



DESIGNING AND STYLING A-LINE GARMENT USING SELECTED WARLI MOTIF

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Abstract: India had always been known as the land that portrayed cultural and traditional vibrancy through its conventional arts and crafts. Every region in India has its own style and folk art which are very ethnic and simple, and yet colorful and vibrant enough to speak volumes about the rich heritage. Folk art in India apparently has a great potential in the international market because of its traditional aesthetic sensibility and authenticity. The most famous folk painting is Warli art of Maharashtra. Traditionally these paintings were done by hand which is time consuming and laborious process, but with technological advancement, these designs can be created directly with the help of CAD and applied on textiles through Digital Printing. It is now possible with CAD and digital printing to go straight from an initial idea to visual representation of fabric showing these designs in combination of colors within minutes. The present study was an attempt to develop fusion designs from these folk paintings using CAD and adapt them on apparels using digital printing technique. It will be an effort to reveal the unexplored treasures to the world by introducing the newly developed fusion designs from the Plethora of these arts and to open new avenues for artisans to revolutionize the Fashion world and empower them.

Keywords: CAD technology, Fusion Designs, Warli Painting, Apparels.

I. INTRODUCTION

Textile designing has been an ancient art and perhaps the most ancient craft of India. It is not a new concept and has existed even in the prehistoric cave paintings as evidenced by designs appearing on costumes, tapestries and carpets etc. Gradually designing has become a more intellectual endeavor over a period of time. Textile designing is the most demanding and emerging field as it is full of scope and creativity (Sharma. A 2016). Any objects or things we see in our daily routine are possible design sources. These may include nature, temples, famous monuments, furniture, various kinds of toys, folk arts and crafts such as wall paintings, floor paintings, sculptures, carvings etc. India had always been known as the land that portrayed cultural and traditional vibrancy through its conventional arts and crafts. Every region in India has its own style and pattern of art, which is known as folk art (Punia 2017). The folk and tribal arts of India are very ethnic and strongly reveal the skilled abilities of their local artisans and the prosperous cultural heritage of the particular state. These present the religious sentiments and socio-cultural traditions of the region as well as the collective experience of the artists inherited through many generations and expression of the historic events, with which the places are marked. Some of these folk arts are very simple yet colorful and vibrant enough to speak volumes about the rich heritage (Bhatnagar 2013). Folk arts in India apparently have a great potential in the international market because of its traditional aesthetic sensibility and authenticity. Warli art is an ancient Indian folk-art tradition of painting of a Maharashtrian tribe called Warli. These paintings were mainly done by the women folk. The most important aspect of the painting is

that it does not depict mythological characters or images of deities, instead they portray social life that includes images of human being and animals along with scenes from daily life that are created in a loose rhythmic pattern. The trademark of Warli paintings is the use of geometric designs such as triangles, circles, squares, dots and crooked lines. These are used to depict human figures, animal figures, houses, crops etc (Grover 2014).

Warli paintings, although one of the most intricate art, still governs the entire fashion market. Even today, when the dressing styles and trends are changing continuously, the beauty and charisma of Warli art still captures the heart of people. Traditionally these paintings were done by hand which is tedious, time consuming and laborious process (Vaishav 2015). But in due course of time with technological advancement, these designs directly can be created with the help of various software like Corel draw, Illustrator, photoshop etc. It is now possible with CAD to go straight from an initial idea to visual representation of fabric showing different types of designs and combination of colors (Joseph 2015). CAD has led to better quality and flexibility in design development, increasing the efficiency and shortening the time between the design concept and actual marketing. There is no doubt that every effort is to be taken to preserve the traditional crafts (Ansul Sharma 2020). However, to popularize these arts and crafts and to get decent income for craftsmen, these crafts have to be incorporated in to contemporary scenario especially through textile designing. The present study was an attempt to introduce the fusion designs of traditionally restricted folk paintings, to new textile experimentation, using Computer Aided Designing (Sharma 2011). It will be an effort to reveal to the world the unexplored treasures, the light of the day, by introducing the newly developed fusion designs from the Plethora of collections of Warli paintings and to open new avenues to revolutionize them to the 'Design-Fashion' world. The study would be a step forward to the integration of designs and art from two distinct areas into textile world and to preserve these designs by developing a repository, which could be accessed as and when needed (Rajvanshi 2014).

