



*Full Length Research Paper*

# Building a proposed measurement schedule for women in Saudi Arabia

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Measurement schedule has a great importance because of its effect on the clothes production process dramatically, so many countries are interested in updating the industry introducing their own measurements schedules, and even the countries that have the measurements schedules update them periodically. The research aims to find averages of standardized measurements of Saudi women's body (25 to 50 years) in the western region of Saudi Arabia (Makkah - Jeddah - Taif) and a measurement schedule for the Format Arabia for women and corresponding measurements of other countries, the research followed descriptive and analytical approach to answer the research questions and checking its hypothesis, it also used measurement tool to codify the sample of (600) women, it has been reached to put measurements schedules for women in the western region of the following sizes: (SS-SM-SL-SXL- S2XL) relying on height and weight to classify the sample, the study recommended the need for the Arabia Saudi standards body to adopt women measurements schedule to supply the factories to work in production and raising domestic product quality, as it also recommended to activate these measurements through courses in colleges specializing in the production of garments in Saudi Arabia.

**Keywords:** Measurement Schedule, clothing sector, domestic product

## INTRODUCTION

The industry sector in the Kingdom of Saudi Arabia receives great attention, since it is the sector embodies and employs the comparative advantages of the Kingdom. This interest has been manifested in the adoption of the Saudi Council of Ministers Resolution No. (35) dated 02/07/2009, the national strategy for the industry until the year 2020 AD), and at this stage in which the Kingdom is taking seriously about the beginnings of the twentieth century, the manufacturing will remain the strategic option optimized to accelerate the achievement of economic development goals.

Upgrading competitiveness to the global level of Saudi clothing products industries is considered necessary not only to gain stakes in world export markets, but also to maintain the domestic market shares and strengthened. This requires of producing apparel industrial units in the

Kingdom work to raise productivity and the quality to record levels and meet consumer requirements, through field visits to many garment factories in addition to the Jeddah Chamber of Commerce it is found that the measurements used in factories for the production of clothing European and American sizes, this explains the operations of adjustment for clothes after buying in order to fit in with the Saudi consumer body which increases product costs on the citizen, she may resort to adjustment and the amendment more than once until the adjustment process done, and we have seen that through the production unit of clothing and textiles department at King Abdul-Aziz University.

This is due to the fact that different countries with all its geographic factors, environmental, climatic and cause different body sizes for every country distinct form in the outer body's limits in terms of height and short body, the

body width and in its Interior characteristics of its ability to store or burn fat, it also affect the form-fitting, all of these factors produce a clear and significant differences in the sizes and emphasizes the study of "Philip" (2007), which reached a difference in the physical measurements from one country to another country as size 40 in French measurements differ in sizes from size 40 in Italian measurements, and so German sizes despite falling within the same continent, so there must be an independent measurements schedules for each country to achieve good control of the clothes, but the production of ready-made garments of high quality fit consumers, also the study of "Prey" (2003) emphasizes that it is difficult to choose the right size for a woman from several measurements where the woman's body varies from one place to another as size 40 Premier is a US size 16, and a French size 42 .

Standard sizes has a great importance because of its effect on the clothes production process significantly, so many countries which are interested in updating industry are introducing their own Format schedules, and even the countries that have the Format schedules to update them on a regular basis, several studies which focused on development of measurements schedules of the body were conducted, Shafei (1994) study dealt with standard Specification for children's measurements from (4 to 3) years in the UK, Ismail (1993) conducted a study aimed to develop measurements of the body of Egyptian women in pregnancy, as well as the study of Ashmawy (1994) aimed at evaluating the standard tables of body measurements of the child used in the garment industry in the stage from 6-12 years old , and the study of Moawad (2007) came on the status of measurements of the body of Kuwaiti women and benefit from it in the work of the standardization of some governorates of Kuwait. The study of Lafleur and Tim (2007) aimed to develop measurement standards in Australia's system and that women between the ages of 18-30 years, and the study of Eric, et al (2011) in order to reach groups of anthropometric and business models coincide with the human body , to ensure the quality of the design of the clothes.

