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Comparative Study between Two Methods of Easy Fitting Block Pattern of Blouse to Fit the Egyptian Women's Bodies

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Abstract:

Building the basic pattern is a very important step in the ready-made garment industry, because the design is transferred to the block pattern so increasing production efficiency depends on pattern steps modification. Also, building the basic pattern is a primary necessity for the different types of clothes that cover the body, and therefore can be applied to any design and any type of clothing. Therefore, the idea of the research focused

on comparing two ways to build the basic model of the blouse to suit the body of the Egyptian woman. The aim of this research is to identify the main difference between two methods of making basic patterns in order to reach the best way that suits Egyptian women. The results showed that the type (b) method is better than the way (a). The study recommended the importance of studying pattern making as one of the main factors for the quality of the final product.

Key words: Block pattern, Easy fitting, Pattern making.

The introduction and the problem of the research:

The clothing industry is witnessing a dynamic and unstoppable development in the 21st century, it is an international and global industry and accounts for a large share of global economic output, so the clothing industry thrives on a strange complex phenomenon in terms of speed, versatility, and flexibility enough to satisfy the growing consumer needs.

Basic block pattern is a very important step in ready-made garment industry production because it can be modified to raises production efficiency, also the basic block pattern is necessary to cover various body types, and it can apply in any design and clothing type.

Therefore, the idea of the research is to compare between two methods for the easy fitting pattern to obtain the highest quality.

The previous studies:

1- Study of: Somia Mostafa Mohamed, entitled "Introduction of a new method for constructing the basic pattern for women by comparing three methods" research Published on 2014 - Journal of Home Economics - Number 30- Pages from (173 -198)

This research aims to construct a basic pattern for women through identify the best way of three methods (American McDonalds, Italian Burgo, English Aldrich) in terms of the proportion of comfort, fit, and general form. In addition to the development of new suggested method to construct a basic pattern for women in which the advantages of the three methods are available to suit the nature of the Egyptian women's body. This research followed the experimental method and the sample consisted of three sizes: (40 - 44 - 48), where nine samples were carried out. The results showed the best method for sizes (44 - 48) is the American method McDonalds, while best method for size (40) is English method Aldrich, however, The Italian method Burgo showed the less ratios of all sizes. Also reaching to a new method of basic pattern (Blouses) through the advantages of the three methods.

2- Study of: Hye-Won Lim - Tom Cassidy, entitled "A Comparative Study of Trouser Pattern Making Methods" Article · May 2017 – Med Crave - Journal of Textile Engineering & Fashion Technology.

The aims of this study are to compare and evaluate between four different trouser pattern making methods known as the Aldrich, Armstrong, Bunka, and Esmod methods. Also, to find the most suitable method. The sample of this study was selected by the purposive sampling method and consisted of one Korean female.

The results showed that the slight difference between the four construction methods of trouser basic patterns and the suggested amount of ease affected the clothing fit and overall shape, the Armstrong method was evaluated as the best method, and the Aldrich method was the best method in movability test. In discussion, it appears that the Bunka method was suitable. Overall, it is not best to follow one specific pattern making method and it is difficult to construct one pattern making to fit a specific subject.

This research is directly related to the research subject.

3- Study of: basma Reda Mohamed, entitled "A comparative study between Profili and Helen Armstrong Patterns and to make use of them in the implementation of the Egyptian women's jacket" Ph.D. Thesis 2018 - Faculty of Applied Arts - Damietta University.

This study aims to construct a basic Pattern Women's Jacket to achieve good fitting factors, to suit with the Egyptian woman's body. This research followed the descriptive analytical method and experimental method. The sample consisted of three different sizes: (36 - 40 - 44). The results showed that Helen pattern method after Modification gave high degrees than the Profile method where it achieved in the rate of 100% in Balance and fitting in all sizes, so that it suitable for different Egyptian's body. While the Profili method ratios is high only for the smallest size, and the ratios were less when the sizes are increased. And this research is directly related to the research subject.

Purpose of the Study

The primary purpose of the study was to determine if There were a difference in the results obtained from a comparison of easy fitting block pattern.

The research aim:

The objective of this research is to identify the main difference between the two methods of making basic patterns.

The research hypotheses:

- 1- There are statistically significant differences between the averages of the Specialists 'opinions of the two methods in the front for the measurements used S, M, L, XL".
- 2- There are statistically significant differences between the averages of the specialists' opinions of the two methods at the back of the measurements used S, M, L, XL".
- 3- There are statistically significant differences between the averages of the opinions of specialists in the two methods of Sleeve of the measurements used S, M, L, XL".
- 4- There are statistically significant differences between the averages of the opinions of specialists in the two methods of the total of the measurements used "S, M, L, XL".

The research borders:

Comparing between two methods of easy fitting block pattern of the blouse (Aldrich, 1994; Burgo, 2004).

