

PATTERN DRAFTING SKILL NEEDS OF INFORMAL DRESSMAKERS IN NSUKKA LOCAL GOVERNMENT AREA

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Abstract

The study investigated pattern drafting skill needs of informal dressmakers in Nsukka Local Government Area. The design of the study was survey. Four purposes and research questions guided the study. The population consisted of 1002 dressmakers in Nsukka Local Government area of Enugu state. A sample of 80 dressmakers) were purposively selected to respond to the questionnaire items. The questionnaire was validated by three experts from the department of Home Economics and Hospitality Management Education. Data were analyzed with percentages, mean and standard deviation using Statistical Product for Service Solution (SPSS) version 22.0. Results showed that majority of informal dressmakers have good skills for taking body measurement, adding seam allowance, laying and cutting, but poor in drafting basic block pattern, adaptation of styles from the basic block, indicating pattern marks correctly and transferring pattern pieces to fabric. Dressmakers in Nsukka need pattern drafting skills such as technical drawing, taking of body measurements and knowledge of basic geometry. Challenges posing threats to effective pattern drafting practices were identified and five solutions to the challenges were also identified. Based on the findings of the study, it was concluded that informal dressmakers in Nsukka Local Government need pattern drafting skills. It was also recommended that Home Economics Extension services be aided financially in the development of pattern drafting skills needed by the dressmakers through free training, seminars and workshop by the state government level.

Keywords: Pattern, Drafting, Skill, Informal, Dressmaker

Introduction

Garment production is one of the major employments and income generating activities in textile and clothing industries globally. Major garment production processes involve fabric selection, pattern drafting or preparing the already drafted or commercial pattern, cutting the fabric, assembling the garment, inspecting the garment and label development (Ozougwu and Elope, 2022). Pattern drafting is the foundation in garment manufacturing and plays an important role in deciding how the final appearance of a garment will look like. Quincy (2019) described pattern drafting as an art of manipulating and shaping a flat piece of fabric to conform to one or more curves of the human figure. It is a bridge function between design and production. Pattern drafting is the art of designing the outline of the plan or arrangement for sewing clothes. It is one of the clothing construction practices employed by garment makers in the contemporary world and is also considered as the first step in garment production. A pattern drafting process actually helps to come out with the imagination of a designer from the sketching till real product. Pattern drafting is considered as the first step in garment production. While making a garment as per design, templates are used to trace the various garment parts of similar style onto fabric prior to cutting and assembling. Generally, patterns are made of paper or cardboard templates that have become a skilled technical process over the centuries (Dibyendu and Partha 2018).

A pattern may be a guide for cutting the fabric which can be sewn together to form a garment. It is a piece of paper drafted and cut to size and shape, used for cutting fabric pieces for sewing dress (Igbo and Iloeje, 2012). Pattern is an original garments form on the paper or cardboard templates which other garments of a similar style are copied from which the parts of garments are traced on to fabric before cutting out and assembling (Naznin, Tabraz & Sultana, 2017). The

basic pattern according to Shoben and Ward (2009) is the very foundation on which pattern drafting, fit and design are based. It is a simple pattern that fits the body with just enough ease for movement and comfort. It is the actual copy of different parts of a garment that is made by cutting board or hard paper using measurements which have been taken from models or dress forms after sketching (Ekumankama and Igbo, 2009). According to Hulme (2013), a pattern is developed from a design sketch using a block. The designer or pattern cutter will add to the block by introducing style lines, drapes, pleats, pockets and other adjustments to create an original pattern (Fischer, 2009). Drafted patterns can be made to produce very good and well-fitting garments if the operator is skillful and meticulous (Forster & Ampong, 2012). Competency in pattern drafting is a major factor in the production of well-fitting garments (Forster and Ampong, 2012).