So, vein sought by the Kingdom for the development of the industry, and the belief in the role of academia in supporting the industry and achieve its renaissance following the requirements of the scientific methods the researchers felt that it was necessary to focus on the Status of measurements schedules of the bodies of women in Saudi Arabia

It was found that there is a standardized measurement of Saudi women body, which represent a large segment of society so that it can have access to appropriate clothing, which achieved control component problems, and the consequent development of the competitiveness of national products which belonged in turn on the upgrading of manufacturing clothes and then the national economy to the kingdom. The current research dealt with

the western region of Saudi Arabia, which is filled from populated areas, also has a number of ready-made garments, which are concentrated in the cities of Jeddah, Mecca factories.

### **The Problem of the Study**

From the above and through field visits and access to previous studies it is found that Saudi women face problems in terms of getting fully clothes settings, may be due to the factories use of ready-made garments of European and American measurements which do not fit with the body of Saudi women as a result of the different nature of a country from the other, which directly affect the body composition.

### **Questions of the Study**

1. To what extent codified measurement schedules could be set for the body of Saudi women from the age of 25 to 50 years in the western region of Saudi Arabia?
2. How it could be linked between body measurements of Saudi women and other international measurements?

### **The Objectives of the Study**

1. Find the averages of standardized measurements of Saudi women body from the age of 25 to 50 years in the western region of Saudi Arabia.
2. Set a schedule measurement for Saudi women and the equivalent sizes of other countries.

### **Significance of the Study**

The importance of research in achieving control and the corresponding to national clothing products to reduce import and increase the demand for local products and stand in front of the invasion of the world market for the domestic market, which promotes the establishment of many of the clothes factories in Saudi Arabia it also helps to establish the rules of garment industry in the Kingdom of Saudi Arabia and make it supportive industry for the national economy.

### **Limits of the Study**

The research is limited to raising the measurements of Saudi women's bodies who are born and living in the western region of Saudi Arabia (Makkah - Jeddah - Taif)

## **DESIGN AND METHODOLOGY**

The research followed descriptive analytical method to answer research questions and checking its hypotheses.

**The Sample of the Study**

The sample of the study consisted of (600) Saudi women born and living in the western region of Saudi Arabia (Makkah - Jeddah - Taif) and their ages ranged between 25 to 50 years.

**The Study Tool**

The researcher used a form to record body measurements of the members of the sample

**Research hypotheses**

**First hypothesis:** Measurements Schedules could be set for bodies of women in the western region of Saudi Arabia; from it the following hypotheses can be formulated:

- Measurements schedules could be set for women bodies size (SS) in the Western Region of Saudi Arabia.
- Measurements schedules could be set for women bodies size (SM) in the Western Region of Saudi Arabia.
- Measurements schedules could be set for women bodies size (SL) in the Western Region of Saudi Arabia.
- Measurements schedules could be set for women bodies size (SXL) in the Western Region of Saudi Arabia.
- Measurements schedules could be set for women bodies size (S2XL) in the Western Region of Saudi Arabia.

**Second hypothesis:** Measurements of Saudi women's bodies could be linked to the corresponding measurements of other countries

**Search procedures**

1- Design a form monitoring measurements of women's bodies  
The measurement form to jot down measurements of women's bodies in the western region was designed and it contains (waistline- body - the body lengths - Body width) and that for the front and back of the body and the arm.

**Validity and reliability of the measurement form**

**Logical validly**

The form of measurement has been introduced to a group of faculty members to express an opinion on the validity of the application in terms of adequacy of the items, and clarity, and to achieve the goal of the questionnaire items, the sequence of the questionnaire items and then the researcher did amendments and finalized the questionnaire in its final shape.

**Reliability**

The reliability coefficient of measurement form was calculated as described in the following table:

Table 1: Reliability of measurement

Reliability of measurement form	Retail midterm		Alfa Coefficient	
	Correlation values	Sig	Correlation values	Sig
Body contours	0.715 - 0.834	0.01	0.808	0.01
Body lengths	0.757-0.861	0.01	0.847	0.01
Body width	0.895-0.926	0.01	0.840	0.01

From Table 1 it is clear that all transactions at the level (0.01) are significant which shows the reliability of measurement form.