II. METHODOLOGY

This phase includes creation of designs through adaptation of Warli painting motifs using CAD selection of created designs, design placements and colour ways.

The experimental work has been presented under the following heads:

- 2.1 Selection of Traditional Painting
- 2.2 Selection of Warli Motif
- 2.3 Selection of Garment
- 2.4 Selection of Age group
- 2.5 Adaption of CAD
- 2.6 Development of Design Arrangement and their Selection
- 2.7 Development of Garment by the Selected Pattern
- 2.8 Development of Colour Combination for Designed Patterns with Warli Motif
- 2.9 Evaluation of Developed Product

2.1 Selection of Traditional Painting

Warli Painting, one of the most intriguing forms of Indian folk painting carried out at harvesting time and at wedding and birth, their homes were decorated with a vocabulary of pattern. This is the tradition which gave birth to warli painting, and contains all the events of the past, the stillness of the present and the possibilities of the future. Hence the investigator has selected the warli painting for the study. This in turn helps in promoting the tribal painting and diversification can be done to preserve this tribal painting from extinction.

2.2 Selection of Warli Motif

Two warli motifs Ambada (Figure 1) and Flower (Figure 2) was selected for this study by the investigator.



Ambada Motif
Figure 1



Flower Motif
Figure 2

2.3 Selection of Garment

A-Line dresses are fitted to your waist, and then flare out gradually to the hem. The magic in this shape is that it can minimize the mid-section, hips, thighs and draw attention among teenagers. The investigator selected A-line dress for designing. The basic silhouette of A-Line dress selected for designing is shown in Figure 3.



A-Line Garment
Figure 3

2.4 Selection of Age Group

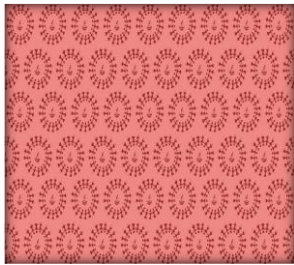
A-Line dress is the singular most flattering fit for every body type. The age group between (16-22) prefer to use this garment. The willingness to wear this style among the selected age group again and again made the outline of the garment popular and the same has come out in different silhouettes in the market, Hence the researcher selected this age group of population for the study.

2.5 Adaptions of CAD

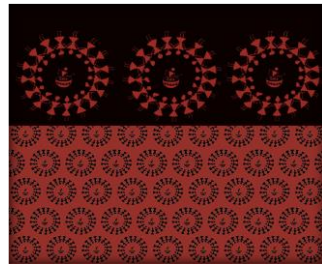
The selected warli motifs were individually patterned in different suitable form and incorporated to the garment A-Line Dress. The incorporation of the pattern was done through the use of photoshop. The adaptation process involves the use tools present in edit menu of the software. The select tool, Bezier tool, shape tool, magic wand tool, pencil tool, lasso tool were used to alter the lines of the design to make it suitable to the trend.

2.6 Development of Design Arrangement and their Selection.

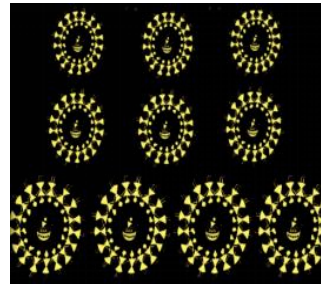
Ambada motif (Figure 1) and Flower motif (Figure 2) selected and used for developing design arrangement of A-Line dress. The motif was used in overall, Half and half, center alignment, Asymmetrical, Symmetrical and border form on the apparels as shown in Figure 4 - Figure 9. The same will be repeated for the Flower motif as shown in Figure 10- Figure 15 The design arrangement was developed by arranging motif in different manners by tilting, flipping and rotating