Pattern drafting requires some skills for accuracy and fitness of the garments made with it. It is a highly skilled technique which calls for technical ability, and a sensitivity to interpret a design with a practical understanding of garment construction. It involves manipulation and shaping a flat piece of fabric to conform to one or more curves of the human figure (Bhati, 2011). Thomas (2009) posited that the first step and skill in pattern making is taking of body measurements. Without accurate measurements, cutters will not have the right statistics to cut fitting garments (Okorie, 2000). These measurements are taken manually with tape measures and their accuracy largely depends on the skill of the data operator. Aldrich (2008), however, explained that basic block patterns can be drafted to fit individual figures by using personal measurements instead of standard ones listed on size chart. Other pattern drafting skills needed by a dressmaker includes fabric knowledge, technical drawing such as ability to read and interpret patterns, use measuring tools and understand various designs, understanding of garment construction which includes knowledge of the different types of seams, darts and pleats, knowledge of basic geometry such as understanding angles, curves and proportions.

Drafting patterns may seem very intimidating, but it is an amazing skill that can take the dressmaker to a completely new level of possibilities (Obinnim and AfiPongo, 2015). Pattern drafting is considered as the first step in garment production (Datta and Seal, 2018). Different methods of pattern drafting include flat method (paper pattern making), draping method (modeling method) and computer aided design (Datta and Seal, 2018). Flat pattern drafting method is a system of pattern making that depends on measurements taken from a dress form or model to create basic foundation, or design patterns (Naznin and Sultana, 2017). Draping, which is known as the original method of constructing garment patterns, is one involving a detailed survey and study of the figure to build up a reliable fitting experience. It involves the draping of a two-dimensional piece of fabric around a form, conforming to its shape and creating a three-dimensional fabric pattern (Bappy, 2018). On the other hand, computer aided design (CAD) is a system of pattern making which depends on measurements taken from a dress form, model or measurement chart which is given by buyer (Bhati, 2011). Here, different types of pattern making software are used to make the pattern such as lectra, gerber technology, tukatec, optitex among others. Knock-off is also included as one of the commonly practiced methods of pattern drafting which involves copying ready-made garments (Gohar, Deabes and Salem, 2016).

In large garment production establishments or industries, pattern is used for fabric cutting. Varney (2008) indicated that patterns are used to obtain a better fit and to save material. A correct pattern will result in good fit garment that suit current design for the industry. With pattern, it is not difficult to cut complicated styles of garment. One can correct mistakes by modifying the pattern thus reducing fabric waste. A paper pattern enables cutting a garment with a minimum amount of fabric and saves time (especially if garment will be mass produced). Pattern can also be graded into different sizes which is very helpful when garment is to be mass produced (Chidera, 2021; Momoh, 2021), though improper use of blocks and layers make

updating and modification of the drawings a cumbersome task for another person (Quincy, 2019).

Dressmakers are referred to as individuals whose main occupation is cutting, fitting and altering apparel. Julie Cole and Sharon Czachor (2013)s. They work with clients to create custom designs, and use a variety of techniques and tools to produce high-quality, tailored garments. Most informal dressmakers and tailors are not aware of the inaccuracy of apparel sewn with the free-hand method (Foster & Ampomg, 2012). As a result, they prefer free-hand cutting to other sewing method which seems to them faster, but sometimes pose a lot of problems in terms of fit for their clients when the apparel is made. However, if dressmakers and tailors remain ignorant of the influence of technique on the apparel outcome, more conflicts with clients will arise and this leads to cost implications, collapse of businesses and waste of resources. Dressmakers in Nsukka majorly make their patterns by marking directly on the cloth using white chalk which is free hand cutting. While using the free hand cutting, the fabric will be wasted. According to Shailong and Igbo (2009), free hand method of garment construction may spoil the garment entirely, thereby wasting the fabric. This study focus on pattern drafting skill needs of informal dressmakers in Nsukka Local Area

Statement of the Problem

The level of dissatisfaction with dresses by clients of dressmakers has increased. The problem could be, as a result of lack of basic skills for effective pattern drafting which influences their capacity to make standard fit garment. This situation has much implication to the economic empowerment and development of not only the dressmakers, families but the nation at large. In spite of the pattern drafting facilitates mass production of standard and professionally made garments capable of competing in international clothing and apparel markets, not much research has been done regarding the pattern drafting skill needs of by dressmakers in Nsukka L.G.A. Hence, the need for the requisite skills needed for pattern drafting by dressmakers, in Nsukka L.G.A. as they construct apparel for their clients.

Purpose of the study

The general objective of the study was to investigate the pattern drafting skill needs of informal dressmakers in Nsukka Local Government of Enugu state. Specifically this study determined:

- i. The pattern drafting skills possessed by the dressmakers in Nsukka L.G.A.
- ii. identify pattern drafting skills needed by dress makers in Nsukka L.G.A..
- iii. identify the problems associated with pattern drafting by dressmakers in Nsukka L.G.A
- iv. various ways of mitigating these problems.

Research questions

- i. What are the pattern drafting skills possessed by dressmakers in Nsukka L.G.A?
- ii. What are the pattern drafting skills needed by dressmakers in Nsukka L.G.A of Enugu state?
- ii. What are the challenges associated with pattern drafting by garment makers in Nsukka L.G.A.
- iv. What are the various ways of mitigating the problems.

Methods

The study adopted descriptive survey research design. The study was carried out in Nsukka Local Government Area of Enugu State. The population for this study comprised of 1002 dressmakers in each of the eighteen 18 towns that make up Nsukka L.G.A. of Enugu State. The dressmakers used in this study were those that have workshops outside their family houses either in the streets or market places. Some of the dressmakers combine this business with farming and so close their shops during farming season to farm. The sample of this study were 80 dressmakers which were purposively selected. The towns and number of participants selected

included Nsukka 30, Opi 10, Lejja 12, Eha-Alumona 9, Edem 8 and Obukpa 11, making it a total of 80 garment makers were used for the study. A structured questionnaire named Pattern Drafting Practices (PDP) questionnaire was used for data collection. The questionnaire was divided into four parts on; personal information of the respondents; pattern drafting skills possessed; pattern drafting skills needed by dressmakers and challenges associated with the use of pattern drafting and how to mitigate the challenges in the study area. 15 copies of the questionnaire were administered to 15 dressmakers from Ibagwa-Aka in Igbo-Eze South Local government Area of Enugu State outside of the six towns selected for the study after which Cronbach Alpha method was used to obtain the reliability co-efficient. A reliability co-efficient of 0.76 was obtained indicating relatively high reliability of the instrument. Primary sources of data were used in this study. The Primary data were obtained from dressmakers in Nsukka L.G.A. A total of 80 copies of structured questionnaire were distributed to the respondents. Collection of data was on the spot and a 100% retrieval of the filled questionnaire from the respondents was achieved. The data were analyzed with Statistical Product and Service Solution (SPSS) version 22.0 using descriptive statistics such as percentage, mean and standard deviation. Mean was used to answer the research questions and standard deviation was used to identify the difference between the mean. Any response with mean 3.00 and above was regarded as positive (accepted) while scores less than 3.00 was regarded as negative (rejected)

Results

Research Question One

What are the pattern drafting skills possessed by dressmakers in Nsukka L.G.A of Enugu State?

