

PERCEPTION, AWARENESS AND KNOWLEDGE OF INDIGENOUS TEXTILE DESIGNERS IN ITOKU-ABEOKUTA ON THE DISCHARGE METHOD OF FABRIC DECORATION

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Abstract

Despite the development of discharge paste, textile designers in Itoku-Abeokuta still ignore its use in screen printing. A descriptive survey involving a practical approach through the production of discharge printed fabric and a questionnaire was used to purposively collect data from (72) Itoku Adire designers. The result shows that 58.3% of respondents were female and aged ($\bar{x} = 35.1$) years, 61.1% have less than 10 years of designing experience and 73.6% were aware of the discharge method of fabric decoration. A low level of awareness was revealed as respondents do not know discharge can be done with screen printing ($\bar{x} = 0.33$); but a high level of awareness on the effect chlorine bleaches has on fabric ($\bar{x} = 1.67$). Knowledge of the discharge method measured revealed that respondents had good knowledge of the use of bleach for discharge ($\bar{x} = 3.11$). There is no significant relationship between respondents' socio-demographic characteristics and their awareness ($p = 0.32$), and also respondents' perception of the discharge screen printing method ($p = 0.08$). Furthermore, the results revealed a significant relationship ($p > 0.01$) between respondents' knowledge, awareness, and perception of the use of bleach for the discharge method. In conclusion, the discharge screen printing method is not used in the study area because respondents had low awareness, relatively good knowledge, and a negative perception of the discharge method of fabric design due to the lack of ready-to-use discharge pigment, as well as other pigments used for designing.

Keywords: Perception, Awareness, Knowledge, Textile, Designers, Discharge

Introduction

Surface decoration is the process of adding structures, patterns, and ornamentation to fabric surfaces by coordinating complementary colours and materials. Applique, embroidery, quilting, heat setting, textural effects, and printing techniques are among the techniques used (Vidyasagar, 2016; Surface Design Association, 2002; Wisbrun, 2012). Three types of printing are mentioned by Pamela (2021): discharge, resist, and direct printing. Lakshmi et al. (2011) emphasizes how surface design may be used artistically. Rathore 2022; Beca, 2019; Vidyasagar, 2016; and Storey, 1992 discuss direct printing, which is a technique for colouring fabric using pigment or print paste. One common technique for creating colourful pattern designs is screen printing, however direct printing is also widely used. The earliest methods for printing textiles were resist and coloured printing; discharge printing calls for taking colour out of a coloured cloth. For designs to be distinctive and aesthetically pleasing, both approaches are necessary.

The discharge agent is applied using various suitable methods, including stencils, embossed rollers, brushes, or sprays. Kiron (2011) highlights the use of saponifying chemicals in the discharge printing process to create various colour effects on fabrics, especially organic cellulose esters. Printing involves creating coloured designs on textiles, rather than dyeing, weaving, or combining coloured threads. The process involves steaming, washing, drying, and additional finishing procedures. Miles (2003) and Adeboye (n.d) have explored discharge printing, a vital process in textile printing. In comparison to direct screen printing, it provides more visually appealing outcomes, better quality, and a more manageable approach. Nevertheless,

Adeboye's research revealed that the discharge approach is not used by the majority of Nigerian designers of handcrafted fabrics and clothing, who instead only employ two of the three surface decoration techniques. This is because the initial discharge agents, Rexoleme and Melcol RR, were only widely available and were in use for decades prior to the introduction of the discharge technique. Olowookere (2016) stated that indigenous textile designers from Itoku Abeokuta exhibit unusual individuality through their hands-on skills. Quick technical progress has caused a move away from the discharge method of cloth decoration and towards resist techniques and handcrafted screen printing. Because there is a shortage of discharge pigment and aesthetics, indigenous designers are not as familiar with this technique, which produces subtle colours and intricate patterns. Their investigation of the discharge technique has been hampered by this.

In 1802, Monteith created the first discharge printing by discharging a chlorine solution. The fabric was placed in between perforated plates, and the cloth was exposed to the chlorine solution through the plates. Storey, (1992) asserted that the first person to produce both coloured and white discharge on the same fabric was Daniel Knoechlin, a Frenchman. Knoechlin found an illuminating dye solution that didn't require a discharge agent, which allowed him to colour and remove dye from fabric at the same time. In order to produce a solid shade of colour, pre-dyed fabric is destroyed using chemicals in a process called discharge printing, often referred to as extract printing. In this method, dyes are reduced and oxidised by a discharging agent such as chlorine bleach, which leaves a white discharge pattern on a coloured ground. Compared to screen or roller printing, this technique produces a light-printed image that is richer and more saturated while maintaining a darker background colour (Vidyasagar, 2016).