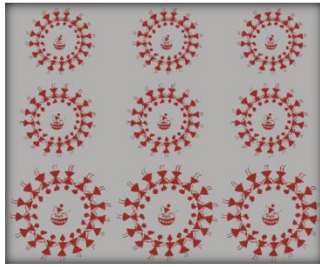
Overall Pattern - Ambada Motif Figure 4



Half and Half - Ambada Motif Figure 5



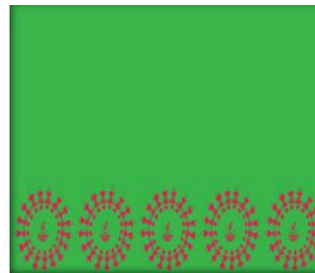
Asymmetrical - Ambada Motif, Figure 6



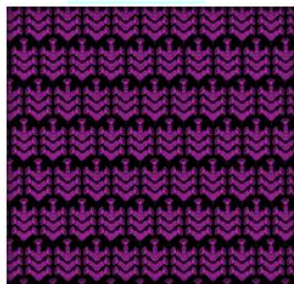
Symmetrical - Flower Motif Figure 7



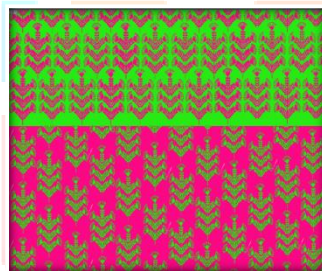
Center Alignment - Flower Motif Figure 8



Border - Ambada Motif, Figure 9



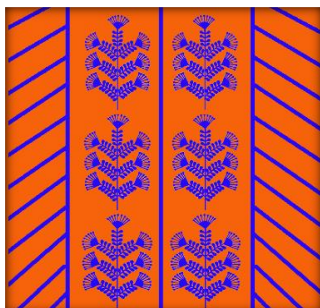
Overall Pattern - Flower Motif Figure 10



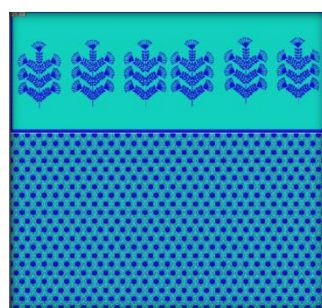
Half and Half - Flower Motif Figure 11



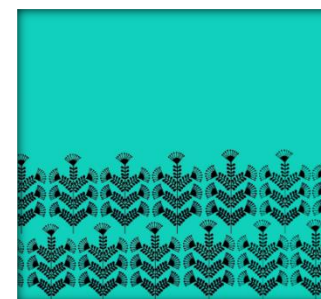
Asymmetrical - Flower Motif Figure 12



Symmetrical - Flower Motif Figure 13



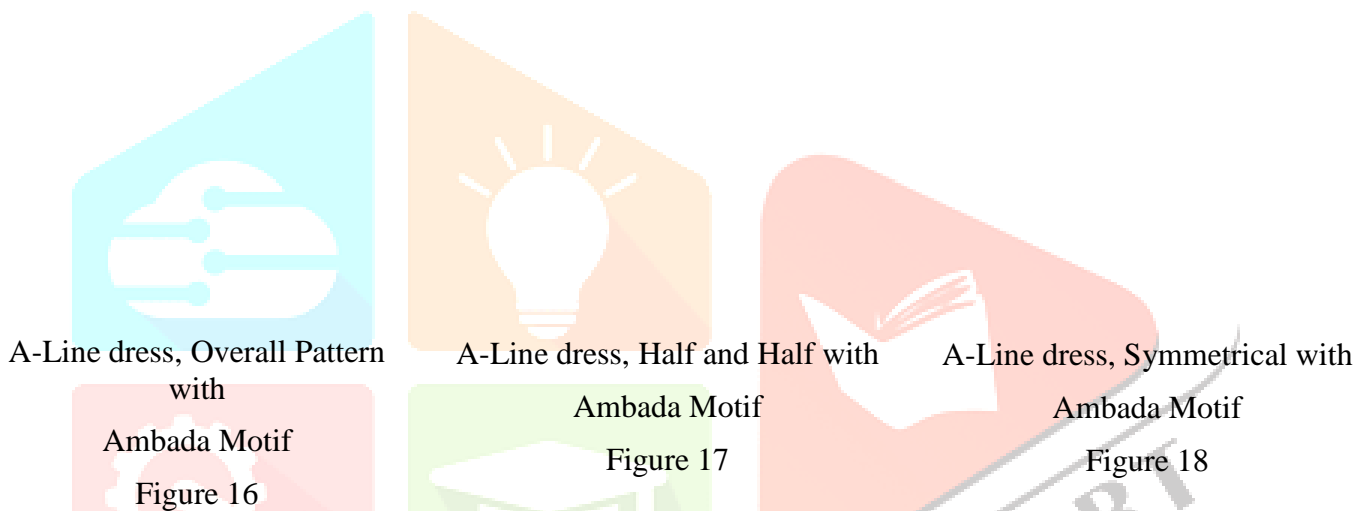
Center Alignment - Flower Motif Figure 14