Table 1: Frequency and percentages of pattern drafting skills possessed by dressmakers in Nsukka L.G.A

S/N	Pattern drafting skills	Possessed		Not possessed	
		Freq.	%	Freq.	%
1	Taking of body measurements accurately	64	80.0	16	20.0
2	Drafting a basic block pattern	10	12.5	70	87.5
3	Adaptation of styles from the basic blocks	10	12.5	70	87.5
4	Indicating pattern marks correctly	10	12.5	70	87.5
5	Adding of seam allowance	64	80.0	16	20.0
6	Laying and cutting	70	87.5	10	12.5
7	Transfer pattern pieces to fabric	10	12.5	70	87.5

Result in Table 1 shows the frequency and percentages of respondents on the pattern drafting skills possessed by dressmakers in Nsukka L.G.A. The result showed that taking of body measurements accurately, adding seam allowance correctly and laying and cutting are the pattern drafting skills possessed by dressmakers in Nsukka L.G.A. On the other hand, pattern drafting skills such as drafting a basic block pattern, indicating pattern marks correctly, adding of seam allowance and transfer pattern pieces to fabric are not possessed by dressmakers in Nsukka L.G.A.

Research Question Two

What are the pattern drafting skills needed by dressmakers in Nsukka L.G.A of Enugu State?

Table 2: Mean and Standard deviation of the pattern drafting skills needed by dressmakers in Nsukka L.G.A

S/N	Pattern drafting skills	$\bar{x}$	S.D	Remark
1	Technical Drawing skill	4.71	0.60	Important
2	Taking body measurements	4.54	0.50	Important
3	Knowledge of basic geometry	4.64	0.48	Important
4	Fitting	2.53	1.44	Not Important
5	Problem-solving and analytical skills	4.31	0.47	Important
6	Knowledge of fabric properties	4.90	0.30	Important
7	Marking accurately on fabric	4.75	0.44	Important
8	Knowledge of drafting tools	4.94	0.24	Important
9	Pattern alteration skills	4.86	0.35	Important
	Cluster Mean	4.39	0.49	Important

$\bar{X}$ = Mean S.D = Standard Deviation

Result presented in Table 3 shows that technical drawing skill, taking body measurements, knowledge of basic geometry and others are the important pattern drafting skills needed by dressmakers in Nsukka L.G.A. On the contrary, item 4 had mean rating of 2.53 with standard deviation of 1.44. Since the mean rating is below the criterion level of 3.00, this means that fitting is not an important pattern drafting skill needed by dressmakers in Nsukka L.G.A.

Research Question Three

What are the problems associated with pattern drafting skills by dressmakers in Nsukka L.G.A of Enugu State?

Table 3: Mean and Standard deviation of the problems associated with pattern drafting skills by dressmakers in Nsukka L.G.A

S/N	Item Statement	N	Mean	S.D	Decision
1	Taking measurement for pattern drafting is difficult	80	1.91	1.51	Disagree
2	Difficulty in interpreting or following pattern drafting guidelines and procedures	80	4.25	1.23	Agree
3	Styles modification is difficult with the use of pattern	80	4.71	0.60	Agree
4	Pattern drafting consumes a lot of time	80	4.11	1.21	Agree
5	Unavailability of up-to-date body size charts	80	4.01	1.44	Agree
6	Equipment/tools for pattern drafting are too costly	80	3.89	1.57	Agree
7	No adequate awareness on pattern drafting	80	4.09	1.41	Agree
8	Pattern makes use of paper instead of fabric	80	4.14	1.34	Agree
	Cluster Mean	80	4.39	0.44	Agree

Result presented in Table 4 shows that difficulty in interpreting or following pattern drafting guidelines and procedures, styles modification is difficult with the use of pattern, pattern drafting consumes a lot of time and others are the challenges associated with pattern drafting skills by dressmakers in Nsukka L.G.A. On the contrary, item 1 had mean rating of 1.91 with standard deviation of 1.51. Since the mean rating is below the criterion level of 3.00, this means that taking measurement for pattern drafting is difficult is not among the challenges associated with pattern drafting skills by dressmakers in Nsukka L.G.A.

Research Question Four

What are the solutions to mitigate the problems associated with pattern drafting skills by dressmakers in Nsukka L.G.A of Enugu State?

Table 4: Mean and Standard deviation of the solutions to mitigate the problems associated with pattern drafting skills by dressmakers in Nsukka L.G.A of Enugu State

S/N	Item Statement	N	Mean	S.D	Decision
1	Free training on pattern drafting and use of patterns by the government	80	4.25	1.25	Agree
2	Investing on high quality pattern drafting tools	80	4.01	1.44	Agree
3	Body size charts should be updated from time to time for better fit in garment construction	80	4.14	1.34	Agree
4	Short level Courses that will assist in development of pattern drafting should be introduced	80	4.25	1.25	Agree
5	Government Support through extension workers	80	3.82	1.54	Agree
	Cluster Mean	80	4.10	0.77	Agree

Result presented in Table 5 showed that free training on pattern drafting and use of patterns by the government, investing on high quality pattern drafting tools, body size charts should be updated from time to time for better fit in garment construction and others are the solutions to mitigate the challenges associated with pattern drafting skills by dressmakers in Nsukka L.G.A.

Discussion of the findings

Table 1 revealed that dressmakers in Nsukka Local government possess some skills in pattern drafting such as taking of body measurements, adding seam allowance correctly and laying and cutting. The dressmakers do not possess these skills: drafting basic blocks, adaptation of styles from the basic blocks, indicating pattern marks correctly, and transfer pattern pieces to fabric. Chidera (2021) stated that these skills which they possess are not sufficient to help them meet the ever-changing demands of the public who they are consciously of their outfit. Dressmakers in Nsukka therefore need more skills in pattern drafting. Bappy (2018) observed that pattern drafting has many skills that need to be mastered by dressmakers.

The study in table 2 revealed that dressmakers in Nsukka needs additional skills in pattern drafting. Adrich (2014) revealed the skills needed by these Dressmakers are Technical drawing skill, taking body measurements, knowledge of basic geometry, problem solving and analytical skills, knowledge of fabric properties, marking accurately on fabric, knowledge of drafting tools and pattern alteration skills. This shows that most Dressmakers in Nsukka do not make use of pattern drafting and they lack the skills needed in pattern drafting.

The study revealed from table 3 shows that some problems hinder the effective use of pattern drafting by dressmakers in Nsukka. Naznin and Sultana (2014) discovered that seven items under consideration constituted problems to the effective use of pattern drafting by dressmakers in Nsukka. These problems included: difficulty in interpreting or following pattern drafting guidelines and procedures, style modification is difficult with the use of pattern, pattern drafting consumes a lot of time, unavailability of up-to-date body size charts, equipment and tools for pattern drafting are costly, no adequate awareness on pattern drafting.

The findings of the study as shown in table 4 revealed different ways to improve the skills of dressmakers in pattern drafting. Ozougwu and Elope (2022) stated that free training on pattern drafting and the use of patterns by government, investing on high quality pattern drafting tools, body size charts should be updated from time to time for better fit in garment construction, short

courses and Government support through extension workers that will assist in development of pattern drafting should be introduced.

Conclusion

Based on the analysis of data and the findings of this study, the researcher has come to the conclusion that there pattern drafting skills which dressmakers in Nsukka Local Government needs. The researcher also draws conclusion that the dressmakers like to use pattern but do not have the necessary skills because of some challenges they encounter. It is important that effort be geared towards reducing some of the problems affecting maximum use of pattern by the dressmakers. The problems includes unavailability of up-to-date body size charts, difficulty in interpreting or following pattern drafting guidelines and procedures, cost of pattern drafting tools and equipment. The solutions to these problems will hesitate the acquisition of the needed skills in pattern drafting and dressmaking in general.

Recommendations

The following recommendations are made based on the findings of the study;

1. Government organisations should help in the development of pattern drafting skills needed by the dressmakers. This could be through free training, seminars and workshops for dressmakers were clothing specialist are invited.
2. Body size charts should be provided for different body measurements and those with figure forts and should be updated from time to time.
3. Dressmakers should invest on buying quality tools and equipment used in pattern drafting and government should assist the dressmakers by giving them financial assistance through soft loan to buy some costly equipment.

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