Storey (1992) and Miles (2003) draw attention to the aesthetic benefits of discharge printing, which include the avoidance of overlapping colours, light patterns, crisp edges, and deep hues. Because of the better aesthetic results these patterns provide than direct printing, discharge printing has become a niche market for textiles. Even with its advantages, discharge printing is still a common design option.

Miles further identifies the following reasons for the limited use of the discharge method to be expensive, specialized equipment is required; the results are difficult to control; Removal of dyes generates large amounts of waste; the reducing agent used can be hazardous; and Registration is difficult. The discharge style of printing, which uses the chemical oxidation of dye to produce a pattern, is covered by Abd El-AAty et al. (2022). Acids, alkalis, salts, and oxidising or reducing agents are examples of discharging agents. The right conditions are essential since oxidising chemicals can have negative effects on cotton substrates. Sodium formaldehyde sulphonylate is a widely used discharge agent, available from Ciba Formosul or BASFRongalite. The dyes, backdrop depth, and fabric being printed all affect how much reduction agent is needed. According to Karmakar's research from 1999, bleach works well to remove colour from cellulosic fibres like rayon, cotton, and linen. When bleached, 100% cotton produces the greatest results. However, due to inconsistent or ambiguous effects, fabrics dyed with vat dye mixed with caustic soda and hydrosulphite solutions are not recommended for bleaching. One technique for applying bleach solution directly to cloth is to splash, spray, or pour the solution onto the material. Applying the bleach directly to the fabric after tracing or painting the design on it with a paintbrush, toothpick, earphones, or pointed foam is another way to accomplish this. Another technique for producing graphics that are exact or almost correct is screen printing. The design can be photo-stenciled or blocked by hand to appear on the screen. Nevertheless, depending on how much bleach is applied, colour gradation may occur. Light colours are produced by excessive application, while variances in colour are produced by little application, which lowers intensity. Artists can use this phenomenon to incorporate colour changes into their works.

The study examines how native textile designers in Abeokuta perceive and are familiar with the discharge process for fabric decorating, with a particular emphasis on hand-printed fabrics and sociodemographic traits. Through increased and varied production, the results can enhance the level of living, economy, and revenue generation of indigenous textile designers. The study also emphasises the necessity for easily accessible, widely available discharge agents that are easy to use and environmentally beneficial. At the 0.05 threshold of significance, three null hypotheses were examined.

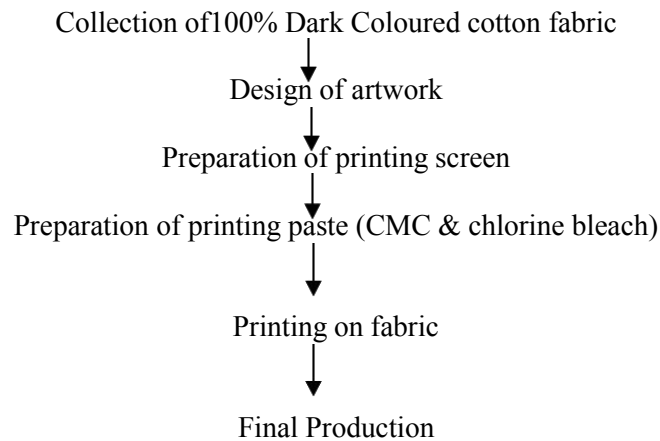
Materials and Methods

The study used a descriptive methodology, combining theoretical and practical approaches, to survey the Itoku market in Abeokuta. While the actual technique entailed printing cloth using the discharge process, the theoretical approach required using questionnaires to collect information from Itoku adire-indigenous textile designers. Situated in Ogun State, Nigeria, Abeokuta is 103 kilometres away from Lagos and 79 kilometres away from Ibadan. (Karmakar, 1999). *Itoku, a hub of arts and fashion in Abeokuta*, is home to the Egba Yoruba subgroup, as noted by (Biobaku, 1991). The city's renowned Itoku market attracts designers, dyers, fabric beaters, and adire fabric retailers (Saheed, 2013).

The study surveyed 72 textile designers in the Itoku market, including screen printers, batik designers, and tie-and-dye artists. A purposive sample technique was used to select Itoku adire designers. Pilot research among Asero textile designers tested questionnaire validity, finding a Cronbach's Alpha reliability coefficient of 0.803. Data analysis included mean, percentage, frequency, and rank, with Chi-Square used to test hypotheses.

Experimental Procedure

Fabrics suitable for the discharge process were bought and tested from the Itoku market. Two 64 by 16-inch wooden rectangular frames were constructed with the help of a carpenter, and T110 mesh was put on top of the frames. Using graphics software, two 14 x 20-inch artworks were produced, and three of each were printed on ISO A3 paper. The printed artwork on ISO A3 paper were merged to make a 60 by 14-inch artwork, which was then exposed via photo-stenciling method. Opaque ink from the inside of the mesh was applied to the screen's surface upon exposure. The ink was allowed to dry on the exposed part of the mesh. The flat-bed screen printing technique, which is usually used for custom work, was used to complete the printing. The two ingredients that comprise the printing paste are carboxymethyl cellulose (CMC), a stronger bleach, and chlorine bleach, which was previously used by Adeboye (n.d) as a fabric discharge agent. The flowchart below demonstrates the procedure.



Results

Socio-Demographic Characteristics of the Respondents

Table 1- Socio-Demographic Characteristics of the Respondents (n=72)

S/n	Items	Freq.	%	Mean	Std. Dev.
	Male	30	41.7		
	Female	42	58.3		
	>= 20	1	1.4		
	21-39	49	68.1		
	40-59	21	29.2		
	Above 60	1	1.4		
	Yoruba	71	98.6		
	Others	1	1.4		
	Single	25	34.7		
	Married	41	56.9		
	Divorced	6	8.4		
	No formal education	2	2.8		
	Primary	7	9.7		
	Secondary	40	55.6		
	Tertiary	23	31.9		
	1 to 10	44	61.1		
	11 to 20	20	27.8		
	21 to 30	4	5.6		
	31 to 40	4	5.6		
	Yes	53	73.6		
	No	19	26.4		

According to Table 1, 58.3% of respondents were female, demonstrating that there is no gender balance in the indigenous textile business, and 68.1% of respondents were between the ages of 21 and 39 ($x = 35.1$). 52.8% of the interviewees were Muslims, 98.6% were Yoruba, and 1.4% were Idoma. The majority had completed secondary education (55.6%), while 31.9% had completed tertiary education. Moreover, 61.1% of respondents had less than 10 years of expertise in designing native textiles. The discharge method of fabric decoration is known to 73.6% of the respondents.

Knowledge of Indigenous Textile Designers on the discharge printing

Multiple choice questions with one correct and two wrong answers were set comprehensively on the discharge method of fabric decoration to test respondents' knowledge and were graded.

Table 2: Respondents knowledge on the discharge method of Fabric Designing

QUESTIONS (Correct option)	Answer option						Mea n	Rank	
	A		B		C				
	Freq.	%	Freq.	%	Freq.	%			
The discharge method is (Colour Removal)	59	81.9	0	0	13	18.1	2.64	3 rd	
Discharge affects only fabric colour (No)	52	72.2	20	27.8	0	0	1.72	8 th	
Fabric can be discharged with (bleach)	56	77.8	16	22.2	0	0	1.78	6 th	
Major substance use for Discharge (Bleach)	11	15.3	58	80.6	3	4.2	2.11	5 th	
Discharge can be done like this (Screen Printing)?	27	37.5	16	22.2	29	40.3	1.97	10 th	
Fabrics can be discharge using (Bleaches)	58	80.6	4	5.6	10	13.9	2.67	4 th	
Fabrics colours best for discharge are (Dark colours)	55	76.4	14	19.4	3	4.2	2.72	7 th	
Colour you get when you discharge fabric (off-white)	5	6.9	64	88.9	3	4.2	2.03	2 nd	
Effective discharge fabric has to be (cotton)	68	94.4	0	0	4		2.89	1 st	
Bleaching is same as discharge ((Yes)	49	68.1	23	31.9	0	0	1.68	9 th	
	Average Mean						2.22		

Table 2 shows a measure of knowledge of respondents on the discharge method of fabric design. According to the respondents' percentage of correct answers, the table also shows the respondents' knowledge of the discharge method of fabric decoration as follows: Question 9 ranked first, Question 8

ranked second, Question 1 ranked third, Question 6 ranked fourth, Question 4 ranked fifth, Question 3 ranked sixth, Question 7 ranked seventh, Question 2 ranked eighth, Question 10 ranked ninth, and Question 5 ranked tenth. Table 4- Summary of Knowledge Test Score

S/N	Knowledge Score	Frequency	%
1	9-10	39	54.2
2	7-8	13	18.1
3	5-6	9	12.5
4	1-4	11	15.3

Table 5- Categorized Mean Knowledge Test Score

S/N	Knowledge Level	Range	Mean Range
1	Excellent	9-10	3.5-4.0
2	Good	7-8	2.5-3.4
3	Fair	5-6	1.5-2.4
4	Poor	1-4	0-1.4
Grand Mean		3.11	

According to Table 4, which summarises knowledge test results using the discharge method, 54.4% of respondents scored a total of (9–10) questions, indicating an excellent level of knowledge; 18.1% scored (7–8), indicating a good level of knowledge; 12.5% scored (5–6), indicating a fair level of knowledge; and 15.3% scored (1–4), indicating a poor level of knowledge.

Table 5 shows the results of the classified mean knowledge test scores. The average mean is 3.11, and the mean range indicates that the respondents have a solid understanding of the discharge method of cloth decoration.

Perception of Textile Designers towards Discharge Method as Fabrics Decoration

This section focused on the data analysis and presentation for the ten (10) questions on the (perception of textile designers checked towards discharge method as fabric decoration). When expressing an opinion, some statements employ the terms strongly agree (SA), agree (A), disagree (D), and disagree strongly (SD). Included among the descriptive data were mean, frequency, percentage, and rank.

Table 6: Respondents' Perception towards the discharge method

S/n	Statement	SA Freq. (%)	A Freq. (%)	D Freq. (%)	SD Freq. (%)	Mean	Rank
1	Discharge method of fabric is stressful to practice	32 (44.4)	15 (20.8)	9 (12.5)	16 (22.2)	2.88	4
2	Using bleach to design can damage fabric	19 (26.4)	22 (30.6)	17 (23.6)	14 (19.4)	2.64	2
3	The designs done using discharge method appear beautiful	32 (44.4)	29 (40.3)	7 (9.7)	4 (5.6)	3.24	7
4	I am aware of discharge method of fabric decoration	39 (54.2)	13 (18.1)	7 (9.7)	13 (18.1)	3.08	6
5	If I use bleach to design fabric I won't get patronage	16 (22.2)	8 (11.1)	17 (23.6)	31 (43.1)	2.13	1
6	Design like Eleko motif can be done fabric using discharge method	28 (38.9)	27 (37.5)	9 (12.5)	8 (11.1)	3.04	5
7	Quality of fabric will reduce using bleach	24 (33.3)	19 (26.4)	15 (20.8)	14 (19.4)	2.74	3
8	Discharge fabric require more patience while working on it	38 (52.8)	26 (36.1)	6 (8.3)	2 (2.8)	3.39	9
9	Producing discharge fabric will be another source of income	42 (58.3)	23 (31.9)	5 (6.9)	2 (2.8)	3.46	10
10	Bleach create a unique design on fabric	38 (52.8)	23 (31.9)	7 (9.7)	4 (5.6)	3.32	8

Overall Mean= $\sum x/\text{No of Statement} = 20.1/10 = 2.01$

Table 6 shows how respondents saw the discharge method as cloth decorating. The majority of respondents, 44.4%, said they strongly agreed that using the discharge method to design fabric is stressful to undertake, 30.6% said using bleach to design fabric can damage it, and 44.4% said using the discharge method to design fabric results in beautiful designs. I am aware of the discharge method of cloth decoration, according to 54.2% of respondents, whereas 43.1% of respondents said they strongly disagreed. I won't get any business if I create fabrics using bleach. 33.3% of respondents strongly agree that bleaching fabrics will lower their quality, 52.8% of respondents say they strongly agree that working with discharge fabric requires more patience, 58.3% of respondents say they strongly agree that producing discharge fabric will be another source of income, and 38.9% of respondents say they strongly agree that designs like the Eleko motif can be applied to fabric using discharge method.

The table shows that producing discharge fabric will be another source of income, with the lowest rank of 10 indicating a low perception of the respondents, and the highest rank of 1 indicating a high perception of the respondents on the statement that if I use bleach to design fabric, I won't get patronage. It can also be deduced from the table that the respondent's perception of the discharge method is low with an overall mean = 2.01.

Level of Awareness of Discharge Method of Fabric Decoration among Textile Designers

This section was concerned with the analysis and presentation of the data regarding the ten (10) questions on the (level of awareness of textile designers on the discharge method as fabric decoration). The descriptive statistics used included mean, frequency, percentage and rank.

Table 7- Respondents’ level of awareness on the discharge method

S/n	Statement	Yes Freq. (%)	No Freq. (%)	Mean	Rank
1	I have worked on fabric using bleach	55 (76.4)	17 (23.6)	1.76	5
2	I have seen discharge fabrics before	61(84.7)	11(15.3)	1.85	2
3	Does bleach have an effect on fabric?	50 (69.4)	22 (30.6)	1.69	6
4	Bleach is used to create designs on fabric	57 (79.2)	15 (20.8)	1.79	3
5	Bleach is used for discharge method	47 (65.3)	25 (34.7)	1.65	8
6	Bleach creates light colours on dark fabrics	57 (79.2)	15 (20.8)	1.79	4
7	Discharge can be done by screen printing	17 (23.6)	55 (76.4)	1.24	10
8	The <i>Eleko</i> motif can be used as a design for discharge	50 (69.4)	22 (30.6)	1.69	7
9	Chlorine has an effect on the fabric	21 (29.2)	51 (70.8)	1.29	9
10	Discharge fabric can be sewn as a garment	67 (93.1)	5 (6.9)	1.93	1

Overall Mean = $\sum x / \text{No of Statement} = 16.68/10 = 1.67$

Table 7 shows the level of awareness of discharge method of fabric decoration among respondents. 76.4% of the respondents reveal that they have worked on fabric using bleach, 84.7% agreed that they have seen discharge fabrics before, 69.4% know that bleach has an effect on the fabric, 79.2% of the respondents revealed they were aware of using bleach to create a design on fabric., 79.2% were aware that bleach creates light colours on dark fabrics. 76.4% of the respondents reveal they do not know discharge can be done like screen printing. 69.4% of the respondents reveal *Eleko* motif can be used as a design for discharge, and 93.1% of the respondents reveal they were aware that discharge fabric can be sow as garment.

This table shows that Do you know discharge fabric can be sow as garment have the highest rank of 1 which deduces that the respondents are much aware of this statement while Do you know discharge can be done like screen printing have the lowest rank of 10 which deduces that the respondents not aware of this statement.

It can also be deduced from the table that the respondents’ level of awareness of the discharge method is high with an overall mean= 1.67.

a. Result of Hypotheses Test

Table 8- Test of significant relationship between socio-demographic characteristics and respondent’s awareness of discharge method of fabric decoration.

H₀₁: There is no significant relationship between socio-demographic characteristics and awareness of the respondents on the discharge method of fabric decoration.

Null Hypothesis	Test	Sig.	Decision
The distribution of the socio-demographic characteristics is the same across categories of awareness	Independent-Samples Kruskal-Wallis Test	0.317	Retain the null hypothesis

The significance level is 0.317

Table 8 shows that since the significance level is greater than Sig. (0.05), therefore do retain the null hypothesis and conclude there is no significant relationship between socio-demographic characteristics and awareness of the respondents on the discharge method of fabric decoration.

Table 9- Test of significant relationship between socio-demographics and respondents perception of discharge method.

H₀₂: There is no significant relationship between socio-demographics and the perception of the respondents on the discharge method.

Null Hypothesis	Test	Sig.	Decision
The distribution of the socio-demographic characteristics is the same across categories of perception	Independent-Samples Kruskal-Wallis Test	0.078	Retain the null hypothesis

The significance level is 0.078

Table 9 shows that since the significance level is greater than Sig. (0.05), therefore do retain the null hypothesis H₀₂ and conclude there is no significant relationship between socio-demographics and the perception of the respondents on the discharge method.

Table 10: Test of significant relationship between knowledge and awareness of the respondent's perception of discharge method.

H₀₃: There is no significant relationship between knowledge and awareness of the respondent's perception of discharge method.

Null Hypothesis	Test	Sig.	Decision
The distribution of knowledge is the same across categories of awareness	Independent-Samples Kruskal-Wallis Test	0.000	Reject the null hypothesis

The significance level is 0.000

Table 10 shows that since the significance level is less than Sig. (0.05), we, therefore, do reject the null hypothesis H₀₃ and conclude there is a significant relationship between knowledge and awareness of the respondent's perception of the discharge method.

Discussion

The major interest of this study is to access the knowledge, awareness and perception of indigenous textile designers on the discharge method of fabric decoration. The socio-demographic characteristics of the respondents revealed showing that the respondents with the higher percentage age range are between 21-39 years and also a higher percentage of the respondent is between 1-10 years as a designer which implies that the respondents are in their adult age and which has given them the opportunity to acquire textile design knowledge in their youthful age with that level of low experience as designers.

While trade secrets appear to remain a significant factor in the production of *adire*, the industry appears to be drawing a greater proportion of younger males than females. Currently, there are more women working in the field, but very few of these women are interested in learning the craft. These statistics suggest that there is beginning to be a gender balance. With the new trend, more young men acquiring *adire-making* skills and adapting the cloth to an entirely new range of products, the statement that *adire* production and sales are the sole business for women may change very soon (Braide, 2016).

The result revealed that 31.9% of the respondents have Tertiary education levels. Ogunduyile, (2001), affirmed that the introduction of Western education reduced the number of potential apprentices in textile production, as many parents prefer to send their children to school. The influx of foreign clothing and the recent development in technology also affected the production of fabrics. And also, a higher percentage of the respondent is married 56.9% which affirm their age range.

Yoruba people make up 98.6% of the respondents suggesting that they are the native textile designers of Itoku. That being said, 73.6% of the respondents are aware of the fabric decorating discharge method, indicating that they are well-informed about the fact that this method can be used to generate cash for them.

The findings showed the categorized mean knowledge test score as 3.11 which implies that respondents have good knowledge about discharge method. 81.9% know that discharge method is a fabric decoration. 77.2% know that the discharge method is the removal of colour from fabric to form design. The respondents have knowledge of the type of fabric used for discharge, major substances used for discharge, discharge can be done by applying bleaches on fabric and the fabric has to be 100% cotton for effective discharge as Abrahamet-al., 2015 discuss the importance of an adequate knowledge of the properties of the print paste ingredients, coupled with effective application technique can produce a satisfactory discharge on whatever type of fabric is to be printed. However, the choice of discharging agent is determined largely by the type of fabric to be printed. The constituents of a basic discharge printing paste consist of a discharging agent, a thickener and water.

The study also revealed that a low number of respondents had a positive perception of the fabric discharge method. Respondents generally stated that practicing the fabric discharge method is stressful and needs more patience than other methods. The respondent (52.8%) agreed that bleach creates a unique design on the fabric and also agreed that the design done using the discharge method appear beautiful. According to Miles, (1994) discharge style aims at sharp and intricate patterns, it is essential to minimize the flushing and bleeding by using the low- viscosity thickeners and a high solids content.

Furthermore, respondents (30.6%) agreed that using bleach to design can damage the fabric and as well agreed that the quality of finish fabric will reduce using bleach. Adiji and Oladumiye, 2015 found that there are such factors such as fading of the colours on the fabrics, the durability and the quality of the fabrics are militating against discharge fabric production, which does not really make it very effective and allow for multitudes in its practice. The study revealed that the respondent disagrees that if bleach is used to design fabric, it won't get patronage.

The finding of this research on the respondents' level of awareness on the discharge method reveals that the respondents disagree that discharge can be done like screen printing. Although Asmah, *et-al.*, 2015 suggest the use of the screen-printing method to produce the *Adire* in with cooked starch paste via the squeegee. Discharge methods of fabric design have been important since the early days of textile printing, accounting for many processes that provided a wide range of effects without the advantages of modern dyes. The discharge method will always be significant due to the various and aesthetically superior effects that are frequently obtained. The usefulness of the process in comparison to other printing techniques is the technical and commercial reason for the conception and continuation of the discharge method of fabric decoration. With the increased use of discharge inks, screen printers now have more options when deciding how to approach a specific project (Grant, 2020).

The respondents know the materials used for discharge method. Hitherto, the discharged fabrics produced by the local fabric designers in the early years of 1995, applied a mixture of a discharging agent and water directly onto the dischargeable fabric, hand drawn, using either a bristle brush or a syringe. Respondents revealed that discharge fabric can be worn as a garment which shows high awareness of the commercial aspect of fabric decoration. Also, the respondents are not aware of chlorine as the discharge agent used.

Conclusion

In conclusion, the technique of discharge screen printing method has not been evidently practised by textile designer and discharge fabric decoration have an aesthetic quality that many consumers find appealing.

Recommendations

In line with the findings of the study:

1. Textile scientists and chemists should develop a discharge paste that can be easily accessible and used by the textile designer.
2. A simple automated method of discharge screen printing production should be developed.
3. Textile designers should be well-trained and equipped in the discharge method of fabric design production.
4. Further study should be taken to differentiate the result of using fine mesh and that of this research used open mesh.

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Appendix



Fig. 1: Designed artwork, Discharge screen printing and Finished discharge printed Fabrics (Field study, 2021)