Border - Flower Motif Figure 15

2.7 Development of A-Line Garment with Selected Patterns

A-Line dress were designed for each selected warli motif with developed six patterns as explained in 2.6. Ambada and the flower motifs were taken and designed with following selected pattern such as



- A-Line Dress- Overall Pattern with Ambada Motif (Figure 16)
- A-Line Dress- Half and Half with Ambada Motif (Figure 17)
- A-Line Dress- Asymmetrical with Ambada Motif (Figure 18)
- A-Line Dress- Symmetrical with Ambada Motif (Figure 19)
- A-Line Dress- Center Alignment with Ambada Motif (Figure 20)
- A-Line Dress- Border with Ambada Motif (Figure 21)
- A-Line Dress- Overall Pattern with Flower Motif (Figure 22)
- A-Line Dress- Half and Half with Flower Motif (Figure 23)
- A-Line Dress- Asymmetrical with Flower Motif (Figure 24)
- A-Line Dress- Symmetrical with Flower Motif (Figure 25)
- A-Line Dress- Center Alignment with Flower Motif (Figure 26)
- A-Line Dress- Border with Flower Motif (Figure 27)



A-Line dress, Asymmetrical with Ambada Motif
Figure 19



A-Line dress, Center alignment with Ambada Motif
Figure 20



A-Line dress, Border with Ambada Motif
Figure 21



A-Line dress, Overall pattern with Flower motif.
Figure 22



A-Line dress, Center alignment with Flower motif.
Figure 23



A-Line dress, Symmetrical with Flower motif.
Figure 24



A-Line dress, Asymmetrical with Flower motif
Figure 25



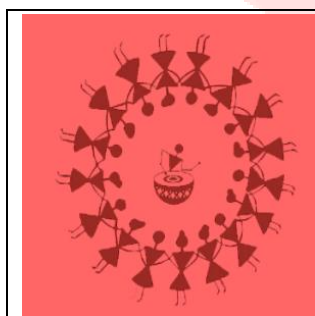
A-Line dress, Half and half with Flower motif
Figure 26



A-Line dress, Border with Flower motif.
Figure 27

2.8 Development of Colour Combination for Designed Patterns with Warli Motif

The developed six A-line dress with ambada motif (Figure 16 -Figure 21) and six A-line dress with flower motif (Figure 22 -Figure 27) were replicated using colour schemes such as primary colours - red, blue, yellow and complementary colour scheme namely red-green, blue-orange and yellow-violet, totally six colour combinations were made for flower motif of warli painting. (i.e total 12 garments were developed with the 12 colour combinations) as shown from Fig 28 to 39.



