

FIT ASSESSMENT IN GARMENT CHOICES AND USAGE OF UNIVERSITIES' STUDENTS: PERCEIVED CONSEQUENCES FOR WELL BEING

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Abstract

The study assessed fit garment choices and usage of universities' students: perceived consequences for well being. Two research questions and a null hypothesis guided the study. Study area was Delta state and 34,142 students constitute the population from all the seven public universities in the state. Through multi-stage sampling, two universities each (federal and state) were randomly selected. Then proportionate sampling was used to select 335 subjects and 9 users model were purposively selected. Structured questionnaire was used to collect the data; mean, standard deviation and Analysis of Variance (ANOVA) were used for data analyses. Findings showed poor fit on students garment choices and usage viz; neckline sagging, shoulder not hanging smoothly, garment loose/sag at hip, above knee length, no ease in garment, usability and overall fit of garment when sitting, standing and in motion and these have negative consequences such as low self esteem, indecent appearance, lack of self confidence, sexual harassment among others on students well being. The small, medium, and large size-based students (users) did not significantly differ in their responses on 19 items on the fit requirements of the garments but, significantly differed on 17 items. Conclusively, well fitted garments enhance students' self esteem, body image, self confidence, comfort and daily activities. Therefore, orientation on dress sense will help ensure decent garment choices and usage among student in the universities in Nigeria.

Keywords: Fit assessment, garment choices, usage, university students, well being.

Introduction

Clothing is a crucial body effect to everyone; being close to our bodies they are selected and worn for various purposes and occasions. Clothes are comfortable when the garment fit is appropriate for the intended function and based on the wearer's choice. Clothing being an artifact that enhances person's appearance and confidence, elicits respect, communicates personality, protects dignity and provides protection and comfort. Besides the design and quality of the fabric used for the garment, fit is an important element in user's clothing appearance. Garment fit is determined by the body anatomy and contour interaction, silhouette, pattern construction as well as fashion trends. Garment may not attract the attention of the consumer if it does not fit well on the body.

Fit is often subjective as it depends on fashion, time, style, perception of user and industrial norms and values. Fit has to do with how the ability to be in the right size and shape. Garment fit is described as how the clothing conforms or is proportionate to the body shape. Garment fit refers to relationship between the garment size and contour to the body (Shan et al, 2013). It is the conformity of garment to the three dimensional human body contours. Well fitting garment conforms to the wearer's body, hangs smoothly and evenly, without fabric pulls or distortion, no body constriction, adequate ease and without strain. It should increase neat and smooth appearance while at the same time provides maximum comfort and mobility for the wearer. Such garment makes wearer adjusts naturally to

activities being done and at the same time feel comfortable. A well fitted garment has some amount of ease that allows seam lines move along with the shape of the body and adjust to the wearer's activities naturally with comfort (Latha, 2018). It can fit snugly on the user's body and neatly hangs and sets without any wrinkles, no sag, good proportions, no gaps, straight seam lines and appropriate ease for mobility. Garment fit is important to the wearer's body for consumer's satisfaction and appearance (Balakumar, 2014). Hems run parallel to the floor unless otherwise when there is a special style, the armholes and crotch of the garment do not constrict the body contour. The length and width of the garment parts should conform to the wearer's figure. Fit as a function of sizing is often neglected and it affects comfort, usage and durability of garment. Garment fit mainly includes two aspects: aesthetic fit and comfort fit resulting from fit elements (Liu, 2021).

Fit elements or standards determine the way a garment fits, these are important for good garment fit which include; grain of the fabric, set of the garment, construction lines, balance and ease (Lasinski, 2007;). These classical elements are parameters for fit evaluation in garments. The knowledge of these elements of good fit enhances consumer's choice of ready – to- wear clothes (Abiamuwe et al, 2018). Grain is the lengthwise and crosswise yarns woven together to create fabric. The lengthwise grain should fall perpendicular to the floor while the crosswise grain should be parallel to the floor. The construction lines should lie properly on the body in the right position; the shoulder seam sits on the shoulder; the side seam run down the side of the body of the wearer and remains perpendicular with the floor. Horizontal seam lines, such as a waistline are parallel to the floor. Set of the garment refers to the ideas that a well fitted garment should have no wrinkles when the wearer is standing still. Balanced is achieved when the garment is symmetrical and hangs away from the body identically on the right and left sides of the body. Ease has to do with the difference between the body measurement of the person and the corresponding measurement of the garment (Taverna, 2020; Technologgmt.com, 2021).

Fit in garments often can be difficult not only due to balancing of the factors, but due to the fact that people are all of different shapes and sizes. Sizing and fit are interrelated; garment producers must ensure balance and accommodate more individuals within a specific size category. A garment size fits well if the wearer is satisfied with the relationship between garment and their body shape. Very few people have exactly the same measurements that a manufacturer uses to determine the size of clothing; manufactures develop their own size charts; small, medium, large and extra large based on their experience and customer feedback. Since the 'body shape is three dimensional, the measurements obtained from it must be accurately taken and must be representative of the characteristics of the body shape that are critical to the garment fit' (Song & Ashdown, 2010; Azonuche, 2017). There are standard rules for obtaining body measurements and it facilitates a comprehensive measurement of all parts of the body important for fit. This must fit the three-dimensional body shape from which the measurements were taken. Sizes are determined and categorized by users' age, gender and silhouette. Clothing ought to fit the body so that the user can move, sit and perform work duties but poor fit pose challenges to comfort, mobility and self confidence.

