seven selected body parts were**:** bust, stomach, waist, abdomen, hips, buttocks, and thighs which are critical fit points.

3.3. Data analysis

Data obtained was analysed, compared and summarised, using descriptive statistics, that is, frequencies, means and percentages. The bivariate analysis was used for perception of an ideal figure by the different body shapes; furthermore, the chi-square test was used to determine an association between participants' body shape and their perception of an ideal shape.

4. Results and discussion

4.1. African and Caucasian body shapes' perception of an ideal figure

The results showed the following: triangle shape (56.3% African, 80.5% Caucasian); hourglass shape (53.3% African, 70.6% Caucasian); and rectangle shape (64.3% African, and 62.5% Caucasian) selected the hourglass shape as an ideal body shape (Table 1) and not their own figure shapes. These findings were further confirmed by the Chi-square test which was based on a null hypothesis H_0. There is no significant association between participants' body shapes and their perception of an ideal figure at significance level of 0.05. A *p*-value of 0.162 for African shapes and $p = 0.262$ for Caucasian body shapes indicate that in this study, participants' body shapes do not influence their perceptions of an ideal figure; hence, H_0 is accepted and H_1 is rejected.

Table 1. Cross tabulation between participants' body shapes and their perception of an ideal figure ($n = 233$) & chi-square test.

		Participants' perception of ideal shape					Chi-square
		Triangle f (%)	Inverted triangle f (%)	Hourglass f (%)	Rectangle f (%)	Total	*P*-value Asymp. Sig. (2-sided)
African body shapes	Rectangle	2 (14.3)	2 (14.3)	**9 (64.3)**	1 (7.1)	14	0.162
	Hourglass	11 (36.7)	3 (10.0)	**16 (53.3)**	0 (0.0)	30	
	Triangle	23 (35.9)	5 (7.8)	**36 (56.3)**	0 (0.0)	64	
Total		36 (33.3)	10 (9.3)	**61 (56.5)**	1 (0.9)	108	
Caucasian body shapes	Rectangle	1 (3.1)	8 (25.0)	**20 (62.5)**	3 (9.4)	32	0.262
	Hourglass	4 (7.8)	7 (13.7)	**36 (70.6)**	4 (7.8)	51	
	Triangle	4 (9.5)	3 (7.1)	**34 (81.0)**	1 (2.4)	42	
Total		9 (7.2)	18 (14.4)	**90 (72.0)**	8 (6.4)	125	

Highest frequency & % in bold. Minority shape (Apple f = 1) was excluded. Level of significance = 0.05.

These findings are according to Keiser and Garner (2003), that the Generation-Y consumers' apparel purchasing behaviour is influenced by their awareness of the fashion figure used by the apparel industry as a design base.

4.2. Body parts' cathexis of African and Caucasian body shapes

Table 2 shows findings on body cathexis. Since there were three cathexis categories, namely: satisfied, neither and dissatisfied, this study concentrated and reported on cathexis level that recorded ≥ 40% per body shape category (in bold), which was considered a majority.

Table 2. Body parts cathexis of predominant African and Caucasian body shapes ($n = 233$).

Body part		African triangle f = 64 *n* (%)	Caucasian triangle f = 42 *n* (%)	African hourglass f = 30 *n* (%)	Caucasian hourglass f = 51 *n* (%)	African rectangle f = 14 *n* (%)	Caucasian rectangle f = 32 *n* (%)	Total
Bust	Dissatisfied	10 (15.6)	8 (19.1)	4 (13.3)	6 (11.8)	2 (14.3)	7 (21.9)	37
	Neither	6 (9.4)	3 (7.1)	4 (13.3)	5 (9.8)	1 (7.1)	3 (9.4)	22
	Satisfied	**48 (75.0)[a]**	**31 (73.8)[a]**	**22 (73.3)[a]**	**40 (78.4)[a]**	**11 (78.6)[a]**	**22 (68.8)[a]**	174
Stomach	Dissatisfied	**29 (45.3)[b]**	15 (35.7)	9 (30.0)	**24 (47.1) [b]**	**8 (57.1)[b]**	**16 (50.0)[b]**	101
	Neither	3 (4.7)	2 (4.8)	4 (13.3)	3 (5.9)	0 (0.0)	2 (6.3)	14
	Satisfied	**32 (50.0)[a]**	**25 (59.5)[a]**	**17 (56.7)[a]**	**24 (47.1)[a]**	**6 (42.9)[a]**	**14 (43.8)[a]**	118
Waist	Dissatisfied	13 (20.3)	13 (31.0)	5 (16.7)	12 (23.5)	**6 (42.9)[b]**	11 (34.4)	60
	Neither	4 (6.3)	0 (0.0)	2 (6.7)	6 (11.8)	0 (0.0)	3 (9.38)	15
	Satisfied	**47 (73.4) [a]**	**29 (69.1)[a]**	**23 (76.7)[a]**	**33 (64.7)[a]**	**8 (57.1)[a]**	**18 (56.3)[a]**	158
Abdomen	Dissatisfied	24 (37.5)	16 (38.1)	7 (23.3)	**24 (47.1)[b]**	5 (35.7)	**18 (56.3)[b]**	94
	Neither	7 (10.9)	3 (7.1)	1 (3.3)	6 (11.8)	1 (7.14)	3 (9.4)	21
	Satisfied	**33 (51.7) [a]**	**23 (54.8)[a]**	**22 (73.3)[a]**	**21 (41.2)[a]**	**8 (57.1)[a]**	**11 (34.4)**	118
Hip	Dissatisfied	13 (20.3)	**19 (45.2) [b]**	3 (10.0)	**23 (45.1)[b]**	**6 (42.3)[b]**	**13 (40.6)[b]**	77
	Neither	2 (3.13)	3 (7.14)	2 (6.7)	3 (5.9)	0 (0.0)	3 (9.4)	13
	Satisfied	**49 (76.6)[a]**	**20 (47.6)[a]**	**25 (83.3)[a]**	**25 (49.0)[a]**	**8 (57.1)[a]**	**16 (50) [a]**	143
Buttocks	Dissatisfied	16 (25.0)	**21 (50.0)[a]**	3 (10.0)	17 (33.3)	**8 (57.1)[b]**	**13 (40.6)[b]**	78
	Neither	3 (4.7)	4 (9.42)	3 (10.0)	6 (11.7)	0 (0.0)	5 (15.6)	21
	Satisfied	**45 (70.3)[a]**	**17 (40.5)**	**24 (80)[a]**	**28 (54.9)[a]**	**6 (42.9)[a]**	**14 (43.8) [a]**	134
Thighs	Dissatisfied	26 (40.6)	**30 (71.4)[b]**	4 (13.3)	**28 (54.9)[b]**	4 (28.6)	**21 (65.6) [b]**	113
	Neither	6 (9.4)	0 (0.0)	4 (13.3)	10 (19.6)	0 (0.0)	3 (9.4)	23
	Satisfied	**32 (50.0)[a]**	12 (28.6)	**22 (73.3)[a]**	13 (25.5)	**10 (71.4)[a]**	8 (25)	97

Highest numbers [a] satisfied & dissatisfied [b] in bold. Minority shape (Apple f = 1) was excluded.

The Caucasian hourglass, generally viewed as ideal, was mostly satisfied with their body parts, namely: their bust (78.4%), waist (64.7%), hips (49.0%), and seat (54.9%). There were 47.1% Caucasian hourglass who were dissatisfied with their stomach and abdomen, and another 47.1% also expressed satisfaction with their stomach. A majority of them were also dissatisfied with other body parts like: the hips (45.1%), and thighs (54.9%). These findings confirm observations by Chattaraman and Rudd (2006) who noted participants' low cathexis on lower body parts. A majority, (> 70%) of the African hourglass was satisfied with all the selected body parts. The differences in body part cathexis reported by both the African and Caucasian hourglass confirm findings by Manuel et al. (2010) that ethnicity may influence participants' body parts' cathexis.

The Caucasian triangle, reported dissatisfaction only with the lower body parts: hips (45.2%), seat (50.1%), and thighs (71.4%). On the other hand, the African triangle group seem to be mostly satisfied with most of their body parts. There were only 45.3% who expressed dissatisfaction with the stomach; while another 50.0% were also satisfied with both their stomach and thighs.

The Caucasian rectangle was dissatisfied with most of the selected body parts. Specifically, 50% were dissatisfied with their stomach; 40.6% their hips and buttocks; 56.3% their abdomen; and 65.6% their thighs. A substantial number, though, expressed satisfaction with some of these body parts; for instance, 43.8% were satisfied with both their stomach and buttocks; and another 50% were also satisfied with their stomach. With regards to the African rectangle, 57.1% were dissatisfied with the stomach and buttocks; 42.9% with the waist; and 42.3% with the hips. On the contrary, another substantial number expressed satisfaction with the stomach and buttocks (42.9%); bust (78.6%); waist, abdomen and hips (57.1%); as well as thighs (71.4%). It is interesting to note that the African rectangle (71.4%) together with the African hourglass (73.3%), and the African triangle (50.0%) were the only shapes who were satisfied with their thighs. Furthermore, the African body shapes, that is, African triangle, hourglass, and rectangle were the most satisfied with all the selected body parts than their Caucasian counterparts. Caucasian body shapes reported satisfaction with fewer of the selected body parts, and dissatisfaction with most.

These findings confirmed what is suggested by Fitzgibbon et al. (2000), that ethnicity impacts on participants' level of satisfaction with body parts. This may be because African women do not relate to a body shape and size regarded as ideal by Caucasian women, and therefore, do not compare their body shapes to the ideal Western body shape. Women, in general, compare themselves to a culturally ideal body; and an ideal African body shape is curvaceous, and not as slim as the Caucasian (Western) ideal body (Boyington et al., 2007).

Webster and Tiggemann (2003) found that young women, in their early twenties, experienced lower body satisfaction when confronted with the thin Western ideal shape (Grippo & Hill, 2008; Keiser & Garner, 2012). In the present study, the hourglass shape was chosen by all six body shapes as the ideal one. Matched against previous research (Robinson, 2003), and the social comparison theory (Lin & Kulik, 2002), it could be argued that the hourglass shape is, therefore, the shape that the various African and Caucasian shapes in this study would have compared themselves with. Hence, all body shapes in the current study, except the African hourglass, reported dissatisfaction with some of the selected body parts.

4.3. Ready-to-wear apparel fit preferences of African and Caucasian body shapes

Findings of participants' apparel fit preference in Table 3 indicate that a majority of the predominant African and Caucasian body shapes expressed a preference for closely fitted apparel on most of the selected body parts. The Caucasian hourglass indicated dissatisfaction with their abdomen and thighs only; yet they showed a preference for a close fit on almost all the selected body parts (bust, waist, hips, buttocks, and thighs), except on the abdomen.

Table 3. Frequency table of fit preferences of predominant African and Caucasian body shapes ($n = 233$).

Body part	Fit preference	African triangle	Caucasian triangle	African hourglass	Caucasian hourglass	African rectangle	Caucasian rectangle	Total count f (%)
Bust	Close fit	**49 (76.6)**	**28 (66.7)**	**20 (66.7)**	**36 (70.6)**	**12 (85.7)**	**19 (59.4)**	164 (70.4)
	Semi-fitted	12 (18.8)	13 (30.9)	8 (26.7)	12 (25.5)	2 (14.3)	13 (40.6)	60 (25.8)
	Loose fit	3 (4.7)	1 (2.4)	2 (6.7)	3 (5.9)	0 (0.0)	0 (0.0)	9 (3.9)
Stomach	Close fit	**34 (53.1)**	**18 (42.9)**	**17 (56.7)**	**17 (33.3** [1]	**6 (42.9)**	9 (28.1)	101 (43.3)
	Semi-fitted	15 (23.4)	16 (38.1)	11 (36.7)	18 (35.3)	4 (28.6)	14 (35.3)	78 (33.5)
	Loose fit	15 (23.4)	8 (19.1)	2 (6.7)	16 (31.4)	4 (28.6)	9 (28.1)	54 (23.2)
Waist	Close fit	**45 (70.3)**	**23** [a] **(54.8)**	**27 (90.0)**	**28 (54.9)**	**9 (64.3)**	**16 (50.0)**	148 (65.5)
	Semi-fitted	16 (25)	14 (33.3)	3 (10.0)	11 (21.6)	3 (21.4)	13 (40.6)	60 (25.8)
	Loose fit	3 (4.7)	5 (11.9)	0 (0.0)	12 (23.5)	2 (14.3)	3 (9.4)	25 (10.7)
Abdomen	Close fit	**38 (59.4)**	**19 (45.2)**	**16 (53.3)**	17 (33.3)	**7 (59.0)**	6 (18.8)	103 (44.2)
	Semi-fitted	13 (20.3)	13 (39.2)	11 (36.7)	20 (39.2)	5 (35.7)	**15 (46.9)**	77 (33.0)
	Loose fit	13 (20.3)	10 (23.8)	3 (10.0)	14 (27.5)	2 (14.3)	11 (34.4)	53 (22.7)
Hips	Close fit	**44 (68.8)**	**21 (50.0)**	**25 (83.3)**	**30 (58.8)**	**11 (78.6)**	**20 (62.5)**	151 (64.8)
	Semi-fitted	16 (25.0)	16 (38.1)	5 (16.7)	5 (16.7)	2 (14.3)	7 (21.9)	59 (38.2)
	Loose fit	4 (6.23)	5 (11.9)	0 (0.0)	8 (15.7)	1 (7.1)	5 (11.9)	23 (9.9)
Buttocks	Close fit	**46 (71.9)**	**22 (52.4)**	**27(90.0)**	**42 (82.4)**	**10 (71.4)**	**19 (59.4)**	166 (71.2)
	Semi-fitted	9 (14.1)	14 (33.3)	2 (6.7)	6 (11.8)	1 (7.1)	11 (34.4)	43 (18.5)
	Loose fit	9 (14.1)	6 (14.3)	1 (3.3)	3 (5.9)	3 (21.4)	2 (6.3)	24 (10.3)
Thighs	Close fit	**42 (65.6)**	**19 (45.2)**	**27 (90.0)**	**31 (60.8)**	**11 (78.6)**	12 (37.5)	142 (60.9)
	Semi-fitted	12 (14.9)	10 (23.8)	2 (6.7)	13 (25.5)	2 (14.3)	13 (14.3)	52 (22.3)
	Loose fit	10.7 (15.6)	13 (31.0)	1 (3.3)	7 (13.7)	1 (7.1)	7 (21.9)	39 (16.7)
Total		64	42	30	51	14	32	233

Highest frequency & % in bold. Minority shape excluded (Apple f = 1).

The Caucasian triangle indicated a preference for a close fit on the selected body parts; yet they expressed dissatisfaction with their hips, buttocks, and thighs; whilst the Caucasian rectangle expressed a preference for closely fitted apparel on the buttocks (59.4%), and hips (62.5%). However, it should be noted that another 59.4% of the same group preferred a close fit at the bust. They also reported a preference for semi-fitted apparel on the abdomen (46.9%) too, as expected, since they expressed dissatisfaction at the same.

The African body shapes preferred a close fit on all the selected body parts, despite being dissatisfied with some of these body parts. The close fit preference by the African hourglass shape could be attributed to the over 70% who expressed being satisfied with all the selected body parts. The African rectangle preferred closely fitted apparel for all the selected body parts; yet they were dissatisfied with their buttocks and were, therefore, expected to at least indicate a preference for semi or loosely fitted apparel on these body parts, as expected by Plutt (2011).

These findings are contrary to literature which suggests a positive correlation between body cathexis and apparel fit preference; where closely fitted apparel is used to accentuate body parts with higher cathexis, and loosely fitted apparel camouflages body parts with low cathexis (Rudd & Lennon, 2000). Since this study focused on younger women aged 18–25 years, it found that they preferred closely fitted apparel, despite expressing low cathexis at the same. These findings confirm the fact that consumers' age would impact on apparel fit preference (Keiser & Garner, 2012).

5. Conclusion, implications, limitations and recommendations

In conclusion, this study found that one's body shape does not influence one's perception of an ideal figure. Those Generation-Y apparel consumers are aware of the standard figure used by the apparel industry despite being different from their own body shapes. Therefore, if apparel consumers are knowledgeable on what may be considered as the ideal figure, they may select apparel styles that will give them an illusion of an ideal figure; thus improving their clothed body cathexis and fit satisfaction. All the predominant African and

Caucasian body shapes (except the African hourglass) were dissatisfied with their mid and lower body parts. It is, therefore, concluded that, the Caucasian triangular shapes are dissatisfied with their larger lower bodies and both the African and Caucasian rectangular shapes are dissatisfied with their fuller mid-section and larger lower bodies. Even though this study did not statistically test the relationship between body shape, body part cathexis and ethnicity, due to sparse data emanating from the multiple comparisons of variables across the six predominant body shapes; it can still be concluded that body shape did not seem to influence the young African and Caucasian women's level of satisfaction with the selected body parts. This was evident as participants, despite having different body shapes, reported dissatisfaction with similar body parts.

Ethnicity seems to have influenced cathexis, since the African hourglass and triangular groups were more satisfied with all their selected body parts than similar shaped Caucasian women. Again, the sparse data could not allow for a statistical test on the relationship between fit preference and body shape. However, the present study found that all the predominant body shapes expressed preference for closely fitted apparel. It is concluded, therefore, that body shape and body cathexis of young African and Caucasian women did not seem to influence apparel fit preference as different body shapes expressed preference for closely fitted apparel on all the selected body parts, despite variations in body shape characteristics, and level of satisfaction with these body parts. These findings point towards other factors influencing apparel fit preference, such as age, which was not tested in this study as the focus was only on young women.

While it was expected that body shape influences one's body cathexis and fit preference, this study found that almost all the African and Caucasian body shapes reported being dissatisfied with their middle and lower body parts, and preferred closely fitted apparel on all the selected body parts, even those they were dissatisfied with. The younger Generation-Y consumers, in this study, reported higher body cathexis and preference for closely fitted apparel.

These findings, when taken into consideration, may benefit apparel designers, manufacturers, marketers, and retailers to better target this consumer segment in an effort to satisfy their apparel fit needs. This, in turn, may result in consumer loyalty and increased revenue for all apparel industry's stakeholders. This being one of very few multi-cultural studies to be conducted in South Africa, the data and findings form a base for further research on body cathexis, sizing, and fit theory nuance.

It is recommended that apparel manufacturers need to further investigate apparel fit preferences, body cathexis, and body shapes to better understand their interrelationship, especially, within the context of ethnically diverse consumer populations as prevalent in South Africa. A follow-up study that employs probability sampling techniques, across the geographically and ethnically diverse African population of different age groups, could be undertaken from a large sample size. That approach would allow statistical tests for conclusive findings on the relationships between the variables of interest in this study.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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