Ambada Motif-Colour Combination 1
Figure 28



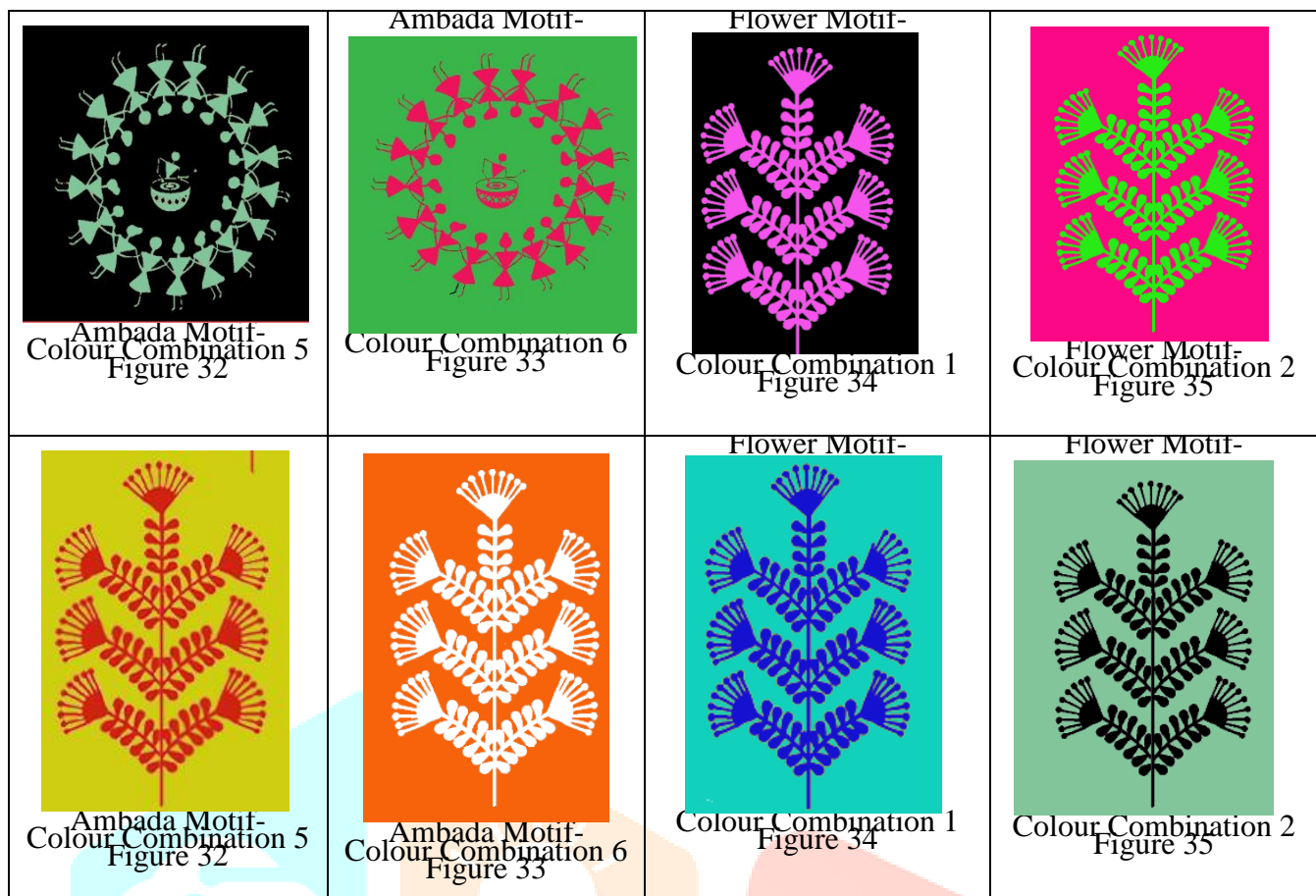
Ambada Motif-Colour Combination 2
Figure 29



Ambada Motif-Colour Combination 3
Figure 30



Ambada Motif-Colour Combination 4
Figure 31



2.9 Evaluation of the Developed Product

A-Line dresses developed using two warli motifs, six patterns and colour combinations. Developed apparels were further subjected to evaluation by the hundred responds by a self-structured questionnaire which was framed to collect the data about the consumer preference and attitude toward the design. The parameters used for the evaluation were appropriateness of placement of motifs according to the product, colour combination and pattern appearance. The product was scored in a rating scale, the statical analysis was done by collection the data with the questioner. The analysis of data and the tabulation is discussed under results and discussion.