The first method is called the (Aldrich method) of the author Winifred Aldrich, and it is one of the methods used in the field of teaching. The construction of this method depends on several measurements: Bust measurement which determines the pattern width, nape to waist, arm hole depth, neck size, shoulder length, back width, and chest width.

As for the second method, it is the (Italian method) of the author Fernando Borgo. This method depends on different measurements these are: Height, size which determine by the (full chest measurement /2), Back waist length, Front waist length, Back width, and Back shoulder width

The two methods are easy fitting block patterns, and they are constructed with half Pattern. The two methods differ in the way of taking measurements, the way of constructing them, and the amount of added ease allowance.

The research Tools:

- 1. Sources of block pattern methods: In this study two methods of block pattern were selected (Aldrich, 1994; Burgo, 2004).
- 2. Egyptian Women Table of Measurements.
- 3. Sample Members.
- 4. Experimental patterns: It was painted on transparent sheets.
- 5. Experimental garment: cotton muslin was used
- 6. Photographs of sample members.
- 7. Questionnaire sheet: to evaluate the models.

The methodology:

This research followed the comparative experimental method through the study and analysis of two methods of block pattern (Aldrich, 1994; Burgo, 2004).

The research definitions:

<u>Easy fitting block:</u> is called the dart-less or casual block, it suitable for all loose-fitting styles, and used to create innovative shapes (Ward & Shoben, 1987; Aldrich, 2008).

Block pattern: it is a template of the foundation pattern which has no seam allowances or design lines, and it a basis for patterns development. the block pattern referred as basic pattern, master pattern, and sloper pattern (Aldrich, 2008; MacDonald, 2010).

The theoretical framework:

Pattern making:

Pattern making is a 2D or 3D process, that converts the drawing stage (design sketches) to garment (actual physical) production, by shaping the fabric to conform to the human figures.

The patternmaking methods:

There are four different patternmaking methods that varying in presentation, details, and in the methods of construction are:

- Draping method.
- Drafting pattern.
- Flat pattern.
- Knock-off method.

They are commonly used by pattern maker separately or together, depending on the material of the fabric and the style of design want to be achieved (Bonnita, 1982; Kristina Woo Kyung Shin, 2009; Kundel, 1998).

The Draping method:

Often called 'Modelling method' is the oldest patternmaking method. And generally referred as a creative approach to pattern design.

The draping method is a creating three dimensional pieces of pattern by the fabric directly pinned to a mannequin (Cooklin, 2012; Seal, 2018).

The Drafting pattern:

Drafting: is the most mechanical method of pattern development, it can be constructed by drafting manually or produced by a computer programmed. Therefore, it is more used for staple ready-to-wear. (Mohamed, 2004).

The Flat pattern:

The flat pattern method is creating patterns by manipulating and alter the basic block into more sophisticated patterns. It is created by using the

drafting method or the draping method (Aldrich, 2008; MacDonald, 2010).

Knock-off method:

'knock-off' is a creating pattern by copying ready-made garments. It is extremely used when a manufacturer wants to take advantage of a well-publicized hot fashion item, or from a famous designer label, and it does not need a long time before production (**Kristina Woo Kyung Shin, 2009**).

The concept of clothing fit:

Due to the multifaceted characteristics of apparel, clothing fit has definite in multiple dimensions to understand the meaning of fit overall. It the relationship between the body and the way a garment conforms to the human body.

Fit also defined as a combination of the main five factors grain, line, ease, balance, and set. (Lila A. Kinchen, 2008)

1. Elements of fit:

1.1. Garment ease/comfort:

Defined as the difference between the actual body measurements and the garment measurements. The amount of ease determines the fit of the garment and comfort, which is one of the functional apparel quality features that plays a very important role in a garment fit. Patterns are designed with differing amounts of ease, wearing ease and design ease (Patty Brown, ©2014; Zhang, 2009).

1.2. Fabric grain:

Woven fabrics are made by weaving process will help during the cutting process.

However, Cutting the fabric on the right grain lines resulted in good fabric draping that effects on the other fitting elements such as balance and garment setting (**Kasambala**, **June 2013**).

1.3. Balance and proportion:

The balance occurs when the garment has evenly symmetrical weight to all parts of the design with the structural lines and the design lines. Therefore, the proportion in the parts of the garment must be related to one another in length, size, and figure. Also, the balance can achieve when the garment viewed symmetrically in the sides of the front and back. (Ibrahim, 2015)

1.4. Line:

The lines play a very vital role in garment fit, consisting of structural lines and decorative lines. It determines the shape of the silhouette, by shaping the flat pattern, therefore, when the lines are in the right place and conform to the body contours, the total appearance and the fit of the garment will appear appropriate otherwise loose or tight vertical, horizontal

and diagonal lines in the garment occurs cause poor designer figure irregularities (Anita A. Stamper, 1991; Kasambala, June 2013).

1.5. Handel:

Handle refers to the smoothness of the garment without any undesirable wrinkles while hanging on the body. The wrinkle types in the garment refer to a fitting problem that shows poor fitting. (Nkambule, October 2010)

Experimental work:

The researcher studied two methods of easy fitting block patterns and comparing the two methods to identify the main differences between them in terms of fitting, comfort, and a good overall appearance for Egyptian women's bodies. The research has gone through the following procedures:

- 1. Studying different types of block patterns for choosing two methods.
- 2. Comparing between two methods to make the basic easy fitting block pattern.
- 3. Evaluating the two methods to determine the setting range of the block pattern.

1. Studying different types of block pattern for choosing two methods.

The researcher studied several different methods of easy fitting block patterns (Aldrich, 1994; Burgo, 2004; Donnanno, 2002; Teresa, 2008; Ward & Shoben, 1987) and made a test experiment to compare between them by applying them to different samples, then select the two methods (the subject of the research) to conduct the study on them. The two methods were chosen because they were the best in the construction method and best fitting for the Egyptian body, also they were not compared in previous research.

a) Choose two methods of block pattern:

After Studied different methods related to the subject (block pattern for blouse), the two methods of block patterns without darts (easy fitting block) were chosen (Aldrich, 1994; Burgo, 2004).

b) Experimental sample:

The researcher randomly chose two students from the Women's college through initial experiment because it includes students from different Egyptian governorates and therefore will cover the study in different bodies and sizes, to test the validity and suitability of the different ways chosen to make a flat block pattern of woman's blouse before carrying out the final experiment, the first method named as (A) and the second method named as (B). Then the experiment has been evaluated to prove their validation.

2. Comparing between two methods to make the basic easy fitting block pattern:

This research was applied to a sample of the Egyptian society that is closest to conform with the Egyptian specifications.

a) Choose the basic sample:

The basic sample consisted of four groups, and each group has three different measurements, which chosen from the Women's college in a systematic random sampling method to allow samples to be compared in different sizes. Table [1] shows the measurements of the chosen samples:

size	No.	height	Neck	Chest	Bust	Waist	Hip	chest	Back	Back	n san	Front	back	Nape	Waist	Arm	Sleeve
SIZC	110.	neight	size	Circ.	Circ.	Circ.	Circ.	width	width	shoulder	length	Waist	Waist	to	to hip	hole	length
										width		length	length	waist		depth	
	1	164	35	92	93	76	100	33	36.5	38	13	42.5	41	40	20	21.5	59
Α	2	156	36	91	90	71	98	34	35	36	12	38.5	39	38	18	20	57
	3	158	34	87	89	75	100	33	36.5	36	12	41.5	40	39	18	20	57
	4	165	37	98	100	84	110	37	39	41.5	13.5	43	42	41	18	23	60
В	5	158	36	100	102	80	107	35	37	40	13.5	44	41	40	18	22	59
	6	160	37	97	99	82	106	35	38	40	13	41	42	41.5	19	22	59
	7	158	39	106	108	92	116	38	40	42	14	42	41.5	40	18	23.5	58
С	8	160	40	108	110	94	118	38	40.5	42.5	14	44	42	41	18	24	60
	9	159	39	104	106	91	115	38	41	41	13	40	39	40	18	22	58
	10	158	41	112	115	101	123	39.5	42	44	15	43	41.5	40	18	24	60
D	11	160	40	111	113	100	120	41	43	44	14	43	42	41	19	23	58
	12	161	40	111	110	100	122	39	42	40	14	42	44	41	18	23	60

b) Preparing the basic sample patterns of the blouse in two methods:

After choosing the basic sample, the measurements were taken twice precisely to consider a suitable way for each method factors that may affect them.

3. Evaluating the two methods to determine the setting range of the block pattern:

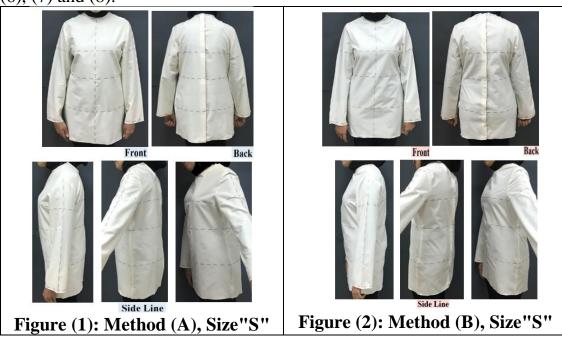
The evaluation of the block pattern is done after designed an evaluation form carried out according to the basic criteria of the blouse, so the first step is:

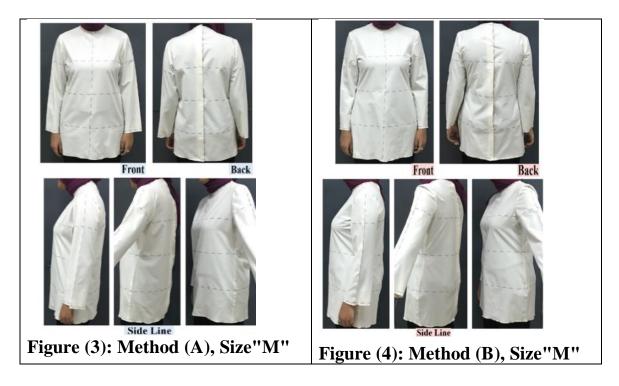
- a) Prepare the evaluation form to measure the accuracy and fitting of the samples: Each section of the evaluation form contains a set of elements to evaluate it accurately:
- The front: Contains 20 points to evaluate the sample fit from the front, and 1 point to evaluate the sideline.
- The back: Contains 20 points to evaluate the sample fit from the back, and 1 point to evaluate the sideline.
- And the sleeve: Contains 11 points to evaluate the sample fit of the sleeve.
- And three-point scale rating methods were used in this evaluation for response scores; 'very good = 2', 'good = 1', 'poor = 0'.

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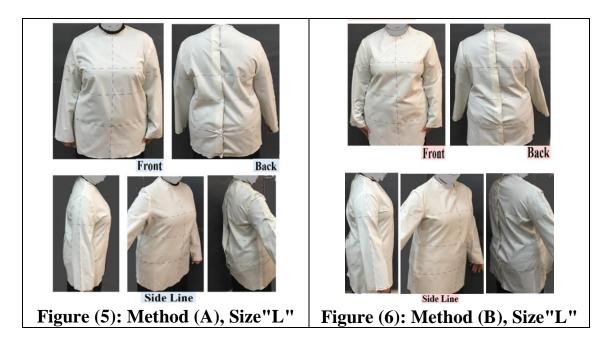
b) Evaluating samples:

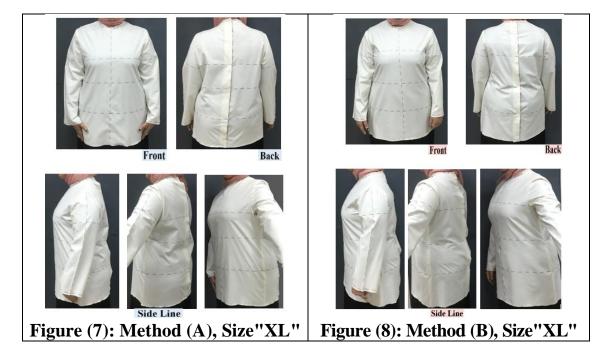
The evaluation of the two methods A and B carried out by fitting a muslin sample to the targeted model. Photographs were taken for the front, back and side view with a sleeve as shown in figures (1), (2), (3), (4), (5), (6), (7) and (8).





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After the judging of the two methods of the easy fitting block pattern, the researcher collected assessments and extracted statistical analysis, by averaging the three measurements for each group, so that the statistical analysis was extracted into four sizes: small, medium, large and x-large.

Table [2]: The measurement table of the chosen samples

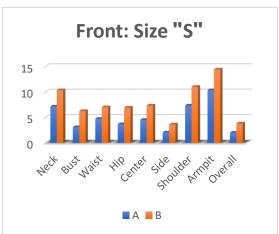
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	size	height	Neck size	Chest Circ.	Bust Circ.	Waist Circ.	Hip Circ.	chest width	Back width	Back shoulder width	Shoulder length	Front Waist	back Waist	Nape to	Waist to hip	Arm hole	Sleeve length
												length	length	waist		depth	
	S	164	35	92	93	76	100	33	36.5	38	13	42.5	41	40	20	21.5	59
Ī	M	165	37	98	100	84	110	37	39	41.5	13.5	43	42	41	18	23	60
	L	158	39	106	108	92	116	38	40	42	14	42	41.5	40	18	23.5	58
	XL	158	41	112	115	101	123	39.5	42	44	15	43	41.5	40	18	24	60

Results and Discussions:

The first assumption:

There are statistically significant differences between the averages of the Specialists 'opinions of the two methods in the front for the measurements used S, M, L, XL".



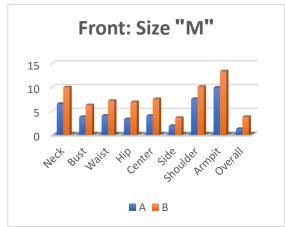
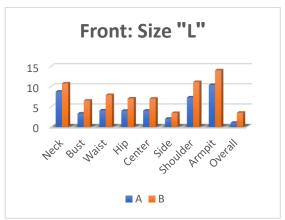


Figure (9): The significance of the Figure (10): The significance of the differences between the average scores of the two methods "A and B" Used for blouse modeling (Front: size "S").

differences between the average scores of the two methods "A and B" Used modeling for blouse (Front: size "M").



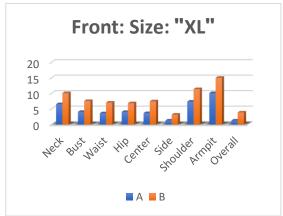


Figure (11): The significance of Figure (12): The significance of the the differences between the average scores of the two methods "A and B" Used for blouse modeling (Front: size "L")

differences between the average scores of the two methods "A and B" Used for blouse modeling (Front: size "XL")

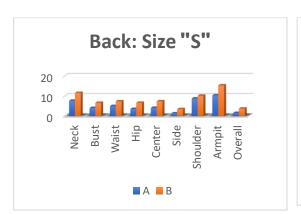
Table [3]: Show the differences between the averages of the specialists 'opinions of the two methods in the front for the measurements used S, M, L, XL"

			Me	ean		Std	. De	viat	tion		T t	est		Si	igni	fica	nt
Fron		S		L													
	A	7.1	6.5	8.7	6.5	1.3	1.6	1.4	2.0								
Neck	A	4	1	4	1	5	6	2	9	6.6	5.5	2.7	7.2	0.0	0.0	0.0	0.0
line	R	10.	9.1 0	10.	10.	2.9	3.5	3.3	4.5	3	5	6	1	1	1	5	1
	D																
	٨	3.1	3.7 5	3.3	4.0	1.0	1.4	0.5	1.1								
Bust	A	0	5	1	2	6	0	3	2	4.2	4.9	4.5	6.5	0.0	0.0	0.0	0.0
line	R	6.2	6.2 4	6.5	7.5	2.4	3.1	2.2	3.2	1	1	2	2	1	1	1	1
	Δ	4.7	4.0 2	4.0	3.5	1.2	0.9	1.3	1.3								
Waist	$\boldsymbol{\Lambda}$	4	2	9	9	0	4	6	6	5.7	3.5	5.7	8.6	0.0	0.0	0.0	0.0
line	R	7.0	7.1 5	7.8	7.0	2.9	3.2	2.0	2.1	8	5	8	3	1	1	1	1
	D	7.0	5	9	1	7	3	5	0								
	Δ	3.6	3.2	3.9	4.0	1.1	1.2	1.3	2.1								
Hip	11	8	9	9	1	2	1	4	0	4.6	5.5	6.2	2.6	0.0	0.0	0.0	0.0
line	R	6.9	6.8 8	7.0	6.8	2.4	3.1	2.4	3.5	9	1	1	5	1	1	1	5
		2	8	3	3	4	0	2	3								

```
4.0 3.6 1.9 1.2 1.7 1.0
Cente
                     3
                                   4 3.0 6.3 2.0 5.7 0.0 0.0 0.0 0.0
                            3
                         6
                    7.4 3.3 3.2 2.6 2.4 2
                                           3
                                               1
                                                   8
                                                       1
                                                          1
                     5
        2.0 1.8 2.0 1.2 0.9 1.3 0.8 0.6
Side
                 2
                     5
                         4
                            8
                                9
                                   4 2.4 2.7 2.6 3.0 0.0 0.0 0.0 0.0
line
        3.6 3.5 3.4 3.1 2.2 2.0 1.0 2.4
                                      1
                                           1 6
                                                   6
                                                       5
                                                         5 5 1
                     5
                         5
                            1
                                2
         2
                 3
        7.3 7.5 7.2 7.3 2.4 1.3 1.6 2.0
Shoul
                 9
                     5
                         1
                            2
                                5
                                   8 8.5 6.6 6.6 6.4 0.0 0.0 0.0 0.0
      B 11. 10. 11. 11. 3.2 4.5 3.5 3.9
 der
                                      2
                                           4 9 1
                                                       1
                                                         1
                                                             1 1
         02 10 12
                   38
        10. 9.9 10. 10. 2.6 1.0 2.3 2.5
                                   5 9.0 7.0 8.1 7.8 0.0 0.0 0.0 0.0
        36
            3
                38 12 4
                            5
                                4
      B 14. 13. 14. 15. 3.5 4.0 4.1 4.0 4
                                           5 0
                                                   9
                                                          1 1 1
         42 36 03 03 2
                            4
                                0
            1.2 1.0 1.2 0.9 0.6 0.4 0.6
 all
                 21
                            7
                     4
                         1
                                1
                                      2.3 2.5 2.3 2.7 0.0 0.0 0.0 0.0
aranc B 3.8 3.7 3.5 3.8 1.3 1.9 1.1 1.2
                                           1
                                               3
                                                   1
                                                       5
                                       3
         1
             8
                 2
                     4
                         3
                            9
                                2
                                   7
        44. 42. 44. 41. 5.0 4.0 5.0 4.4
Front A 93 14 87 71
                               7 6 23. 25. 25. 29. 0.0 0.0 0.0 0.0
                        1
                            2
total B 70. 68. 71. 72. 6.8 6.2 7.1 6.3 63 51 42 24 1 1 1 1
         77 59 30 35
                        9
                            6 5
                                   1
```

The second assumption:

There are statistically significant differences between the averages of the specialists' opinions of the two methods at the back of the measurements used S, M, L, XL".



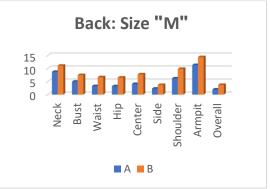


Figure (13): The significance of Figure (14): The significance of the

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the differences between the average scores of the two methods "A and B" Used for blouse modeling (Back: size "S")

differences between the average scores of the two methods "A and B" Used for blouse modeling (Back: size "M")

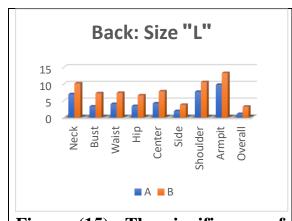


Figure (15): The significance of the differences between the average scores of the two methods "A and B" Used for blouse modeling (Back: size "L")

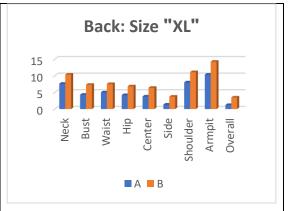


Figure (16): The significance of the differences between the average scores of the two methods "A and B" Used for blouse modeling (Back: size "XL")

Table [4]: Show the differences between the averages of the specialists 'opinions of the two methods in the back for the measurements used S, M, L, XL"

D. J			Me	ean		D	St evi	d. atio	n		Τt	test		Si	igni	fica		· N.T	16
Back		S	M	L	XL	S	M	L	X L	S	M	L	XL	S	M	L	X L	IN	df
Neck	A	7.6 3	8.7 6	6.9 5	7.6 3	1.2 4	1.2 2	1.9 9	2.0 1	8.4	6.0	7.5	4.9	0.	0.	0.0	0.0	1	1
line																			
Bust	A	4.0	5.0 0	3.2 8	4.3	1.3 3	1.1 5	1.6 3	1.5 2	3.6	2.5	6.2	5.6	0.	0.	0.0	0.0	1	1
													3						
Waist	A	4.9 9	3.2 8	4.0	5.0 2	1.2 0	1.0 0	1.5 4	1.3 6	5.6	4.7	5.2	2.1	0.	0.	0.0	0.0	1	1
													1						
Hip	A	3.5	3.2	3.3 9	4.2 0	1.5 1	1.4 1	1.1 4	1.2 1	5.8	5.9	6.1	2.6	0.	0.	0.0	0.0	1	1
													4						
Cente	A	4.0 9	4.0 9	4.1 9	3.7 9	1.3 5	1.6 6	0.7 8	1.0 4	6.0	5.8	5.3	4.7	0.	0.	0.0	0.0	1	1
front line	D	6	9	2	9	7	2	2	4		8	3	1	01	01	1	1	0	5
Side	A	6	0	9	1.3 5	9	8	8	1	2.1	2.2	3.0	2.5	0.	0.	0.0	0.0	1	1
line																			
Shoul der	A	8.7 4	6.2 5	7.6 5	8.0 2	2.6 4	1.3		2.5 1 01		6.0 3	6.6 2	4.6	0. 05	0. 01	0.0 1	0.0 1	1 6	1 5

```
B 10. 9.8 10. 11. 3.5 3.6 4.0 3.4
16 8 56 11 8 6 5 9

Armp A 35 36 5 36 7 0 6 8 9.1 6.5 9.0 7.0 0. 0. 0.0 0.0 1 1
it B 15. 14. 13. 14. 3.5 4.1 4.8 4.0 3 3 3 1 01 01 1 1 6 5

Over A 1.5 1.9 1.0 1.2 0.7 0.5 0.6 0.6
all Appe aranc B 3.7 3.7 3.2 3.4 1.6 2.0 1.2 1.9 2 3 0 7 01 01 1 1 6 5

Eront A 46. 46. 42. 45. 6.9 4.5 4.4 4.6

Front B 72. 71. 69. 71. 7.6 6.0 6.0 7.8 89 15 02 38 01 01 1 1 6 5

B 72. 71. 69. 71. 7.6 6.0 6.0 7.8 89 15 02 38 01 01 1 1 6 5
```

The third assumption:

There are statistically significant differences between the averages of the opinions of specialists in the two methods of Sleeve of the measurements used S, M, L, XL".



Sleeve: "M" 15 10 5 Front Back Side Overall ■ A ■ B

differences between the average scores of the two methods "A and B" Used for blouse modeling (Sleeve: size "S")

Figure (17): The significance of the Figure (18): The significance of the differences between the average scores of the two methods "A and B" Used for blouse modeling (Sleeve: size "M")



Sleeve: Size "XL" 15 10 Front Back Side Overall ■ A ■ B

Figure (19): The significance of the Figure (20): The significance of the differences between the average scores of the two methods "A and B" Used for blouse modeling (Sleeve: size "L")

differences between average scores of the two methods "A and B" Used for blouse modeling (Sleeve: size "XL")

Table [5]: Show the differences between the averages of the specialists 'opinions of the two methods in the sleeve for the measurements used S, M, L, XL"

CI.				ean)evi											.	16
Sleev	e 	S	M	L	XL	S	M	L	X L	S	M	L	XL	S	M	L	X L	N	df
Front		7.6 5	7.2 1 9.6 6	7.0 1	7.6 2	1.6 9	2.1 5	1.3 6	1.4 2	6.6	2.4	2.5	6.3	0.	0.0	0.0	0.0	1 6	1 5
Back	A B	2	8.3511.35	3	3	5	9	3	6	5.9 8	5.5 2	2.7 6	5.6 4	0. 01	0.0 1	0.0 5	0.0 1	1 6	1 5
Side line	A B	8.7 4 13. 42	9.7 6 13. 33	10. 36 14. 22	8.8 1 13. 63	1.6 4 4.0 1	3.2 6 3.8 8	2.0 1 3.9 9	2.1 6 4.0 0	7.8 2	6.0 3	7.5 1	7.1 2	0. 01	0.0 1	0.0 1	0.0 1	1 6	1 5
Overa ll Appe aranc e	D	3.5	1	3.4	3.5	2.6	3 1.1	1.0	1.0	2.2	2.7 8	2.6 1	2.4 4	0. 05	0.0	0.0 5	0.0 5	1 6	1 5
Sleeve	A B	38.	26. 98 37. 90	37.	37.	4.1	3.0	3.9	3.6	14. 02	`	11. 53	15. 52	0. 01	0.0 1	0.0 1	0.0 1	1 6	1 5

The forth assumption:

There are statistically significant differences between the averages of the opinions of specialists in the two methods of the total of the measurements used "S, M, L, XL".



Total: Size "M" 200 100 Λ ■ Total A ■ Total B

Figure (21): The significance of Figure (22): The significance of the differences between the average scores of the two methods "A and B" Used for blouse modeling (the total for size "S")

the differences between the average scores of the two methods "A and B" Used for blouse modeling (the total for size "M")



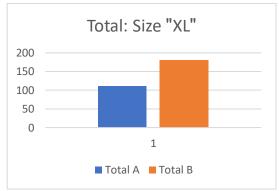


Figure (23): The significance of Figure (24): The significance of the differences between the average scores of the two methods "A and B" Used for blouse modeling (the total for size "L")

the differences between the average scores of the two methods "A and B" Used for blouse modeling (the total for size "XL")

Table [6]: Show the differences between the averages of the specialists 'opinions of the two methods of the total of the measurements used S, M, L, XL"

Total		Ме	ean			Std. De	viation			Τt	est				ficant		N	df
	S	M	L	XL	S	M	L	XL	S	M	L	XL	S	M	L	XL		
A	115.14	115.35	115.47	111.62	8.62	7.35	8.08	9.26	22 01	25 44	21.10	27.21	0.01	0.01	0.01	0.01	16	15
В	181.82	177.87	178.99	181.08	11.21	10.15	12.04	12.21	33.91	35.44	31.10	37.21				0.01		

Conclusion

It is of great importance to study the pattern industry as one of the main factors for the quality of the final product. The necessity of paying more attention to the study of women's body measurements because of their clear impact on controlling the pattern making through accurate measurements and consequently affecting the shape of the final product.

The absolute perfect has not been determined yet in this study, so the study must be completed to reach the highest levels of fitting.

The recommendations.

- 1- The importance of the researches on the measurements of Egyptian women's for making good patterns.
- 2- Increasing of researches related to the easy fitting block pattern industry to achieve higher quality in clothing products.
- 3- The necessity to evaluating the easy fitting block pattern used in the academic curricula and ensuring their conformity with the different Egyptian bodies.
- 4- Benefiting from experiments and scientific research and exchanging experiences with ready-made garment factories to reach the high required quality level.

References:

- 1- **Aldrich, W. (1994).** Metric Pattern Cutting (3td ed.). USA: Blackwell Science Ltd.
- 2- Aldrich, W. (2008). Metric Pattern Cutting for Women's Wear (5th ed.). UK: Blackwell Publishing
- 3- Anita A. Stamper, S.H.S., Linda B. Donnell. (1991). Evaluating apparel quality (2nd ed.). New York: Fairchild Fashion Group,.
- 4- Bonnita, L. M. G. M. (1982). An individualized approach to pattern to design concept of fit U.S.A: Macmillan.
- 5- **Burgo**, **F.** (2004). Il modellism tecnica del modello sartoriale e industriale: MODA BURGO.
- 6- Cooklin, G. (2012). Garment technology for fashion designer (2nd Edition ed.): Blackwell Science.
- 7- **Donnanno, A. (2002).** La tecnica dei modelli uomo-donna (8 ed.). Italia: Ikon Editrice.
- 8- **Ibrahim, D.H.b.** (2015). comparison of two methods of implement sleeves using the flat pattern and draping on the mannequin. المجلة الانسان التطبيقية
- 9- **Kasambala, J. (2013).** An exploration of female consumers' perceptions of garment fit and the effect of personal values on emotions (degree of Master of Consumer Science), University of South Africa.

- 10- **Kristina Woo Kyung Shin, M.A.** (2009). The origins and evolution of the bra. (A thesis submitted for the degree of Doctor), University of Northumbria at Newcastle.
- 11- **Kundel, N.R.H.C.J.** (1998). Pattern making by the Flat-pattern Method (8th Edition ed.): New Jersey: Prentice Hall.
- 12- Lila A. Kinchen, M.D.E. (2008). Clothing for moderns (4th edition ed.). New Yourk: Macmillan,.
- 13- MacDonald, N. M. (2010). Principles of Flat Pattern Design (4td ed.): Fairchild Books.
- 14- **Mohamed, K.** (2004). Novel flat pattern by using modeling technique and its application on different of fabrics. (Thesis submitted for requirement of PH.D degree), Women's College, Ain Shames University.
- 15- **Nkambule, M.T.** (October 2010). Apparel sizing and fit preferences and problems of plus-size Swazi working women.
- 16- **Patty Brown, J.R.** (©**2014).** Ready-to-Wear Apparel Analysis (4th ed.): Pearson.
- 17- TERESA, T.G. (2008). Coupe a platles bases: EYROLLES.
- 18- **Seal, D.B.D.P.** (2018). Various approaches in pattern making for garment sector. Journal of Textile Engineering & Fashion Technology, Volume 4(Issue 1). doi:10.15406
- 19- Ward, J. & Shoben, M. (1987). Pattern Cutting and Making Up: The Professional Approach Paperback (1 edition ed.): Routledge.
- **20- Zhang, J.H.X.X.F.C.A.W.B.** (2009). A study on erea ease distribution between body and garment. Journal of fiber Bioengineering and informatics.

Appendix

Questionnaire sheet for accomplishment of comparison between two methods for making block pattern easy fitting.

Name:

college:

Position:

Method ()

Sample No. ()

			Front l	Position	
Eval	uation Points	Very good	Good	Poor	Notes
	Width				
Neck line	Depth				
	Final shape				
Bust line	Position				
Dust line	Comfort ease				
Waist line	Position				
	Comfort ease				
Hip line	Position				
mp me	Comfort ease				
Center front	Position				
line	straight				
Side line	Position				
	LengthSlope				
Shoulder					
Silouidei	Position				
	DepthWidth				
	Width				
Armpit	Position				
	Total fit				
Overa	all Appearance				

		_		Back Pos	sition	
Eval	uation	Points	Very good	Good	Poor	Notes
	>	Width				
Neck line		Depth				
		Final shape				
Bust line	>	Position				
		Comfort				

	ease	
Waist line		Position
		Comfort
	ease	
Hip line		Position
	\triangleright	Comfort
	ease	
Center back	\triangleright	Position
line		straight
Side line	\triangleright	Position
		Length
Shoulder		Slope
		Position
	\triangleright	Depth
Armpit		Width
		Position
	\triangleright	Total Fit
Overall A	Appear	rance

				Sleev	e	
Eva	luation	n Points	Very good	Good	Poor	Notes
	\triangleright	armhole				
Front		Upper arm				
		Appearance				
	>	Armhole				
Back	>	Upper arm				
	>	Appearance				
	>	Shoulder				
	poin	nt				
Side	\triangleright	Sleeve				
	cent	er line				
	\triangleright	Upper arm				
	\triangleright	Appearance				
Overall app	earanc	ee				

دراسة مقارنة بين طريقتين لنموذج الاساسى بدون بنسة للبلوزة لتتناسب مع جسم المرأة المصرية حنين محمود محمد - هبة زكريا ابوحشيش - خالد محمد احمد عبده* قسم الاقتصاد المنزلي - كلية البنات – جامعة عين شمس

ملخص البحث:

يعد بناء النموذج الاساسى، لذا فإن زيادة كفاءة الإنتاج تعتمد على تعديل الخطوات التى تمر على نقله إلى النموذج الاساسى، لذا فإن زيادة كفاءة الإنتاج تعتمد على تعديل الخطوات التى تمر على مراحل اعداد النموذج، كما أن لبناء النموذج الاساسى ضرورة اساسية واولية لانواع الملابس المختلفة التى تغطي الجسم، وبالتالى يمكن تطبيقه على أي تصميم ولاى نوع ملبس. لذلك، تركزت فكرة البحث على المقارنة بين طريقتين لبناء النموذج الاساسى للبلوزة لتناسب جسم المرأة المصرية. الهدف من هذا البحث هو التعرف على الفرق الرئيسي بين الطريقتين لعمل الأنماط الأساسية للوصول إلى أفضل طريقة تناسب المرأة المصرية. أوضحت النتائج أن طريقة النمط كواحد من الموامل الرئيسية لجودة المنتج النهائي.

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