





# Performance requirements for children's clothing Down Syndrome class design and technical

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### **Research Summary**

The clothing of the basic needs in humans in general for people with special needs from the category of children with Down syndrome "Down syndrome" in particular, and you need this class to all, especially in the psychological, social and physical aspects of care and attention

Given the world's attention in recent years to the need for and interest in their care special and their requirements from the side clothes to meet their requirements performance and commensurate with the type of disability so it became necessary to train them to wear and take off their clothes, skills and other life, and to those around them to take responsibility and To germ to modify these behaviors, Out of that burden falls on the fashion designer to find solutions design using various production requirements that are commensurate with their skills and their performance motor to facilitate adaptation to the environment they live in. Clothing producers who turn design solutions to the reality of executive needs clothes weaving techniques appropriate in line with the nature of their bodies and provide them with comfort during Donning and use. The study confirms (Coleman Helen & France's H: 1990) that a large proportion of children with special needs do not find clothes fit with disabilities are various, and although access to some but they need to be some modifications, And confirmation of the results of this study the researchers conducted a prospective study addressed to the mothers of those with children of special needs category Down syndrome to identify information about the availability of clothes fit their children's markets private early childhood and the results were evident as follows, that the views of mothers showed difficulty provide clothes suit children Down syndrome at (90%), and the lack of sizes for clothes in the domestic market at (80%), and it not diverse (98 %), Mothers also confirmed that clothing scattered in the domestic market does not meet their needs clothes with Percentage (100%), They also sew clothes for their children with maker clothes (70%), The children find it difficult when you wear clothes available in the local market on their own with Percentage (100%), and that







mothers find it difficult when helping their children to wear and take off clothes scattered markets with Percentage (100%).

## By displaying the foreground can be formulated research problem in the following questions: -

- 1- What The performance requirements for the clothing of children with special needs group (Down syndrome) from the age of (3: 6) years?
- 2- What possibility of developing a standard table for children with special needs group (Down syndrome) from the age of (3: 6) years?
- 3- What the proposed designs clothes for children from the age of (3: 6) years with special needs category (Down syndrome) to meet the performance requirements do they have?
- 4- What views (a- experts, b- producers) the proposed designs against?
- 5- What the views of consumers towards our the proposed designs?
- 6- The possibility of better implementation of the proposed designs and accessories production techniques commensurate with the performance requirements of children with special needs group (Down syndrome), based on reviews of arbitrators?

## **Objectives: The research aims to:**

- 1- identify the performance requirements for the clothing of children with special Needs of physically disabled group (Down syndrome) from the age of (6: 3)

  Years
- 2- Prepare a standard table for children with special needs of physically disabled Group (Down syndrome) from the age of (3: 6) years
- 3- Establish of design proposals suit performance requirements for children With special needs group (Down syndrome) from the age of (3: 6) years.
- 4- Determine the views of (a- experts, b- producers) towards the proposed designs.
- 5- Determine the views of the consumers towards the proposed designs.
- 6- Implementation of the best designs based on the opinions of the arbitrators and

The verification of their suitability for children category (Down syndrome) from

The age of (3: 6 years).

Research Methodology: This research follows all of the descriptive analytical method and experimental approach to the suitability of the research







## objectives.

**Descriptive approach**: (cared for studying the physical differences structure anatomy of the body of the child category Down syndrome in early childhood and the collection of physical their measurements by using a descriptive approach tools, a style of field samples, design questionnaires to get to the views and responses gentlemen arbitrators in the designs of the suggested).

**Analytical:** Classification of conducting statistical measurements of transactions it to get to the standardized measure for people with special needs table group (Down syndrome), the analysis of the views of the arbitrators in Gentlemen the proposed designs.

Experimental method: is used in its application executing on the same clothes to find out their suitability for the performance requirements of the physically disabled (Down syndrome), as well as knitting techniques used in implementation.

## Borders Search: The present study is limited to: -

- 1- Category with special needs (Down's syndrome) age period of early childhood Age (3-6 years).
- 2- Establish eight proposals meet the requirements of design performance for a Class with special needs (Down's syndrome) Age period of early childhood age (3-6 years) for the products (dungarees, blouse, dress, skirt)
- 3- Implementation of one design, which received the highest results (average Level) before arbitrators.

#### **Search tools:**

- 1- Field visits.
- 2- Poll mothers to identify those with the special needs of children with Down Syndrome in the category of children's clothes scattered markets. .
- 3- Questionnaire to get feedback from both experts and producers in the proposed Designs.
- 4- Questionnaire to get feedback from mothers and supervisors in the designs of The suggested.

#### **Summary of Results Summa Conclusion: - The results yielded the following:**

1- Identify requirements performing for children's clothing with special needs Category Down syndrome of age (3: 6) years, namely, (durability, comfort During wearing aesthetic appeal, keeping a Clean and textures physicist, be Made of safe materials on child health and pre-







requisites of the production of Secure them Balartdae a disabled child's body also protects it from weather).

- 2- Identification of the design of children's clothes specifications with special Needs category Down syndrome of age (3: 6) years, which is to be (the process Easier for the child wearing them and takes them off without help, designed Attractive lines and in line with the anatomical shape of the child's body (Down Syndrome), a belly rise, allow freedom of movement of the child, maintains a good appearance for as long as possible, resistant to dirt and easy to take care of it, Strong endurance and well-made, implementation, suitable for the size of the child and can be used for as long as possible, containing pockets to put the child needs it.
- 3- Preparing Format Table for children category (Down syndrome) from the age of (3-6) years through a collection of sizes and taking an average.
- 4-Evaluation of eight proposals of design for children category (Down syndrome) from the age (3-6 years) for the products (dungarees, skirt strabs, and blouse, dress) in accordance with standard criteria for a new design and vision can be accepted to meet the performance of the clothes this category requirements.



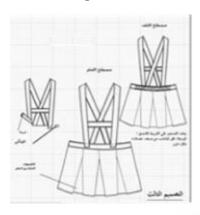
5- Positive views of the research samples to the designs proposed by the through the application of two tests (Friedman to compare the broker several communities, all linked to the very best of the proposed designs from the point of experts and producers of view, Kruskal Wales compared to several independent communities for the very best proposed designs from the point of view of consumers) and that the best designs in accordance with to the opinions of experts, producers and the consumers who received the highest average ranks is the third design product (skirt), in which several specifications provide the most important (relevance phase age and the nature of the child's movement, voguish prevailing, easy wearing helps to hide the emergence of the







abdomen, the proposed design Negotiable for implementation, the proposed design is fit to be a marketable product in the domestic market)



6-The implementation plan for the best design mode (the third design) from the viewpoint of arbitrators, who got the highest score agreed depending on the operating stages (Product file) which passes by the product during the manufacturing to be at the highest level of quality and achieve the performance requirements for wearing class children (syndrome Down) of age (3: 6) years by (design characterization, characterization measurements, specifications of raw materials, natural and mechanical properties of the fabrics used in the manufacture of skirt, used to determine production requirements, stages run skirt).







## Stages operation skirt strap

M	Description process	Practical form	The form of knitting	The form of the machine used	Stitch type, number	The number of needles	Number of stitches stock exchange	Number of threads			
First / stage preparation strap											
1	Sewing line str shoulder back a forth and the close the parti Suspender	and en lies			Closed - ٣٠١ SSa	,	٨	۲			
2	Lighten sewing Balki heart strand then iron	rap ed		N			-	-			
3	Install masking tape (Velcro) the surface of bottom of the strap forward	on the bra			Closed - ٣٠١ SSa		٨	۲			
			II / stage o	f preparation	Waistband						
1	Install the waistband in fr of the filler		1	2		7	-	-			
2	Install acetic waistband in t back	the second secon	4		Closed - " · 1 SSa	1	٨	۲			
3	Iron waistband processing to Sewing		-	a	-	-	-	-			
4	Close waistba forward and backward at t side line		4		Closed - ٣٠١ SSa	,	٨	۲			







M	Descriptio		ctical orm	The form of	The form of the machin		The	Number of	of Number of	•		
	n process	10	OTIII	knitting	used	e type,	numbe of	r stitches stock	threads			
				8			needle					
	Third / preparation stage in front of skirt											
1	Clean side for	11 11		1-700	over	١	11	٣	+			
-	line or over lock		100	1	-	lock						
					The state of the s	SSa-2						
2	Three gallons of		1	-	_	-	-	-	-	+		
	work in front and											
	ironed.											
3	Invert close			13	1-1-0	Closed	1	٨	۲			
	sewing fro			<u></u>	-	SSa						
	higher			1								
4	Iron Inve			100	-		_	_		+		
•	non my		11/100									
			Fou	irthly / pre	paration sta	ge behind	skirt					
1	Clean the ba				7	over		11	٣			
	side over loc	k line	7 6	4-180		lock						
					- Common	SSa-2						
2	Iron three In back.	verts			2			-	-			
3	Inverts close	three	15100	7	di	Closed		٨	۲	$\dagger$		
	sewing from			4	1	- ٣٠١						
	top distance cm	of 3	-	100000	1	SSa	4					
1	Iron Invert									+		
4	Iron invert		1					-	-			
	•			V / ass	sembling pa	rts skirt		·				
1	Sewing foots			13	11-	Closed	١	٨	۲	T		
of skirt side (left		<u></u>		1	- ٣٠١ SSa							
	and right)				7	SSu						
2	Iron and lightening sewing		10.00	-		-	-	-	-			
	inginening sewing											
M	Description	Pı	ractical	The	The form	Stitch	The	Number	Number	+		
	process		form	form of	of the	type,			of threads			
				knitting	machine	number	of	stock				







	300			used		needles	exchange				
3	Installation of waistband preset in central skirt line and install in their place of employment specified in the back		4		Closed - T·ISSa	١	٨	Y			
4	Install adhesive tape (Velcro) on the surface of waistband from abroad				Closed - T•1SSa	,	٨	۲			
5	Install a strap in the back of the middle-shaped x				Closed - T. ISSa	1	8	2			
6	Tail drape of skirt		B		Closed - r·\SSa		٨	۲			
			VI /	finishing st	tage						
1	The removal of all excess sewing thread		X	<b>P</b>	1		4	-			
2	Final inspection	\$ T	X.	with.			7	-			
			Sevent	h / final stag	ge Iron	1					
1	So that all parts of the product			7		-		-			
	Eighth / Packaging										
1	Eighth / Packaging	人新	-		-	-	-	-			

## **Recommendations:**

1. Further research and studies on the design solutions that help children with Down syndrome category to achieve performance requirements during wear and take off their clothes on their own.







- 2. The need for a standard physical measurements especially for the children of category Down syndrome in different age groups to satisfy their needs Of clothing
- 3. The need to focus on the creation and production unit specializes in the production of clothing category Down syndrome within the garment factories ready-to-children as a class in society cannot be neglected.

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