However, it is often easier for consumers to find and choose clothing that one likes with right style, prices, colours, than well-fitted garments. When garment does not fit wearer well it affects and destroy the design, fabric and finished workmanship. Fit problems may be caused due to careless design, construction or may be the result of user's body characteristics which

differ from one person to another. Clothing tightness or looseness is an indication of the most visible manifestation of fit problem caused by size issues. Garment with a poor fit is caused by the curves of the body displacing the natural lining of the garment (Armstrong, 2014). This manifest in these conditions: sleeve out of alignment with the arm and longer than wrist, garment too long or short, strain lines, bulges, wrinkles, tightness and gapping or looseness appearing in the garment (Ashdown 2010; Song & Ashdown 2013). The figure need not be perfectly symmetrical, though body proportions may be less than ideal, but the garment should align properly when fitted. eVidya (2023) noted that in assessing fit of the garment, all the sides of the garment must be examined and the fitting should start from the top downwards of garment. Furthermore, some guidelines for garment fit were pointed viz: garment conform to the contour of the figure, enough ease for comfort of the wearer (not too tight), shoulder seams should fit smoothly, no sagging, seams must sit properly, darts must point to the fullest parts of the body, stitches sit correctly on the body without gapping or pulling, armhole fit properly round the arm without gapping or being too tight, sleeves should hang properly, among others (eVidya, 2023). Furthermore, students' garments should fit well; not too tight or loose, shoulders hang smoothly, armholes not too tight or loose, neckline and waistline not sagging, Collars should be well positioned and on the neck, hip not tight, below or knee length and ease in different postures of sitting, standing and in motion.

Garments are worn for various reasons and affect wearer's personal behavior and personality which reflect different clothing choices (Arora & Aggarwal, 2018). Clothing choice is the act of making decision of selecting desired clothing articles as appropriate and ideal among other alternatives. Choice of clothing affects mood, behavior, self confidence and the reasons for use (Jill, 2016). Some consumers make clothing choices based on comfort and practicality (Oladele & Ogundipe, 2016). Individuals wear clothes for different reasons as warmth, protection, modesty and beauty. But nowadays, emphases on clothing choice and usage have moved from its original purpose to attention seeking, sexuality and fashion resulting in indecent dressing (Ohaka et al, 2018). Most young people have dropped the cultural traditional clothing styles, prefer and use western dress styles in the name of fashion, some of which allow display of the body with poor fit. Mofoluwawo and Oyelade (2012) noted the increase on indecent dressing in Nigeria today because people dress to belong and meet trendy fashion even when they are half – naked. They further stressed that tertiary institution students choose and wear indecent clothing out of ignorance, peer pressure and for seduction.

The mission of Nigerian universities as citadels of higher learning is to promote both knowledge and character in students, which is vital for human capital development and employee productivity (Mbuba, 2022a). However, public universities are struggling with a wave of indecent dressing that is threatening the values of society (Obilo & Okugo, 2015; Yohanna, et al, 2020). This issue highlights the conflict between individual expression and institutional standards, as well as the broader challenges of public conduct in Nigeria (Mbuba, 2016a; Mbuba, 2018). Effective public sector reforms as noted by Mbuba, (2016b) require a foundation of strong values and a commitment to codes of conduct that university students, as future leaders, must embody. Students in the universities engage in various activities both in school and at home; such as sit to take lectures, carry out practical classes and assignments from lecturers, write notes, walk around, take shuttle buses from one point to another in the campus, while at home undertake some chores.

These students appear in clothes that are too tight, skimpy, show boobs; armscyes and crotch constrict the body, snagging or low waist trousers that show their underwear with the slogan “dress to kill”. They open and drag feet on the ground and are sluggish while walking, expose their laps, pulling down short wear while sitting, standing and in motion. Such behavior is very embarrassing, while these garments lack satisfactory fit and comfort. These dressing patterns are contrary to the academic upbringing and training. Consequently, these are morally offensive and unacceptable, show the high rate of societal decadence; often times subject them to sexual harassment and distraction from academic activities (Yohanna et al, 2020; Loureiro et al, 2017). The current choice of garment styles of tertiary institutions’ students in Nigeria expresses near or total shift and abandonment from fit and modesty consideration, this informed this study. They choose and purchase some of these garments online which are custom-made without checking fit or real try-on and this constitutes bottleneck on how to evaluate the garment fit and sizes before buying.

Previous studies evaluated garment fit for fashion design and manufacturing, fitting problem on ready- to- wear garments, fit satisfaction and fit preferences on male consumers (Liu et al, 2021; Abiamuwe et al 2018; Bizaneh et al, 2023). Others researchers examined fashion and clothing choices and preferences, indecent dressing and dressing patterns of students in tertiary institutions (Ohaka et al, 2018; Arora & Aggarwal, 2018; Yohanna et al, 2020; Obeta & Uwah, 2015). But to the researcher’s knowledge study on fit assessment of universities students’ garments has not been done. Hence there is the need for the Fit assessment in garment choices and usage of universities’ students: Perceived consequences for well being. The findings of the study will educate students on the effect of their garment choices and help them to dress decently at all times, use garments that camouflage their figure and give proper fit. Specifically, the study assessed fit in garment choices and usage of universities’ students when standing, sitting, in motion and perceived consequences on well being

Research Questions

The study was guided by these research questions

1. What are the mean ratings of the students’ assessment on the appropriateness of garment based on fit when standing, sitting and in motion?
2. What are the perceived consequences of garment?

Hypotheses

1. There is no significant difference in the mean ratings of small, medium, and large size-based students on the fit requirements of garment choices and usage.
2. There is no significant difference in the mean ratings of male and female students on the perceived consequences of garment fit choices and usage on students’ well being.

Methods and Materials

Design of the Study

The study area was Delta State, located at Southern, Nigeria. Expo facto design was adopted using descriptive survey research method. This was chosen as its result would be used to generalize the entire population from the representative sample.

The study’s population was 34,142 students from all the seven public universities (federal and state) operating in Delta State; Federal University of Petroleum Resources, Effurun; Nigerian Maritime University, Okerenkoko; Admiralty University, Ibusa; Delta State University Abraka;

University of Delta, Agbor; Dennis Osadebe University, Asaba; and Delta State University of Science and Technology, Ozoro. Sample size 335 selected through multistage sampling technique. Firstly, two federal and two state universities were randomly selected from the seven universities in Delta state. Secondly, through the faculties of the subjects, proportionate sampling method was used to select the subjects; 200 females and 135 males from 200-400 level students viz; Federal University of Petroleum Resources, Effurun= 50, Admiralty University, Ibusa= 35, Delta State University Abraka=200, Delta State University of Science and Technology, Ozoro=50. Thirdly, nine (9) student users of various sizes were purposively selected from the 335 respondents for fit assessment viz; 3 small, 3 medium and 3 large sizes that have stayed not less than one year in the universities.

Structured questionnaire was constructed in Google form titled "Fit Assessment in Garment Choices and Usage of Universities' Students: Perceived Consequences for Well Being (FAGCUUSPCWB) as the tool for gathering data. It has two parts; Part1 is for respondents' demographic information of the respondents. Part 2 has two sections; Section A has 37 items on a four-point rating scale of Excellent fit (EF) = 4, Good Fit (GF) = 3, Poor fit (PF) = 2, and No fit (NF) = 1, for fit assessment. Section B was for students perceived consequences with 18 items on four point rating of Strongly agree (SA) =4, Agree (A)=3. Disagree (D) =2 and Strongly disagree (SD)=1, which the respondents were expected to indicate their opinions.

The questionnaire was face validated by two lecturers of Clothing and textiles and a lecturer in measurement and evaluation, who carefully analyzed items to assess the extent the problems were expressed and represented to determine the validity of the research instrument. Based on their inputs, adjustments were made for the final version. Pilot study was done with twenty (20) students from University of Benin, Benin city, Edo State, not involved in the study, were given the instrument by test retest to determine the instrument's reliability. The opinions were analysed using the Cronbach alpha technique of reliability, and an internal consistency reliability coefficient obtained was 0.76.

The questionnaire in Google form was forwarded to 335 students' mail with the help of the four Universities' Information Technology (ICT) staff as research assistants. Questionnaire was responded to by the respondents and 330 copies were filled and reverted within four days

The data were analyzed with mean and standard deviation for the research questions. Strongly agreed for mean of 2.50 and above, strongly disagreed for 2.50 and below. Null hypothesis was tested using Analysis of Variance (ANOVA) to determine if there was significant difference among the 3 sizes (small, medium, large) of students at 0.05 level of significance. Data collected were analysed using Statistical Package of Social Science (SPSS) version 18.0

Results

1. **Research Question 1:** What are the mean ratings of the students' assessment on the appropriateness of garment based on fit when standing, sitting and in motion?

Table 1: Mean responses and standard deviation of ratings of the students (users) on the appropriateness of garment of various sizes based on fit.

N = 9

S/n	Clothing fit assessment questionnaire for fit testing of prototype.	\bar{X}	SD	Remarks
Sitting				
1	Neckline of garment not sagging when sitting	2.11	0.53	Poor Fit
2	Garment shoulder hanging smoothly when sitting	2.11	0.53	Poor Fit
3	Armholes of garment not tight when sitting	3.33	0.50	Good Fit
4	Bust/chest not tight when sitting	2.33	0.50	Poor Fit
5	Waist should be loose when sitting	2.33	0.50	Poor Fit
6	Garment hip should not be loose or sag when sitting	2.16	0.53	Poor Fit
7	Garment is tight fitting when sitting	2.24	0.53	Poor Fit
8	Garment is above knee length when sitting	2.26	0.53	Poor fit
9	Ease in garment when sitting	2.14	0.53	Poor Fit
10	Garment is safe when sitting	2.33	0.50	Poor Fit
11	Usability when sitting	2.10	0.60	Poor Fit
12	Overall fit of garment when sitting	1.13	0.33	Poor Fit
Standing				
13	Neckline of garment not sagging when standing	2.18	0.48	Poor Fit
14	Garment shoulder hanging smoothly when standing	2.39	0.66	Poor Fit
15	Armholes of garment not tight when standing	3.00	0.73	Good Fit
16	Bust/chest not tight when standing	2.09	0.77	Poor Fit
17	Waist should be loose when standing	2.19	0.63	Poor Fit
19	Garment hip should not be loose or sag when standing	2.08	0.69	Poor Fit
20	Garment is tight fitting when standing	2.29	0.56	Poor Fit
21	Garment is above knee length when standing	2.33	0.64	Poor Fit
22	Ease in garment when standing	2.04	0.72	Poor Fit
23	Garment is safe when standing	2.21	0.60	Poor Fit
24	Usability when standing	2.05	0.68	Poor Fit
25	Overall fit of garment when standing	2.20	0.79	Poor Fit
In motion (bending, twisting, lifting/raising)				
26	Neckline of garment not sagging when in motion	2.00	0.72	Poor Fit
27	Shoulder hanging smoothly when in motion	2.02	0.60	Poor Fit
28	Armholes of garment not tight when in motion	3.02	0.67	Good Fit
29	Bust/chest not tight when in motion	2.22	0.74	Poor Fit
30	Waist should be loose when in motion	2.22	0.64	Poor Fit
31	Garment hip should not be loose or sag when in motion	2.11	0.63	Poor Fit
32	Garment is tight fitting when in motion	2.22	0.46	Poor Fit
33	Garment is above knee length when in motion	2.33	0.50	Poor Fit

34	Ease in garment when in motion	2.22	0.49	Poor Fit
35	Garment is safe when in motion	2.33	0.50	Poor Fit
36	Usability when in motion	2.00	0.60	Poor Fit
37	Overall fit when in motion	2.04	0.74	Poor Fit

Table 13 showed mean rating and standard deviation on responses of students on the fit of the garment. The respondents assessed the fit requirement variables in different positions, results from the Table showed that items indicated poor fit of garment for sitting, standing and in motion with their means ranged from 1.13 to 2.33 for sitting; 2.05 to 2.39 for standing and 2.00 to 2.33 for various motions. But one item has mean of 3.33, 3.00 and 3.02 for good fit in different positions. This indicates that the garments has poor fit for neckline not sagging, shoulder hanging smoothly, bust/chest not tight, waist loose, garment loose/sag at hip, above knee length, ease in garment, safety, usability and overall fit of garment when sitting, standing and in motion. But armholes of garments were not tight fitting in these positions. The standard deviation of all the items ranges from 0.48 to 0.74. This implies that the respondents were close in their responses of students' garment fit requirements assessment.