3 RESULTS AND DISCUSSION

It is necessary to conduct consumer survey to determine the preferences and needs of the consumer in respect of various parameters related to designed apparels. The results are given in details under the following heading:

- 3.1 Distribution of the Respondents Based on Awareness about Warli Painting
- 3.2 Distribution of Factors to be Considered while Selecting the Garment
- 3.3 Assessment of Developed Prototype
- 3.4 Acceptance of Warli Painted A-Line dress Pattern in Consumer Wardrobe

3.1 Distribution of the Respondents based on Awareness about Warli Painting

The awareness of warli painting that was collected from hundred respondents obtained and tabulated in Table I.

TABLE I: DISTRIBUTION OF THE RESPONDENTS BASED ON AWARENESS ABOUT WARLI PAINTING

S. No.	Awareness	Percentage (%)
1	Yes	89
2	No	11

It is evident from the Table I that 89 % of the respondents are aware of the warli painting and 11% were among the are not aware.

3.2 Distribution of Factors to be Considered while Selecting the Garment

The consumer opinion about the factors to be considered while selecting the garments that was collected from hundred respondents obtained and tabulated in Table II.

TABLE II: DISTRIBUTION OF FACTORS CONSIDER WHILE SELECTING THE GARMENT

S. No.	Factors	Percentage (%)
1	Price	35
2	General appearance	15
3	Fashion	25
4	Quality	25

It is apparent from the Table II that 35% of the respondent are considering the price factor while purchasing the A-Line dress, 15% consider the general appearance, 25% respondents prefer fashion and 25% of them looking the quality factor while purchasing the garment.

3.3 Assessment of Developed Prototype.

Developed prototype were evaluated by the respondents on the basis of the placement of motif (Table III), colour combination (Table IV), and overall appearance (Table V). The prototype was assessed by the consumer on the basis of five-point scale.

TABLE III: RATING OF THE PLACEMENT OF MOTIFS

Name of the design	Rating	Placement of motif
Overall Pattern with Ambada Motif	3.6	Figure 4
Half and Half with Ambada Motif	4.0	Figure 5
Asymmetrical with Ambada Motif	3.0	Figure 6
Symmetrical with Ambada Motif	2.4	Figure 7
Center Alignment with Ambada Motif	4.0	Figure 8
Border with Ambada Motif	3.1	Figure 9
Overall Pattern with Flower Motif	2.8	Figure 10
Half and Half with Flower Motif	4.2	Figure 11
Asymmetrical with Flower Motif	2.6	Figure 12
Symmetrical with Flower Motif	3.8	Figure 13
Center Alignment with Flower Motif	2.9	Figure 14
Border with Flower Motif	3.8	Figure 15

Table III shows the different placement of the design arrangement in the fabric along with rating. It's clear from the Table III that among the all arrangement, A-Line dress- Half and half with Flower motif, A-Line

dress- Half and half with ambada motif and A-Line dress- Center alignment with ambada motif scored the highest 4.2 and 4.0 scores respectively.

TABLE IV: SCORE OBTAINED FOR COLOUR COMBINATIONS

Name of the design	Preference	Colour combination
Ambada Motif- Colour Combination 1	3.9	Figure 28
Ambada Motif- Colour Combination 2	3.8	Figure 29
Ambada Motif- Colour Combination3	3.4	Figure 30
Ambada Motif- Colour Combination 4	4.3	Figure 31
Ambada Motif- Colour Combination 5	2.2	Figure 32
Ambada Motif- Colour Combination 6	3.4	Figure 33
Flower Motif- Colour Combination 1	4.1	Figure 34
Flower Motif- Colour Combination 2	3.2	Figure 35
Flower Motif- Colour Combination3	2.9	Figure 36
Flower Motif- Colour Combination 4	2.5	Figure 37
Flower Motif- Colour Combination 5	3.5	Figure 38
Flower Motif- Colour Combination 6	2.9	Figure 39

It is apparent from the Table IV regarding colour combination used for the motifs and their arrangement along with their weighted mean scores were listed from Figures 28 to 39. Colour Combination which obtained 4.3 the highest score in WMS, and this combination were used in each dress design.