**Application of the Measurement Form**

A team have been trained to raise the measurements of different parts of the body so that they can raise the measurements in the same way, and then they were deployed at various places of communities in the Western Region (Mecca - Jeddah - Taif), it was applied on women with Saudi nationality and living (600) women,

and in order for the sample to be representative of the population the difference in height and weight has been taking into account with ensuring the safety of health status, and measurements has been monitoring in the form of measurement with the exclusion of anomalous measurements, statistical transactions have been conducted on the results of the form.

**RESULTS OF THE STUDY**

To ensure the validity of the first main hypothesis, this states:

"Measurements Schedules could be set for bodies of women in the western region of Saudi Arabia; from it the following hypotheses can be formulated"

Arithmetic mean, Range, and the highest and the lowest value were calculated through a sample of (600) women from the western region with various measurements, in dividing the sample, the researcher adopted weight and length, so the sample was classified into a range of measurements includes five measurements.

Symbols characterize the sample measurements of Saudi women from other women were launched, where it represents different body categories as follows:

(SS -SM-SL-SXL-S2XL) and the first symbol of each size (S) represents first letter of the (SAUDI ARABIA), while

the second letter represents the sequence of sizes from small to great depending on body size.

To ensure the validity of the first main hypothesis a group of sub-hypotheses were verified, the following presentation of the results that have been reached through the questionnaire of the body measurements of the women in the study.

**The first sub-hypothesis:**

"Measurements schedules could be set for women bodies size (SS) in the Western Region of Saudi Arabia" The statistical analysis of women Format Size (SS)

**Table 2:** The perimeters and width and the lengths of women's bodies (size SS)

Items	Mean	Range	The minimum value	highest value
Body length	149.5	3	148	151
body weight	55	4	53	57
Chest perimeter	86	2	85	87
the middle perimeter	64	2	63	65
Abdominal perimeter	69.5	3	68	71
The buttocks perimeter	89.5	3	88	91
Neck perimeter	34	2	33	35
Arm perimeter	26	4	24	28
Wristband perimeter	15	4	13	17
Back width	34	2	35	36
Armpit depth	40	4	38	42
Front length	42.5	3	41	44
Back length	40	4	38	42
Shoulder length	12	2	11	13
Height from the middle to the side	19	4	17	21
Sleeve Length	54.5	3	53	56

The previous Table 2 shows that:

- 1- The average length of the body for women in Size (SS) is 149.5 cm, and the minimum length 148 cm, while the highest limit is 151 cm.
- 2- The average body weight for women Size (SS) 55 kilograms, and the minimum weight is 53 kilograms, while the highest limit is 55 kilograms.
- 3- The average chest perimeter for women Size (SS) 86 cm, and the minimum perimeter 85 cm, while the upper limit is 87 cm.
- 4- The average middle perimeter for women Size (SS) is 64 cm, and the minimum perimeter 63 cm, while the upper limit is 65 cm.

- 5- The average abdominal perimeter for women Size (SS) 69.5 cm, and the minimum perimeter is 68 cm, while the upper limit is 71 cm.
- 6-The average buttocks perimeter for women Size (SS) 89.5 cm, and the minimum perimeter is 88 cm, while the upper limit is 91 cm.
- 7- The average neck perimeter for women Size (SS) is 34 cm, and the minimum perimeter is 33 cm, while the upper limit is 35 cm.
- 8- The average arm perimeter for women Size (SS) is 26 cm, and the minimum perimeter is 24 cm, while the highest limit is 28 cm.

9- The average perimeter wristband for women Size (SS) is 15 cm and the minimum perimeter is 13 cm, while the highest limit is 17 cm.

10- The average back width for women in Size (SS) is 34 cm, and the minimum width is 35 cm, while the upper limit is 36 cm.

11- The average depth of the armpit for women Size (SS) 40 cm, and a minimum depth is 38 cm, while the upper limit is 42 cm.

12- The average Front length for women Size (SS) 42.5 cm, and the minimum length is 41 cm, while the upper limit is 44 cm.

13- The average length of the back of the women Size (SS) is 40 cm, and the minimum length is 38 cm, while the upper limit is 42 cm.

14- The average shoulder length for women Size (SS) 12 cm, and the minimum length is 11 cm, while the upper limit is 13 cm.

15- The average height from the middle to the side for women Size (SS) is 19 cm, and the minimum length is 17 cm, while the upper limit is 21 cm.

16- The average length of the sleeve for women Size (SS) is 54.5 cm, and the minimum length is 53 cm, while the upper limit is 56 cm.

Thus the first sub-hypothesis has been validated.

**The second sub-hypothesis:**

**"Measurements of Saudi women's bodies could be linked to the corresponding measurements of other countries"**

The statistical analysis of women Format Size (SM)

**Table 3:** The perimeters and width and the lengths of women's bodies (size SM)

Items	Mean	Range	The Minimum value	Highest value
Body length	156	4	154	158
body weight	59.5	3	58	61
Chest perimeter	90	2	89	91
the middle perimeter	69	4	67	71
Abdominal perimeter	70	4	68	72
The buttocks perimeter	95	4	93	97
Neck perimeter	35.5	3	34	37
Arm perimeter	28	2	27	29
Wristband perimeter	18	2	17	19
Back width	35	2	34	36
Armpit depth	41.5	3	40	43
Front length	44	4	42	46
Back length	41	4	39	43
Shoulder length	12.5	2	11.5	13.5
Height from the middle to the side	19.5	3	18	21
Sleeve Length	56	4	54	58

The previous **Table 3** shows that:

1- The average length of the body for women in Size (SM) is 156 cm, and the minimum length 154 cm, while the highest limit is 158 cm.

2- The average body weight for women Size (SM) 59.5 kilograms, and the minimum weight is 58 kilograms, while the highest limit is 61 kilograms.

3- The average chest perimeter for women Size (SM) is 90 cm, and the minimum perimeter 89 cm, while the upper limit is 91 cm.

4- The average middle perimeter for women Size (SM) is 69 cm, and the minimum perimeter 67 cm, while the upper limit is 71 cm.

5- The average abdominal perimeter for women Size (SM) is 70 cm, and the minimum perimeter is 68 cm, while the upper limit is 72 cm.

6- The average buttocks perimeter for women Size (SM) 95 cm, and the minimum perimeter is 93 cm, while the upper limit is 97 cm.

7- The average neck perimeter for women Size (SM) is 35.5 cm, and the minimum perimeter is 34 cm, while the upper limit is 37 cm.

8- The average arm perimeter for women Size (SM) is 28 cm, and the minimum perimeter is 27 cm, while the highest limit is 29 cm.

9- The average perimeter wristband for women Size (SM) is 18 cm and the minimum perimeter is 17 cm, while the highest limit is 19 cm.

10- The average back width for women in Size (SM) is 35 cm, and the minimum width is 34 cm, while the upper limit is 36 cm.

11- The average depth of the armpit for women Size (SM) 41.5 cm, and a minimum depth is 40 cm, while the upper limit is 43 cm.

12- The average Front length for women Size (SM) is 44 cm, and the minimum length is 42 cm, while the upper limit is 46 cm.

13- The average length of the back of the women Size (SM) is 41 cm, and the minimum length is 39 cm, while the upper limit is 43 cm.

14- The average shoulder length for women Size (SM) 12.5 cm, and the minimum length is 11.5 cm, while the upper limit is 13.5 cm.

15- The average height from the middle to the side for women Size (SM) is 19.5 cm, and the minimum length is 18 cm, while the upper limit is 21 cm.

16- The average length of the sleeve for women Size (SM) is 56 cm, and the minimum length is 54 cm, while the upper limit is 58 cm.

Thus the second sub-hypothesis has been validated.

**The third sub-hypothesis:  
"Measurements schedules could be set for women bodies size (SL) in the Western Region of Saudi Arabia"**

The statistical analysis of women Format Size (SL)

**Table 4:** The perimeters and width and the lengths of women's bodies (size SL)

Items	Mean	Range	The minimum value	highest value
Body length	160.5	5	158	163
body weight	65	4	63	67
Chest perimeter	95	4	93	97
the middle perimeter	75	4	73	77
Abdominal perimeter	78.5	3	76	79
The buttocks perimeter	106	4	104	108
Neck perimeter	37.5	3	35	38
Arm perimeter	30	2	29	31
Wristband perimeter	21	2	20	22
Back width	38.5	3	37	40
Armpit depth	43.5	3	41	44
Front length	46	4	44	48
Back length	43	4	41	45
Shoulder length	13	2	12	14
Height from the middle to the side	20	2	19	21
Sleeve Length	58.5	3	57	60

The Table 4 above shows that:

1- The average length of the body for women in Size (SL) is 160.5 cm, and the minimum length 158 cm, while the highest limit is 163 cm.

2- The average body weight for women Size (SL) 65 kilograms, and the minimum weight is 63 kilograms, while the highest limit is 67 kilograms.

3- The average chest perimeter for women Size (SL) is 95 cm, and the minimum perimeter 93 cm, while the upper limit is 97 cm.

4- The average middle perimeter for women Size (SL) is 75 cm, and the minimum perimeter 73 cm, while the upper limit is 77 cm.



- 5- The average abdominal perimeter for women Size (SL) is 78.5 cm, and the minimum perimeter is 76 cm, while the upper limit is 79 cm.
- 6-The average buttocks perimeter for women Size (SL) 106 cm, and the minimum perimeter is 104 cm, while the upper limit is 108 cm.
- 7- The average neck perimeter for women Size (SL) is 37.5 cm, and the minimum perimeter is 35 cm, while the upper limit is 38 cm.
- 8- The average arm perimeter for women Size (SL) is 30 cm, and the minimum perimeter is 29 cm, while the highest limit is 31 cm.
- 9- The average perimeter wristband for women Size (SL) is 21 cm and the minimum perimeter is 20 cm, while the highest limit is 22 cm.
- 10- The average back width for women in Size (SL) is 38.5 cm, and the minimum width is 37 cm, while the upper limit is 40 cm.
- 11- The average depth of the armpit for women Size (SL) 43.5 cm, and a minimum depth is 41 cm, while the upper limit is 44 cm.

- 12- The average Front length for women Size (SL) is 46 cm, and the minimum length is 44 cm, while the upper limit is 48 cm.
  - 13- The average length of the back of the women Size (SL) is 43 cm, and the minimum length is 41 cm, while the upper limit is 45 cm.
  - 14- The average shoulder length for women Size (SL) 13 cm, and the minimum length is 12 cm, while the upper limit is 14 cm.
  - 15- The average height from the middle to the side for women Size (SL) is 20 cm, and the minimum length is 19 cm, while the upper limit is 21 cm.
  - 16- The average length of the sleeve for women Size (SL) is 58.5 cm, and the minimum length is 57 cm, while the upper limit is 60 cm.
- Thus the third hypothesis has been validated.

**The Fourth sub-hypothesis:  
"Measurements schedules could be set for women bodies size (SXL) in the Western Region of Saudi Arabia"**

The statistical analysis of women Format Size (SXL)

**Table 5:** The perimeters and width and the lengths of women's bodies (size SXL)

Items	Mean	Range	The minimum value	highest value
Body length	165	4	163	167
body weight	74	4	72	76
Chest perimeter	101	4	99	103
the middle perimeter	81.5	3	80	83
Abdominal perimeter	83	4	81	85
The buttocks perimeter	110.5	3	109	112
Neck perimeter	40	2	39	41
Arm perimeter	34	4	32	36
Wristband perimeter	24.5	3	23	26
Back width	41	4	39	43
Armpit depth	45	4	43	47
Front length	47.5	3	45	48
Back length	45.5	3	44	47
Shoulder length	13.5	1	13	14
Height from the middle to the side	20.5	1	20	21
Sleeve Length	60.5	3	58	61

Table 5 shows that:

- 1- The average length of the body for women in Size (SXL) is 165 cm, and the minimum length 163 cm, while the highest limit is 167 cm.
- 2- The average body weight for women Size (SXL) 74 kilograms, and the minimum weight is 72 kilograms, while the highest limit is 76 kilograms.
- 3- The average chest perimeter for women Size (SXL) is 101 cm, and the minimum perimeter 99 cm, while the upper limit is 103 cm.
- 4- The average middle perimeter for women Size (SXL) is 81.5 cm, and the minimum perimeter 80 cm, while the upper limit is 83 cm.

- 5- The average abdominal perimeter for women Size (SXL) is 83 cm, and the minimum perimeter is 81 cm, while the upper limit is 85 cm.
- 6-The average buttocks perimeter for women Size (SXL) 110.5 cm, and the minimum perimeter is 109 cm, while the upper limit is 112 cm.
- 7- The average neck perimeter for women Size (SXL) is 40 cm, and the minimum perimeter is 39 cm, while the upper limit is 41 cm.
- 8- The average arm perimeter for women Size (SXL) is 34 cm, and the minimum perimeter is 32 cm, while the highest limit is 36 cm.

9- The average perimeter wristband for women Size (SXL) is 24.5 cm and the minimum perimeter is 23 cm, while the highest limit is 26 cm.

10- The average back width for women in Size (SXL) is 41 cm, and the minimum width is 39 cm, while the upper limit is 43 cm.

11- The average depth of the armpit for women Size (SXL) 45 cm, and a minimum depth is 43 cm, while the upper limit is 47 cm.

12- The average Front length for women Size (SXL) is 47.5 cm, and the minimum length is 45 cm, while the upper limit is 48 cm.

13- The average length of the back of the women Size (SXL) is 45.5 cm, and the minimum length is 44 cm, while the upper limit is 47 cm.

14- The average shoulder length for women Size (SXL) 13.5 cm, and the minimum length is 13 cm, while the upper limit is 14 cm.

15- The average height from the middle to the side for women Size (SXL) is 20.5 cm, and the minimum length is 20 cm, while the upper limit is 21 cm.

16- The average length of the sleeve for women Size (SXL) is 60.5 cm, and the minimum length is 58 cm, while the upper limit is 61 cm.

Thus the fourth sub-hypothesis has been validated.

**The fifth sub-hypothesis:  
"Measurements schedules could be set for women bodies size (S2XL) in the Western Region of Saudi Arabia"**

The statistical analysis of women Format Size (S2XL)

**Table 6:** The perimeters and width and the lengths of women's bodies (size S2XL)

Items	Mean	Range	The minimum value	highest value
Body length	168.5	3	167	170
body weight	85	4	83	87
Chest perimeter	105	4	103	107
the middle perimeter	87	4	85	89
Abdominal perimeter	90.5	3	89	92
The buttocks perimeter	114	4	112	116
Neck perimeter	43	2	42	44
Arm perimeter	37	2	36	38
Wristband perimeter	27.5	3	26	29
Back width	43	2	42	44
Armpit depth	47	4	45	49
Front length	49	4	47	51
Back length	47.5	3	46	49
Shoulder length	14	1	13.5	14.5
Height from the middle to the side	21	1	20.5	21.5
Sleeve Length	62	4	60	64

The previous Table shows that:

1- The average length of the body for women in Size (S2XL) is 168.5 cm, and the minimum length 167 cm, while the highest limit is 170 cm.

2- The average body weight for women Size (S2XL) 85 kilograms, and the minimum weight is 83 kilograms, while the highest limit is 87 kilograms.

3- The average chest perimeter for women Size (S2XL) is 105 cm, and the minimum perimeter 103 cm, while the upper limit is 107 cm.

4- The average middle perimeter for women Size (S2XL) is 87 cm, and the minimum perimeter 85 cm, while the upper limit is 89 cm.

5- The average abdominal perimeter for women Size (S2XL) is 90.5 cm, and the minimum perimeter is 89 cm, while the upper limit is 92 cm.

6-The average buttocks perimeter for women Size (S2XL) 114 cm, and the minimum perimeter is 112 cm, while the upper limit is 116 cm.



- 7- The average neck perimeter for women Size (S2XL) is 43 cm, and the minimum perimeter is 42 cm, while the upper limit is 44 cm.
- 8- The average arm perimeter for women Size (S2XL) is 37 cm, and the minimum perimeter is 36 cm, while the highest limit is 38 cm.
- 9- The average perimeter wristband for women Size (S2XL) is 27.5 cm and the minimum perimeter is 26 cm, while the highest limit is 29 cm.
- 10- The average back width for women in Size (S2XL) is 43 cm, and the minimum width is 42 cm, while the upper limit is 44 cm.
- 11- The average depth of the armpit for women Size (S2XL) 47 cm, and a minimum depth is 45 cm, while the upper limit is 49 cm.
- 12- The average Front length for women Size (S2XL) is 49 cm, and the minimum length is 47 cm, while the upper limit is 51 cm.

- 13- The average length of the back of the women Size (S2XL) is 47.5 cm, and the minimum length is 46 cm, while the upper limit is 49 cm.
- 14- The average shoulder length for women Size (S2XL) 14 cm, and the minimum length is 13.5 cm, while the upper limit is 14.5 cm.
- 15- The average height from the middle to the side for women Size (S2XL) is 21 cm, and the minimum length is 20.5 cm, while the upper limit is 21.5 cm.
- 16- The average length of the sleeve for women Size (S2XL) is 62 cm, and the minimum length is 60 cm, while the upper limit is 64 cm.

Through previous schedules of measurements of women's bodies in the western region of Saudi Arabia could be set.

**Table 7:** The average sizes of the women in the western region of Saudi Arabia

Items	Sizes				
	SS	SM	SL	SXL	S2XL
Body length	149.5	156	160.5	165	168.5
body weight	55	59.5	65	74	85
Chest perimeter	86	90	95	101	105
the middle perimeter	64	69	75	81.5	87
Abdominal perimeter	69.5	70	78.5	83	90.5
The buttocks perimeter	89.5	95	106	110.5	114
Neck perimeter	34	35.5	37.5	40	43
Arm perimeter	26	28	30	34	37
Wristband perimeter	15	18	21	24.5	27.5
Back width	34	35	38.5	41	43
Armpit depth	40	41.5	43.5	45	47
Front length	42.5	44	46	47.5	49
Back length	40	41	43	45.5	47.5
Shoulder length	12	12.5	13	13.5	14
Height from the middle to the side	19	19.5	20	20.5	21
Sleeve Length	54.5	56	58.5	60.5	62

Through the above it has been verified from the main and the first hypothesis, which stated that "Measurements schedules could be set for women bodies size (SS) in the Western Region of Saudi Arabia." may be due to the previous training of the staff who raised the measurements, in addition to the cooperation that was found from a sample research and their understanding

and a desire in the existence of clothes identical to their bodies, and to get rid of the problem of modifying clothes after purchase to fit the body, and the results of the study agreed with the study of each of (Magda Yusuf: 1990), which concluded with the standard measurements schedule of Egyptian women in pregnancy period in Cairo Governorate, and the study of (Yusry, 2007) who

reached to put a record Sizes for Women in Kuwait, and the study of (Gihan Fahmi, 2008) which managed to put the record Format tables for teens from the age (12 to16) in Greater Cairo governorate of the Arab Republic of Egypt, who also consistent with the study.

**To ensure the validity of the second main hypothesis, this states:**

"Measurements of Saudi women's bodies could be linked to the corresponding measurements of other countries"

Measurements schedules that have been reached were compared to dependent measurements among countries with the most prevalent products in the Saudi market, which is frequently used in garments, Saudi Arabia factories tables, and the comparison was based on chest perimeter measurement, where is the basis for building women form the upper part of the clothing, and the area around the buttocks, which is the basis for building a model for women lower part of the clothing, as shown in **Table-8:**

**Table 8:** Shows the Saudi sizes and the equivalent sizes from other countries

Chest perimeter of Saudi women	Buttocks perimeter of Saudi women	Saudi size	English, and the US size	French and Italian size	German size
86 cm	89.5 cm	SS	12	40	38
90 cm	95 cm	SM	14	42	40
95 cm	106 cm	SL	16	44	42
101 cm	110.5 cm	SXL	18	46	44
105 cm	114 cm	S2XL	20	48	46

It is already clear that the Saudi size could be linked to corresponding sizes of other countries through the chest perimeter, and the area around the buttocks, so the main second hypothesis was achieved.

**RECOMMENDATIONS**

1. Cooperation between the Standards Organization and the Ministry of Trade and Industry and the academia to build a record of the measurements schedule of the different categories of community.
2. Adopting the Saudi standards body of measurements schedule of Saudi women to provide the factories to work according to it in production and raise the quality of the local product.
3. Activation of these measurements through college courses specializing in garment production in Saudi Arabia.
4. Conducting studies on a regular basis to regulate and evaluate these measurements.

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