Research Question 2: What are the students' perceived consequences of garment fit choices and usage on well being

Table 2: Mean responses and standard deviation of ratings of the students on perceived consequences of garment fit choices and usage on well being.

S/N	Perceived consequences for well being	X	SD	Remark
1.	Sending wrong message about the wearer	3.47	0.82	SA
2.	Lower self esteem	3.30	0.76	SA
3.	Looking indecent	3.31	0.74	SA
4.	Lack self-confidence	3.10	0.80	SA
5.	Sexual harassment	3.40	0.64	SA
6.	Rape/assault	3.02	0.76	SA
7.	Unwanted pregnancy	3.02	0.70	SA
8.	Distract learning activities	3.42	0.68	SA
9.	Affect academic achievement	3.20	0.72	SA
10.	Can cause growth curvature	2.64	0.82	SA
11.	Draw negative attentions	3.22	0.76	S
12.	Societal discrimination	2.52	0.69	SA
13.	Cultural neglect and shift	3.24	0.74	SA
14.	Offensive to some individuals	3.00	0.74	SA
15.	Cause embarrassment that can lead to physical attacks	3.02	0.86	SA
16.	Promoting unhealthy dressing habits	3.20	0.68	SA
17.	Encourages prostitution	3.10	0.78	SA
18.	Health implications, contacting infections and diseases	2.56	0.76	SA

X=mean, SD= standard deviation, S= strongly agreed

Result in table 2 showed that all items had mean ranged from 2.52 to 3.47 which means the items were strongly agreed as students' perceived consequences of garment fit choices and usage on well being. Indication is that garment fit choices and usage have negative consequences on the students' well being which include; sending wrong message about the

wearer, lower self esteem, looking indecent, lack self confidence, sexual harassment, rape, unwanted pregnancy, distract learning and affect academic achievement, can cause growth curvature, draw negative attention, societal discrimination, among others.

Hypothesis: There is no significant difference in the mean ratings of small, medium, and large size-based students on the fit requirements of garment choices and usage.

Table 3: Analysis of Variance (ANOVA) Analyses of the Responses of Small, Medium, and Large Sizes-based student users on Fit requirements of garment choice and usage.

s/ n	Fit Requirements of the Functional Clothing	SSb	SSw	MSb	MSw	Dfb	Dfw	F	Sig.	Decision
Sitting										
1	Neckline of garment not sagging when sitting	2.15	26.10	1.07	0.22	2	120	4.75	0.009	S
2	Shoulder hanging smoothly when sitting	3.14	23.94	1.55	0.20	2	120	7.57	0.001	S
3	Armholes of garment not tight when sitting	4.23	30.32	2.16	0.25	2	120	7.54	0.000	S
4	Bust/chest not tight when sitting	0.66	24.52	0.33	0.20	2	120	1.51	0.204	NS
5	Waist should be loose when sitting	0.37	29.30	0.19	0.24	2	120	0.76	0.469	NS
6	Garment hip should not be loose or sag when sitting	0.00	24.81	0.00	0.21	2	120	0.00	0.987	NS
7	Garment is tight fitting when sitting	0.11	23.07	0.05	0.19	2	119	0.28	0.758	NS
8	Garment is above knee length when sitting	1.27	27.24	0.64	0.23	2	118	2.75	0.068	NS
9	Ease in garment when sitting	1.45	31.00	0.83	0.26	2	120	3.20	0.042	S
10	Garment is safe when sitting	2.11	25.83	1.05	0.22	2	119	4.74	0.010	S
11	Usability when sitting	3.58	30.63	1.74	0.26	2	120	6.74	0.002	NS
12	Overall fit when sitting	3.02	27.20	1.51	0.23	2	120	6.71	0.002	NS
Standing										
13	Neckline of garment not sagging when standing	2.67	36.05	1.33	0.30	2	120	4.44	0.014	S
14	Shoulder hanging smoothly when standing	4.47	34.03	2.24	0.28	2	120	7.79	0.001	S
15	Armholes of garment not tight when standing	5.24	33.17	2.62	0.28	2	120	9.28	0.000	S
16	Bust/chest not tight when standing	1.94	31.81	0.97	0.27	2	116	3.53	0.034	S
17	Waist should be loose when standing	2.34	34.67	1.17	0.30	2	118	3.86	0.024	S
18	Garment hip should be loose when standing	1.17	34.19	0.59	0.30	2	115	1.97	0.144	NS

19	Garment is tight fitting when standing	1.20	39.62	0.60	0.34	2	115	1.74	0.180	NS
20	Garment is above knee length when standing	1.20	40.31	0.60	0.36	2	119	1.68	0.190	NS
21	Ease in garment when standing	2.72	38.11	1.36	0.33	2	119	4.04	0.018	S
22	Garment is safe when standing	1.61	36.73	0.80	0.31	2	119	2.59	0.069	NS
23	Usability when standing	0.62	36.42	0.31	0.32	2	120	0.97	0.383	NS
24	Overall fit when standing	0.13	34.28	0.07	0.29	2	118	0.23	0.899	NS
In motion (bending, twisting, lifting/raising)										
25	Neckline of garment not sagging when in motion	1.91	20.86	0.96	0.22	2	104	4.34	0.015	S
26	Shoulder hanging smoothly when in motion	0.36	30.52	0.18	0.30	2	103	0.60	0.561	NS
27	Armholes of garment not tight when in motion	2.10	36.41	1.05	0.36	2	102	2.95	0.057	NS
28	Bust/chest not tight when in motion	1.49	30.47	0.74	0.30	2	102	2.48	0.089	NS
29	Waist should be loose when in motion	0.66	29.80	0.33	0.31	2	96	1.08	0.344	NS
30	Garment hip should be loose when in motion	1.39	32.47	0.70	0.33	2	100	2.14	0.123	NS
31	Garment is tight fitting when in motion	1.79	32.07	0.90	0.32	2	100	2.79	0.066	NS
32	Garment is above knee length when in motion	4.13	22.11	2.06	0.24	2	97	8.46	0.000	S
33	Ease in garment when in motion	1.99	23.81	1.00	0.22	2	102	4.35	0.014	S
34	Garment is Safe when in motion	1.40	22.72	0.70	0.22	2	103	3.16	0.057	S
35	Usability when in motion	2.43	21.13	1.21	0.21	2	102	5.86	0.004	S
36	Overall fit when in motion	3.10	21.23	1.55	0.20	2	105	6.66	0.001	S

Key: NS = Not Significant, S = Significant, df = Degree of freedom, F = Calculated value of ANOVA using SPSS, SSb = Sum of Squares between groups, SSw = Sum of Squares within groups, MSb = Mean of Squares between groups, MSw = Mean of Squares within groups, n_1 = number of small size based users (3), n_2 = number of medium size based users (3), n_3 = number of large size based users (3), Level of Significance = 0.05.

The Table 3 result shows that for sitting the mean responses of small, medium, and large size-based students (users) on fit requirements significantly differ on 5 items (1, 2, 3, 9 and 10) Their probability values are 0.000 and 0.042, which are less than 0.05 level of significance ($P < 0.05$). Therefore, for the 5 items the null hypothesis of no significance difference at .05 level of significance was rejected. While the mean responses of small, medium, and large size-based students (users) on fit requirements did not significantly differ on 7 items (4 to 8, 11 and 12). Since their probability value ranges from 0.002 to 0.987 which are more than 0.05 level of

significance ($P > 0.05$). Therefore, for the 7 items the null hypothesis of no significance difference was accepted at 0.05 level of significance.

For standing the mean responses of small, medium, and large size-based students (users) on fit requirements significantly differ on 6 items (13, 14, 15, 16, 17, and 21). Since their probability values are 0.000 and 0.034, which are less than 0.05 level of significance ($P < 0.05$). Therefore, the null hypothesis of no significance difference at .05 level of significance was rejected for the 6 items. While the mean responses of small, medium, and large size-based students (users) on fit requirements did not significantly differ in on 6 items (18, 19, 20, 22, 23 and 24). Since their probability value ranges from 0.069 to 0.899 which are more than 0.05 level of significance ($P > 0.05$). Therefore, the null hypothesis of no significance difference for the items was accepted at 0.05 level of significance.

In motion the mean responses of small, medium, and large size-based students (users) on fit requirements there is a significantly differ on 6 items (25, 33 to 36). Since their probability values are 0.000 and 0.057, which are less than 0.05 level of significance ($P < 0.05$). Therefore, the null hypothesis of no significance difference at 0.05 level of significance was rejected on 6 items. While there was no significance difference in the mean responses of small, medium and large size-based students (users) on fit requirements on 6 items (26 to 31). Since their probability value ranges from 0.066 to 0.561 which are more than 0.05 level of significance ($P > 0.05$). Therefore, the null hypothesis of no significance difference was accepted at 0.05 level of significance on the 6 items. The implication of this is that small, medium, and large size-based students (users) did not significantly differ in their responses on 19 items on the on fit requirements of the garments but, significantly differed on 17 items.

Hypothesis 2: There is no significant difference in the mean ratings of male and female students on the perceived consequences of garment fit choices and usage on well being.

Table 4: t-test of the Responses of male and female students on perceived consequences of garment fit choices and usage on well being.

S/N	Perceived consequences for well being	X1	SD1	X2	SD2	t-val	Sig	Remark
1.	Sending wrong message about the wearer	2.46	0.72	2.87	0.82	-1.67	0.008	S
2.	Lower self esteem	2.30	0.76	2.48	0.99	-2.86	0.006	S
3.	Looking indecent	2.67	0.95	2.30	0.74	-1.316	0.189	NS
4.	Lack self-confidence	2.36	1.02	3.00	0.86	-2.293	0.004	S
5.	Sexual harassment	2.10	0.80	3.10	0.64	-2.640	0.000	S
6.	Rape/assault	2.96	0.78	3.20	0.76	-0.764	0.443	NS
7.	Unwanted pregnancy	2.38	0.79	3.07	0.72	-1.436	0.156	NS
8.	Distract leaning activities	2.76	0.96	3.22	0.68	-0.268	0.764	NS
9.	Affect academic achievement	2.86	0.76	3.42	0.72	-0.387	0.962	NS
10.	Can cause growth curvature	2.68	0.74	2.60	0.80	-1.562	0.276	NS
11.	Draw negative attentions	3.01	0.83	3.02	0.76	-1.542	0.089	NS
12.	Societal discrimination	2.78	0.93	2.54	0.79	-1.088	0.264	NS
13.	Cultural neglect and shift	2.72	0.86	3.40	0.74	-1.582	0.307	NS
15.	Offensive to some individuals	2.72	0.90	3.00	0.76	-0.470	0.643	NS
16.	Cause embarrassment that can lead to physical attacks	2.87	0.74	3.02	0.76	-0.524	0.601	NS
17.	Promoting unhealthy dressing habits	2.84	0.98	3.05	0.78	-0.482	0.360	NS
18.	Encourages prostitution	3.00	0.80	3.10	0.74	-0.429	0.664	NS
19.	Health implications, contacting infections and diseases	2.42	0.82	2.56	0.76	-0.520	0.600	NS

Key: X1=mean for males, x2=mean for females, df=degree of freedom (328), t-value=calculated value of t-test using SPSS, SD=standard deviation, n1= number of male students (140), n2= number of female students (190), Sig=level of significance 0.05, NS=not significant, S= significant.

Result in table 4 showed that there was significant difference in male and female students' perceived consequences on well being on 4 items (1, 2, 4, and 5). Since their probability values are 0.000 and 0.189, less than 0.05 level of significance ($P < 0.05$). Null hypothesis of no significance was rejected. While there was no significance in male and female students' perceived consequences on well being on 14 items (3 and 6 to 18). Since their probability value ranges from 0.089 to 0.664 which are more than 0.05 level of significance ($P > 0.05$). Therefore the null hypothesis of no significance difference was accepted at 0.05 level of significance on 6 items. The implication is that male and female students' did not significantly differ in their responses on 4 items on perceived consequences on well being, but, did not significantly differed on 14 items.

Discussion of findings

Finding showed that the garments has poor fit for neckline not sagging, shoulder hanging smoothly, bust/chest not tight, waist loose, garment loose/sag at hip, above knee length, ease in garment, safety, usability and overall fit of garment when sitting, standing and in motion. But armholes of garments were not tight fitting in these positions. This finding is in conformity with Abiamuwe et al (2018) who reported the fit problems of petite students in ready- to- wear garments to include; length too long or short, armholes, sleeves and waistline being too loose or tight, ease of hip, bust line /chest and shoulder width with poor fit problems. Finding further agreed with studies that reported dissatisfaction with fit of shirt necklines being too tight, short sleeve length and sleeve circumference (Chae, 2002, Sindicich, 2008). Anikweze (2013) attributed faulty fit to different figure types and misleading garment size labels in numerical codes which are often not related to individual specific body measurements (Faust &Carrier, 2010; Abiamuwe et al, 2018; Adilo, et al, 2024; Azonuche, et al, 2025). Good garment fit requires a balance between the garment and the body; the garment has to follow the body shape/silhouette and size properly (Ashdown & O'Connell 2006; Brown & Rice 2014; Song & Ashdown 2014). Supporting this view, Gribbin (2014) noted that garment fit has to do with shape; if the garment represents the three-dimensional body, the probability of good fit increases. Now, as more persons buy garments on line; there is no opportunity for real try – on to evaluate garment fit, customers or sellers only evaluate garment fit roughly on models or based on the previous experience (Song & Ashdown, 2013). “Another way to ensure good fit in purchased garment is the “custom-fit”, which offers ‘standard designs in a made-to-measure (mtm) fit, meaning that the measurements of the standard garment are modified in line with the customer’s measurements” (Hernández, 2018). Zakaria (2017) posited that in visual merchandising the use of manikins are important in presenting the garments in a relatable manner that customers perceive the looks on the body as displayed. Contrary to this idea, it is glaring that customers and users are ever dissatisfied with garments that do not fit well due to the method of purchase. Agbo (2011); Thompson (2010), found that the fit variables of the large, medium and small size categories of garments for the physically challenged and cosmetologist respectively were of good fit in various positions of sitting standing and in motions because garments were made-to-measure for the users, with wearing and design (style) ease, which accounted for the good and appropriate fit on the wearer. Well fitting garment is outstanding, ensures pleasant outlook and gives the wearer self confidence. Garment fit to the body has been the most important consideration for customers in making apparel purchasing decisions (Jevšnik et al, 2015). Sindicich (2008) report also ranked fit as the most important clothing evaluation criteria for individuals. It is perceived as “fit well” if the

wearer is satisfied with the fit of the garment. It is unwise for users to purchase or wear any garments that do not meet wearers' standard of fit. The wearer of a garment has the best judgment of the fit of any garment (Liu, 2018). ANOVA test of hypothesis showed the small, medium, and large size-based students (users) did not significantly differ in their responses on 19 items on the on fit requirements of the garments but, significantly differed on 17 items. This is not surprising, clothing fit assessment could be subjectively and objectively carried out. Normally, in a real environment, the clothing fit is evaluated subjectively on a real live model or dress forms (dummy) using several methodologies and standards for subjective evaluation of the clothing fit to the body" (Jevšnik et al, (2015) . Finding agreed with the opinion of Ashdown and Delonge (1995) that judgment of fit is partially a subjective decision as some people prefer loose fitting garment and others prefer tight fitting garment. Garment should fit the body of wearer but not tight fitting so that the person can move, sit and carry out necessary activities.

Finding showed that garment fit choices and usage have negative consequences on the students' well being which include; sending wrong message about the wearer, lower self esteem, looking indecent, lack self confidence, sexual harassment, rape, unwanted pregnancy, distract learning and affect academic achievement, can cause growth curvature, draw negative attention, societal discrimination, among others. This agreed with Obeta & Uwah (2015) who found sexual harassment, rape, exposure to venereal diseases and prostitution as effects of dressing patterns on students. These students seek attention, wear tight garments that predispose wearer to sexual harassment, assault, expose their body parts that have relationship with sexual activity to tempt some weak individuals (Lennon et al, 2014; Gray, 2016). Sarron et al (2017) pointed that tight fitting garments give impression of negative feeling to the wearers and admirers showing signs of irresponsibility (Omede, 2011). There is possibility of rape which can result in unwanted pregnancy, distract academic learning and performance because such students are always more concerned with fashion, what and how to dress than academics (Obeta & Uwah; 2015; Ranjan, 2016; Azonuche & Anyakoha, 2018). Masud, (2014); Liama (2015); posited that fashion preferences often have negative impact on individual's self esteem and personality. Students spend more time and money meant for academics for fashion garments and cosmetics that may be harmful to the body which consequently affect their health and well being negatively (Masud, 2014). Certain garments fit appearances are considered not decent and unacceptable in the society. Ohaka et al (2017) found that students appearance subject them to social discrimination leading to mutual exclusive social gaps and negative impact on their well being. Rape, sexual harassment can lead to contamination of infections and diseases, social discrimination have some psychological implications that can affect students' health and well being. These situations violate the third Sustainable Development Goals (SDGs) that is; to 'ensure healthy lives and promote well-being for all at all ages' (United Nations, 2023). The male and female students' did not significantly differ in their responses on 4 items on perceived consequences on well being, but, did not significantly differ on 14 items. Obeta & Uweh (2015) opined that some of the western garment styles adopted by these students as admirers of western values than theirs (Birhan, 2019), are seen as shift from the African culture and the foundation for indecent garment choice and fit, which is not well accepted in the society.

Conclusion

In garment choices and usage, fit is the most crucial issue that customers/consumers take care of very seriously. No matter how beautiful garments may appear, how costly the fabrics are, customers still may not want to buy the garments if they do not fit well. Garments that fit wearer very well enhance self esteem, body image, self confidence, comfort and activities. Garments are produced and sold in sizes, but buyers may not try-on the garments during purchase. Due to quest for fashion students just place order because is in vogue or other friends have them. Findings indicated poor fit of students garment choices and usage which have far reaching consequences of low self esteem, sexual harassment and assault, rape, unwanted pregnancy, learning distraction, poor achievement, social discrimination that impact students' well being.

Recommendations

Based on findings it was recommended that:

1. Seminars and workshops on 'dress sense' should be organized for the students on garment choices, preferences and usage for good fit.
2. The university management in collaboration with the Students union should ensure decent dress among the students.

References

- Abiamuwe, N. O., Seriki, M. J. S., Ajuluchi, C. E., & Adeniji, O. O. (2018). Fitting Problems in Ready – to- wear Garments among Petite Female Students: Case Study of Yaba College of Technology, Yaba, Lagos State. *Journal of Home Economics Research*. 25(1), 166-175.
- Agbo, D.A. (2011). Development of functional garments for physically challenged wheel and bedridden females in Benue State. Unpublished PhD Thesis, Dept. Of Vocational Teacher Education, University of Nigeria, Nsukka
- Armstrong, H. J. (2014). *Patternmaking for fashion design*. 5th international ed. Essex, UK: Pearson Education.
- Anikweze, G. U. (2013). Figure Types and Challenges of Making Garments in Nigeria. *Production Agriculture and Technology, Nasarawa State University Journal*. 9(1), 135-146.
- Arora, G & Aggarwal, J. (2018). Socio-psychological factors affecting clothing preferences: A review. *International Journal of Applied Home Science*. 5 (3). 690-706.
- Ashdown, S. P. & O'Connell, E. K. (2006). Comparison of test protocols for judging the fit of mature women's apparel. *Clothing and Textiles Research Journal*, 24(2), 137-146.
- Ashdown, S. P. (2014). Creation of ready-made clothing: the development and future of sizing systems. *Designing Apparel for Consumers*. Woodhead Publishing, pp. 17- 34. doi:<https://doi.org/10.1533/9781782422150.1.17>.
- Azonuche, J.E.(2017). Development of Functional Clothing for Caregivers in Day Care centres in Delta State, Nigeria. Ph.D Thesis, University of Nigeria, Nsukka
- Azonuche, J. E., & Anyakoha, E. U.(2018). Construction criteria for functional apparel for caregivers in daycare centres in Delta State. *Journal of Home Economics Research*, 25(1), 1-12.
- Azonuche, J. E., Adilo, O. A., Ichekor, O. & Afam-Osia, F. E. (2025). Achieving the exigency of pattern development among clothing and textiles students in tertiary institutions for garment production in South East, Nigeria

- Balakumar, R.S. (2014). *Basic Elements and Techniques of garment fitting*. <https://textilelearner.net. C:\User\USER\Desktop\Work for upload\Basic Elements and Techniques of Garment Fitting-Textile learner 5.html>.
- Birhan, W. (2019). A review of normative and other factors contributing to Africa's adolescent development crises. *Philosophical Papers and Reviews*, 9(1), 1-9.
- Bizuneh, B., Destaw, A. & Mamo, B. (2023). Analysis of garment fit satisfaction and fit preferences of Ethiopian male consumers. *Research Journal of Textile and Apparel*, 27(20), 228-245. <https://doi.org/10.1108/RJTA-08-2021-0102>.
- Brown, P. & Rice, P. (2010). *Ready-to-Wear Apparel Analysis*. 2nd Edition. New Jersey: Merrill- Prentice Hall.
- eVidya (2023). *Basic Pattern Development Garment Fit*. <C:\User\USER\Desktop\WorksforUpload\Basic-pattern-development-Garment fit eVidya.\html>
- Faust, M. E. & Carrier, S. T. (2010). Women's Wear Sizing: A new Labeling System. *Journal of Fashion Marketing and Management*, 14(1), 88-126.
- Gray, E. (2016, August 15). *Why Anita Hills 1991 testimony is so harming today*. Huffington Post. http://www.huffingtonpost.com/entry/anita-hill-matters-hbo confirmation_us_570fb8f9e4b0ffa5937e5e72
- Gribbin, E. A. (2014). Body shape and its influence on apparel size and consumer choices. In Faust, M.- E. & Carrier, S. (eds.) *Designing Apparel for Consumers*. Cambridge: Woodhead Publishing, 3-16. [doi:https://doi.org/10.1533/9781782422150.1.3](https://doi.org/10.1533/9781782422150.1.3)
- Hernández, N (2018). *Does it Really Fit: Improve, find and evaluate garment fit*. Sweden: Stema Specialtryck AB, Borås. <http://urn.kb.se/resolve?urn=urn:nbn:se:hb:diva-14321>
- Jevšnik, S., Kalaoğlu, F., Eryuruk, S. H., Bizjak, M., Stjepanović, Z. (2015). Evaluation of a Garment Fit Model Using AHP. *Fibres & Textiles in Eastern Europe* 2(110): 116-122.
- Jill, C.F. (2016, June 8). *How clothing choice affects and reflect self image*. <https://www.huffingtonpost.com>.
- Lasinski, B.B. (2007) when one size does not fit all. *National lymphedema network*. 19(2) <http://www.shop.hymphnet.org/product.sc?productid=354>.
- Latha, P. (2018). *Principles of Good Fit*. <slideplayer.com/slide/14208001>
<C:\user\USER\Desktop\works for upload\Principles of good fit, Good fitting A well-fitted garment feels comfortable, adjust naturally to the activities of the wearer.>
- Liam, L. (2015, June 20). *Negative impact of the fashion industry*. <http://www.fictionpress.Com>
- Liu, K., Zhu, C., Zeng, X., Tao, X., Bruniaux, P., Wang, J. (2021). Garment Fit Evaluation for Fashion Design and Manufacturing. *Research Square*. <https://doi.org/1021203/rs.3.rs-1088025/v1>.
- Lennon, S.J., Johnson, K. K, Noh, M., Zheng, Z., & Kim, Y. (2014). In search of common thread revisited: What content does fashion communicate? *International Journal of Fashion Design, Technology and Education*. 7(3), 170-178.
- Loureiro, S.M.C., Costa, L., Panchapakesan, P.A. (2017). Passion fashion. The impact of social influence, vanity and exhibitionism on consumer behavior. *International Journal of Retail Distribution Management*, 45, 468-484
- Masud, M.(2014, October 20). The cost of beauty-the harmful effect of make up on your skin. *The Express Tribune Magazine* p.18.
- Mbuba, F. (2022a). The Bravo of Human Capital Development and Employee Productivity in the Ministry of Information, Awka. *International Journal of Academic Information Systems Research (IJAISR)*. 5(2). 82-92