TABLE V: PREFERENCE OF THE DREES BY OVERALL APPEARANCE

Name of the design	Preference	Overall appearance
A-Line Dress- Overall Pattern with Ambada Motif	26	Figure 16
A-Line Dress- Half and Half with Ambada Motif	43	Figure 17
A-Line Dress- Asymmetrical with Ambada Motif	32	Figure 18
A-Line Dress- Symmetrical with Ambada Motif	49	Figure 19
A-Line Dress- Center Alignment with Ambada Motif	52	Figure 20
A-Line Dress- Border with Ambada Motif	29	Figure 21
A-Line Dress- Overall Pattern with Flower Motif	48	Figure 22
A-Line Dress- Half and Half with Flower Motif	53	Figure 23
A-Line Dress- Asymmetrical with Flower Motif	31	Figure 24
A-Line Dress- Symmetrical with Flower Motif	36	Figure 25
A-Line Dress- Center Alignment with Flower Motif	48	Figure 26
A-Line Dress- Border with Flower Motif	47	Figure 27

Arrangement of different patterns with single motif on the selected garment is given in Table V along with its preference According to Table V A-Line dress-Half and half with Flower motif, A-Line dress-Center alignment with ambada motif, were selected as they acquired highest scores of 53 and 52 respectively.

3.4 Acceptance of Warli Painted A-Line Dress Pattern in Consumer Wardrobe

The acceptance of warli painted A-line dress pattern in consumer wardrobe was surveyed from hundred respondents obtained and tabulated in Table VI

TABEL VI: ACCEPTANCE OF WARI PAINTED A-LINE DRESS PATTERN IN CONSUMER WARDROBE

S No	Add to wardrobe	Percentage (%)
1	YES	90
2	NO	10

From the above Table VI it is concluded that 90% of the consumers are ready to add these designs in their wardrobe and 10 % of the consumers yet not ready to add in the wardrobe.

4. CONCLUSIONS

Warli painting is unique to the tribe of Madhya Pradesh The motifs used shows how close they are to nature and God The signature patterns used in painting are unique and distinguish it from other paintings The colours used are also unique as they are extracted from natural resource Now-a-days, they are using synthetic colours instead of natural colours due to availability of synthetic colours Now the art has shifted their media from wall painting to paper, canvas as they can be easily preserved when compared to wall paintings from severe weather conditions In order to preserve diversification in media on which painting is done should change Apparel is one of the media where this painting can be done either by hand or with different techniques In order to sustain the motifs of the Warli paintings they have to be modified according to technique that is being used The present study of using Warli painting motif for use in apparel is one of the methods to revive the art

REFERENCES

- [1] Ansul Sharma. 2020. "Simulation of Applique Designs Using Cad." *IntJCurrMicrobiolAppSci* 9(02): 2214-2227
- [2] Bhatnagar. 2013. "Traditional Indian textiles: The future in the world fashion Retrieved." *wwwscribd* Dayalbagh Education Institute (deemed university) Dayalbagh, Agra.
- [3] Grover, E Vedika. 2014. "Adaptation of Warli art for development of blocks for printing of apparels." *Asian J Home Sci*, 9(2) 417-421.
- [4] Joseph, Gupta V. 2015. "Development of designs for table cloth through CAD software." *Asian Journal of Home Science*, 10(1): 60-64.
- [5] Punia, Devi S. 2017. "Development of Kantha Embroidery Motifs to Designs: Traditional to Contemporary." *International Journal of Current Microbiology and Applied Sciences* 4479-4488.
- [6] Rajvanshi, R Srivastava M and. 2014. "Developing colourways from Rajasthani miniature paintings using CAD technology." *Asian J Home Sci*, 9(1): 169-178.
- [7] Sharma, RB Sethi RC and. 2011. "CAD in the hands of the designer." *Asian J Home Sci*, 6(2): 292-294.
- [8] Sharma. A. 2016. "Development of motifs: Traditional to contemporary for sarees ." *Research Journal of Recent Sciences* 44-46.
- [9] Vaishav, S. 2015. "Development of customized software on Warli folk art of Maharashtra." *value addition PhD Thesis* Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan.