

Sustainable clothing through knowledge and usage of care labels among higher educational institutions

Abstract

The study assessed the knowledge and usage of clothing label among tertiary institution students in Oyo State. Specifically, it examined the knowledge of respondents about clothing label and determined the level of its usage among the respondents. The study was carried out in Oyo Local Government Area of Oyo State. Tertiary institutions in Oyo town were purposely selected for the study. One hundred and forty students were selected in each school for interview through the use of a structured questionnaire. Data were summarised with the use of descriptive tools while the hypotheses were tested using Analysis of Variance (ANOVA).

Results show that 48.6 percent were male while 51.4 percent were female, majority (90%) was single, and were students of College of Education (66.2%) in 300 level (34.8%). Both the male (46.7%) and female students (49%) had average level of knowledge about clothing label while both the male (46.2%) and female (44.3%) also had average level of usage of clothing label. Results of ANOVA indicated non-significant differences between knowledge ($F = 0.005$) and usage ($F = 0.001$) of clothing labels among male and female respondents of tertiary institutions. Therefore, there is the need to educate the respondents on the importance of the use of clothing labels by the textile experts and manufacturers in order to avoid untimely damage of their clothing and reduced cost of frequent procurement as a result of careless use.

Keywords: fabri care, clothing labels, knowledge, students, usage

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Introduction

Basic needs of man are food, shelter and clothing. Clothing is one of the important resources available to households. Of utmost importance in the household is clothing because it protects the body from adverse effect of weather in addition to the purpose of adornment it serves. Taking adequate care of this singular household resource according to manufacturers' recommendation will prevent its frequent purchase as a result of wrong use, and premature damage to the clothing. Consequently, money conserved through proper use and adequate care will be available to fulfill other family goals. Such manufacturers' recommendation is provided on clothing care label.

A care label is a tag giving instructions on clothing products.¹ Clothing labels strives to provide excellent service to its clients and take care of them in a timely and professional fashion. It concerns the permanently attached labels as well as the temporarily attached labels known as hangtags that are found on clothing products; which provide a wide range of explanatory terms and directions to consumers.² These terms and directions inform consumers about the clothing products care, properties and origin. Clothing labels are not voluntarily placed on clothing products, but rather according to set legislation, regulations and requirements, designed to enforce consumers rights and to maintain a standard for clothing labeling.³ Clothing labels assist consumers when they are deciding whether or not to purchase clothing products, by providing product information and potential care instructions.⁴ In addition to the information on the clothing labels, adequate knowledge, positive perceptions and optional use of clothing labels may result in satisfied consumers who make responsible and informed purchases.³

Consumers' knowledge of clothing labels includes the meaning of the care symbols, the function of clothing labels, type of information on clothing labels and the application of the information on clothing

labels.⁵ Thus, knowledge in the context of this study implies correct interpretation of care signs or symbols on clothing labels. Also, research had established that consumers do make use of clothing labels in the information search phase, purchasing phase and post purchase phase, but the efficiency of clothing labels has not been established.⁶ Use of clothing label in this study means the appropriate use of the care symbols or signs by consumers during post purchase phase. According to Schiffman and Kanuk⁷ symbols are used to communicate information beyond language and culture barriers; and the ideal of symbols is to convey a message that the consumers understand as intended.

Niemann³ stressed that male and female consumers may understand, perceive and use clothing labels differently or similarly. In the past, Schiffman & Kanuk⁸ posited that hair colour and beauty products were mainly purchased by female consumers while equipment products were mainly purchased by male consumers. According to Schiffman & Kanuk,⁸ today's female consumers are increasingly purchasing equipment, whereas male consumers are increasingly purchasing beauty products, this indicates the change in the behaviour of male as well as female consumers. Niemann³ opined that the changing world brings about changes in male and female consumption behaviour, therefore continuous research is needed to understand the current behaviour of these consumers.

Most consumers of clothing and clothing products often times based their purchase decisions on attractive physical properties such as texture, colour, style and sometimes cost. Other important properties are quickly overlooked by not paying attention to the cleaning instructions provided on the clothing labels particularly at pre-purchase and post-purchase periods. This situation, consequently results to consumers obtaining no or minimum value and dissatisfaction from clothing products. Studies have been conducted on knowledge, perception, attitude and use of clothing labels.^{5,6,9} Research had

also been carried out on male and female consumers' knowledge, perceptions and use of clothing labels in South Africa³ as well as university students' perceptions of clothing labels as consumers of textiles.¹⁰ However, there is paucity of data in this area of research in Nigeria, hence this study.

Objectives of the study

The specific objectives are to:

- Investigate the level of knowledge of the respondents on the clothing labels; and
- Determine respondents' level of usage of the clothing labels.

Hypotheses of the study

Hypothesis 1: There is no significant difference between male and female level of knowledge of respondents

Hypothesis 2: There is no significant difference between male and female usage of clothing labels

Material and methods

The study was carried out in Oyo Local Government Area, Oyo State. The target population for the study is the students of tertiary institutions in Oyo town. These are Emmanuel Alayande College of Education, Federal College of Education (special) and Ajayi Crowder University. These institutions were purposely selected for the study. Two schools/faculties were randomly selected in each institution. Two departments were also sampled at random while convenience method was used to identify and interview respondents at different levels in each department. One hundred and forty students were interviewed in each school. A total number of four hundred and twenty respondents were interviewed for the study.

The data instrument used to elicit relevant information from the respondents was a structured questionnaire. Section A was designed to collect information on the socio-economic characteristics of the respondents. Section B consists of various signs of clothing care that appear on clothing labels which were interpreted accordingly. Respondents were asked to indicate whether agree, disagree or don't know the interpretations of various clothing care signs to determine their level of knowledge. Also, respondents were asked to indicate if they always, sometimes or never follow clothing care signs when caring for their clothing to determine their level of usage. Mean scores were calculated for level of knowledge and usage of clothing labels by male and female respondent. Collected data were collated and summarised using descriptive tools while hypotheses were tested with analysis of variance (ANOVA).

Results

Demographic characteristics of the respondents

Results of the analysed data indicate that 51 percent of the respondents were female while about 49 percent were male. A handful of male (32.4%) and female (34.8%) were between 19 and 23 years old. While some male (44.3%) and female (45.7%) were single. Also, 26.2 percent male and 33.3 percent female were Christians, 31.0 percent male and 35.7 percent female were students of College of Education. Few male (16.2%) and female (18.6%) were in 300 Level.

This implies that the respondents were students of College of Education, single, Christians and between 19 and 23 years old (Table 1).

Table 1 Distribution of respondents by demographic characteristics

Variables	Male		Female	
	F	%	F	%
Sex	204	48.6	216	51.4
Age				
14 – 18	31	7.4	46	10.9
19 – 23	136	32.4	146	34.8
24 and above	36	8.6	24	5.7
Marital status				
Single	186	44.3	192	45.7
Married	10	2.4	24	5.7
Divorced	8	1.9	-	-
Religion				
Christianity	110	26.2	140	33.3
Islam	90	21.4	72	17.1
Traditionalist	4	1	4	1
Institution				
University	74	17.6	66	15.7
College of Education	130	30.9	150	35.7
Level				
100	56	13.3	68	16.2
200	62	14.8	46	10.9
300	68	16.2	78	18.6
400	18	4.3	22	5.2
500	-	-	2	0.5

Frequency buying and care for clothes

Data in Table 2 show both male (19.5%) and female (17.1%) bought their clothes on monthly basis, 36.7 percent male and 47.6 percent female cared for their clothes through hand wash which was done by male (23.8%) and female (33.3%) after every wear. It implies that more male than female respondents bought clothes monthly and more female than male cared for it after every use through hand wash. This could be probably because of cultural background of the respondents where hand wash is the most available and accessible method of clothing care.

Table 2 Distribution of respondents by frequency of buying and care for clothes





















Variables	Male		Female	
	F	%	F	%
Frequency of buying clothes				
Weekly	34	8.1	34	8.1
Monthly	82	19.5	72	17.1
Quarterly	34	8.1	42	10
Seasonal	34	8.1	58	13.3
Twice a year	6	1.4	6	1.4
Once a year	14	3.3	4	1
Method of caring for clothes				
Hand wash	154	36.7	200	47.6
Dry cleaning	36	8.6	2	0.5
Machine wash	14	3.3	14	3.3
Frequency of caring for clothes				
After every wear	100	23.8	140	33.3
After second wear	72	17.1	60	14.3
After multiple wear	32	7.6	16	3.8

Knowledge on clothing label

Different care signs were presented to the respondents to determine if they interpreted the signs correctly. Results in Table 3 indicate that both male and female respondents had adequate knowledge of care signs through their correct interpretations in such areas as: use any bleach when needed, hand wash only, ironing is needed, iron using high temperature setting, iron using medium temperature setting, dry

clean, dry clean using any solvent and no steam iron where mean knowledge score is above 2. On the other hand, both male and female knowledge is low on correct interpretation of care signs such as do not wash and do not dry clean; mean score less than 2. In addition, knowledge of male (2.19) was higher on 'bleach with non-chlorine' than that of female (1.95); and male's knowledge (2.13) was higher on 'dry clean using any solvent except trichloroethylene' than that of female (1.98).

Table 3 Distribution of respondents by mean scores of their knowledge on clothing label

Signs	Interpretation	Male	Female
	Use any bleach when needed	2.48	2.47
	Drip dry-hang wet on plastic hanger and allow to dry with hand shaping	2.39	2.31
	Dry flat-lay garment on flat surface	2.31	2.33
	Dry in the shade	2.41	2.18
	Bleach with non-chlorine	2.19	1.95
	Do not bleach	2.03	2.18
	Do not wash	1.51	1.69
	Hand wash only	2.53	2.5
	Regular cycle with regular agitation and spin speed	2.28	2.3
	Ironing is needed	2.75	2.56
	Iron using high temperature setting	2.39	2.23
	Iron using medium temperature setting	2.55	2.55
	Iron using low temperature setting	1.98	2.17
	Do not iron or press with heat	1.97	2.14
	No steam-iron	2.19	2.27
	Dryclean	2.39	2.49
	Dryclean using any solvent	2.07	2.1
	Dryclean using any solvent except trichloroethylene	2.13	1.98
	Dryclean using petroleum solvent only	2.03	2.03
	Do not dry clean	1.71	1.94
Grand mean		44.31	44.27





















Whereas, female's knowledge (2.17) was higher on 'iron using low temperature setting' than that of male (1.98); and female's knowledge (2.14) was higher on 'do not iron or press with heat' than that of male (1.97). The grand mean knowledge scores of both male (44.31) and female (44.27) were almost equal. This finding implies that male and female students of tertiary institutions in the study area had equal knowledge on the interpretations of signs of clothing care. Hand wash and ironing care symbols were correctly interpreted by male and female. This is in agreement with Niemann & Nothling, (2008) that the percentages knowledge of the ironing symbol and the hand wash symbol was ranked the highest. This result could be because washing of clothes with the use of hand as well as ironing clothes before use is a normal phenomenon among male and female students.

Usage of clothing label

Considering the mean scores of usage of clothing label in Table 4, it shows that both the male and female respondents followed care signs of 'hand wash only'; 'ironing is needed' and 'iron using medium temperature setting' whenever they cared for their clothing

with their mean scores greater than 1.3. Also, male and female respondents sometimes followed care signs of 'use any bleach when needed', 'dry flat', 'dry in the shade', 'do not bleach' and 'iron using high temperature setting' when cared for their clothing with their mean scores less than 1.3. Furthermore, male and female respondents never followed care signs of 'bleach with non-chlorine', 'do not wash', 'dryclean using any solvent except trichloroethylene' and 'dryclean using petroleum solvent only' anytime they cared for their clothing with mean scores less than 1. Meanwhile, the grand mean usage score of male (22.38) was as the same as the grand mean usage score of female (22.36). This, therefore, indicates that usage of care labels among male and female students in the study area was equal. Consumers read the care instructions to determine the clothing product's maintenance.² Niemann & Nothling⁵ argued that some consumers find the information provided by labels and hangtags extremely useful, while other consumers may find it overwhelming or do not understand it. Niemann & Nothling⁵ established that majority of male and female 'always' or 'mostly' made use of the care instructions provided in symbols.

Table 4 Distribution of respondents by mean scores of their usage of clothing label

Signs	Interpretation	Male	Female
	Use any bleach when needed	1.16	1.15
	Drip dry-hang wet on plastic hanger and allow to dry with hand shaping	1.16	1.09
	Dry flat-lay garment on flat surface	1.01	1.09
	Dry in the shade	1.17	1.18
	Bleach with non-chlorine	0.96	0.81
	Do not bleach	1	1.04
	Do not wash	0.84	0.96
	Hand wash only	1.52	1.59
	Regular cycle with regular agitation and spin speed	1.03	1.1
	Ironing is needed	1.46	1.49
	Iron using high temperature setting	1.3	1.19
	Iron using medium temperature setting	1.41	1.35
	Iron using low temperature setting	1.09	1.02
	Do not iron or press with heat	1.01	1.09
	No steam-iron	1.09	0.93
	Dryclean	1.3	1.29
	Dryclean using any solvent	1.21	1.13
	Dryclean using any solvent except trichloroethylene	0.87	0.92
	Dryclean using petroleum solvent only	0.88	0.89
	Do not dryclean	0.9	1.05
Grand mean		22.38	22.36

Level of knowledge and level of usage

Using mean and standard deviation, levels of knowledge and usage were calculated for both the male and female respondents. The results in Table 5 show that both the male (34.2%) and female (34.2%) possessed medium level of knowledge of clothing labels. In the same vein, both male (33.3%) and female (35.7%) made use of clothing labels on the average level when caring for their clothings. This implies that the levels knowledge and usage of clothing labels of both male and female respondents were average.

Table 5 Distribution of respondents by levels of knowledge and usage

Levels	Knowledge		Usage	
	Male (%)	Female (%)	Male (%)	Female (%)
Low	6	8.6	8.1	6.2
Medium	34.2	34.2	33.3	35.7
High	8.6	8.6	7.1	9.5

Knowledge and cognitive abilities affect consumers' decision making whereas objective knowledge refers to the actual knowledge consumers have, that can be used in their information search.¹¹

Table 6 Analysis of variance showing the difference between male and female knowledge and usage of clothing labels

Variable	Source	Sum of squares	df	Mean square	F	Sig
Knowledge	Between groups	0.214	1	0.214	0.005	0.946
	Within groups	19618.35	418	46.934		
Usage	Between groups	0.047	1	0.047	0.001	0.979
	Within groups	27946.01	418	66.856		

Research done on consumers' knowledge indicates that consumers with moderate knowledge on a subject will search more intensively for information than experts who refrain from searching for additional information if knowledge exists on the subject.^{11,12} Therefore, this level of knowledge possessed by the male and female respondents would make them aspire to acquire adequate knowledge needed to care appropriately for their clothing.

Hypotheses testing

Hypothesis 1: Results of ANOVA in Table 6 indicate that there was no significant difference between male and female knowledge of clothing labels ($F = 0.005$). This shows that male knowledge (mean = 44.31) is not significantly different from female knowledge of clothing labels (mean = 44.27).

Hypothesis 2: Results in Table 6 indicate further that there was no significant difference between male and female usage of clothing labels ($F = 0.001$). This implies that male usage (mean = 22.38) is not significantly different from female usage of clothing labels (mean = 22.36).

Therefore, there were no significant differences between male and female knowledge and usage of clothing labels. This may be because males are now realising that adequate knowledge and use of clothing labels result to prolonging the shelf life of clothing materials and reduces the rate of changing of wardrobe. This result agrees with the assertion made by Fianu and Harrison-Arthur¹³ that there were no significant differences between male and female consumers in Ghana regarding the perceptions of clothing labels. Also, in using clothing label information when cleaning clothing, Niemann & Nothling⁵ posited that no practically significant differences were found between responses of male and female respondents. However, it is at variance to the report by Krugel and Van Heerden¹⁴ that male and female consumers differ in their reading, comprehension and use of clothing labels. Male and female consumers have different interests when purchasing products and as a result, they may search for different information while obtaining similar products.^{15,16}

Conclusion

The study show that both male and female respondents bought clothing on monthly basis and cared for it after every use through hand wash. Male and female had medium levels of knowledge and usage of clothing labels. This is an indication that male and female students of tertiary institutions had the same level of knowledge and usage of clothing labels. Textile experts and manufacturers are therefore enjoined to educate clothing consumers on the importance of clothing labels as well as the appropriate use of the label to make informed decisions and to obtain optimum value and maximum satisfaction from every purchase of clothing material. This education will assist them to avoid untimely damage of their clothing and reduce cost of frequent procurement as a result of careless use.

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Conflicts of interest

Authors declare that there is no conflict of interest.

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