- Mbuba, F. (2018). Public Servants and Code of Conduct in Nigeria: A Study of Anambra State 2010-2015. *Journal of Social Sciences and Public Policy*, 10(3).
- Mbuba, F. (2016a). Organizational Conflict and Business Growth: An Appraisal. *Coou Journal of Public Administration*, 1(2).
- Mbuba, F. N. (2016b). Public sector reforms and sustainable development in Nigeria. a critique. *Policy*, 8(1), 50-60.
- Mofoluwawo, E. O., & Oyelade, T. (2012). Dress code: A panacea to indecent dressing and cultural breakdown in Nigeria tertiary institutions. *Nigeria Journal f Social Studies*. 15(2), 74-88.
- Obeta, A. & Uwah, B. (2015). Determinants of Dressing patterns of Female undergraduate students in Tertiary Institutions in Abia State Nigeria. *Rural Environment Education personality*. 15, 245-251.
- Obilo, U. & Okugo, S. (2013). *Outrage over indecent Dressing on Campus public Nigerian*. (online) (31.12.2013). <http://sunnewonline.com/new/?p=47593>.
- Ohaka, R,A, Lemchi, S.N & Ozor, P.E. (2018) Factors Influencing Fashion and Clothing choice of Undergraduates in Tertiary Institutions in Imo State, Nigeria. *Journal of Home Economics Research*. 25(1), 67-77.
- Ohaka, R. O., Lemchi, S. N., & Iloeje, C. I (2017). Consequences of fashion preferences on students perceived well-being in tertiary institutions in Imo State. *Nigeria Journal of Home Economics (NigJHEC)*. 6 (1), 212-219.
- Oladele, P. O & Ogundipe, C. F. (2016). Attributes of fashion clothing among female undergraduate students in tertiary institutions in South West Nigeria. *Issues in Business Management and Economics*. 4 (2). 18-23.
- Omede, J. (2011). Indecent dressing on campuses of higher institutions of learning in Nigeria: Implications for counseling. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(4), 228-233.
- Ranjan, V., (2016, June 5). *The Effect of Fashion on Teenagers in school*. <http://www.selfgrowth.com/articles/the-effect-of-fashion-on-teenagers>
- Sarron, J. L., Alyssa, D. A., Jayoung, K. & Kim, K. P. J. (2017). *Dress and Sex: A review of empirical research involving human participants*. <https://dio.org/10.1136/s40691-017-0101-5>.
- Shan, Y. & Haung, G. & Qian, X. (2013). Research Overview of Apparel Fit. *Clothing and Textiles Research Journal*, 161: 39-44. http://linkspringer.com>chapter_
- Sindicich, D.K. (2008). Internet and Needs in Men's Business Clothing: unpublished doctoral *Dissertation*. Florida State University. Tallahassee Florida.
- Song, H. K. & Ashdown, S. P. (2010). An exploratory study of the validity of visual fit assessment from three-dimensional scans. *Clothing & Textiles Research Journal*, 28(4), 263-278. doi:10.1177/0887302X10376411
- Song H. K, Ashdown S. P. (2013). Female Apparel Consumers' Understanding of Body Size and Shape: Relationship among Body Measurements, Fit Satisfaction, and Body Cathexis. *Cloth & Textiles Res J.*;31(3):143-56. doi:http://dx.doi.org/10.1177/0887302x13493127_
- Taverna, N. (2020, October 5). *The Philosophy of good fit*. primer_magazine.com/2012/learn/the-philosophy-of-a-good-fit.
- Thompson, D. (2010). Development of functional apparel for cosmetologists in Lagos, Nigeria. Unpublished Ph.D. *Thesis*. University of Nigeria, Nsukka.
- United Nations (2023). *Sustainable Development Goals (SDGs) Report*; Special Edition. Unstats. <un.org/sdgs/report/2023/>

- Yohanna, K., Sababa, L. K. & Filgona, J. (2020). Students' perception of indecent dressing in Adamawa State Citadel of Higher Learning Research Inventory. *International Journal of Engineering and Science*. 10 (10). 44-56.
- Zakaria, N. (2017). *Evaluation of fit and size: Manikins for Textile Evaluation*. Wood head publishing series in Textiles. 89-113. <https://doi.org/10.1016/B978-0-08-100909-3.00004-2>