

# Efficacy of Developed ‘*Card Weaving Module*’ for Creating Structural Variations in Textile Products

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## ABSTRACT

Card weaving is a simple, easy weaving method, but designing patterns is typically laborious and requires knowledge, experience, and skill. The present investigation explored efficacy of developed card weaving module in creating structural variations in 2,4 and 6 holed cards through various pattern drafts. The researcher used the self-developed ‘Card Weaving Module’ to create 25 different end use products under various categories, i.e. Personal accessories, Household articles, Outer wear and Utility items, using selected 5 pattern designs of each of the 2,3,4,5 and 6 holed cards looking into the aspects of easy workability, savings in time and cost etc. The yarn size, texture and colour were also kept in mind while developing the products to increase the aesthetic appeal and functionality. Different personal and utilitarian products developed by the researcher with the help of developed ‘*Card Weaving Module*’ were evaluated by panel of judges using a rating Proforma, developed for this purpose.

**Keywords :** Efficacy, Structural, Variations, Holed, Card Weaving, Module, Products

## I. INTRODUCTION

“Card weaving” or “tablet weaving” as it is sometimes called, is a very ancient, very interesting and ingenious little craft with many practical possibilities. It is a true form of weaving, as technical as weaving on a large loom, and though limited to the making of narrow fabrics. (Atwater,2006). Card weaving is a fascinating little craft. The fascination lies, in the cleverness and ingenuity of the technique, and in the unique texture of the woven bands. These decorative adornments are found in most cultures throughout history, which are expressed through clothes and other forms of accessories. (Wolfe,1989). Creativity triggers innovativeness which enable one to come out with new concepts and ideas which are relevant in the designing and implementation of fashion. (Sproles and Burns, 1994) Textile craft is a part of Indian heritage that is intangible and significant hence it is essential to preserve it for next generation. Simultaneously innovation is needed to capture the taste of younger generation, with this view, the investigator developed innovative card

weaving module for creating structural variations in textile products.

Hence, keeping in view the importance of ancient craft of creativity and innovation in card weaving and its revival for rural economy, the researcher got the idea of conducting the present investigation on “**Efficacy of developed ‘*Card Weaving Module*’ for Creating Structural Variations in textile products**” for not only to revive this age old craft but to add new dimensions to it.

## II. METHODS AND MATERIAL

**Methodology:** The present investigation is part of research work conducted on ‘Development of an Innovative ‘*Card Weaving Module*’ for Creating Structural Variations in Textile Products’ using varied number of card holes and involved experimental work.

**Sample selection:** The researcher selected ten experts from the field of clothing and textiles to act as panel of experts for evaluation of structural variations in the developed designs in terms of its suitability for various end uses.

**Development of tool:** A rating Performa was developed by the researcher for evaluation of the developed structural variations in card weaving designs by panel of experts on various parameters. A five point rating scale was administered for the same, as follows: Excellent- 5, Very good- 4, Good- 3, Fair -2 and Poor- 1.

**Experimental work:** The researcher developed structural variations in 2,3,4,5 and 6 holed cards. The study was conducted in different phases-

**Phase 1. Development and evaluation of pattern drafts for structural variations**

The researcher explored the feasibility of developing different patterns for creating structural variation by changing number of holes in card weaving. Thus a total of 50 pattern drafts were developed. The final prototype of each of the possible structural design variation in different holed cards developed through conventional card weaving technique was critically evaluated by panel of judges to select best 25 designs to be developed into different textile products based on their suitability for various end uses.

**Phase: 2. Development of ‘Innovative Card Weaving Module’**

Looking into the difficulties encountered in conventional card weaving, the researcher designed and developed an

innovative low cost ‘Card Weaving Module’ for work simplification and product development.

**Phase: 3. Judging efficacy of developed ‘Card Weaving Module’:**

The researcher used the developed ‘Card Weaving Module’ to create 25 different end use products under various categories, i.e. **Personal accessories-** Waist Belt, Specs Case, Wrist Band, Mobile Cover, etc. **Household articles-** Wall Hangings, Multipurpose kit, etc., **Outer wear-** Stole, Muffler, Cowl, Poncho, etc. and **Utility items-** Bag, Guitar Belt, Pooja Mat, etc.

Different personal and utilitarian products developed by the researcher with the help of developed ‘Card Weaving Module’ were evaluated by panel of judges using a rating Proforma, developed for this purpose.

**III. RESULT AND DISCUSSION**

**Preferences of the panel of judges for various products**

The assessment of efficacy of developed card weaving module was judged on 4 parameters. Table- 1 depicts the mean score and ranking of different products developed by using various parameters.

**Table-1.** Mean score and ranking of different products by various parameters (n=5)

Parameters Developed Product with code ↓		Time taken in preparation & completion of product (in hours)		Intricacy of pattern developed		Possibility of creating yarn variations		Possibility of developing larger width articles	
		M.S	Rank	M.S	Rank	M.S	Rank	M.S	Rank
1	Waist belt	4.6	III	5.0	I	5.0	I	5.0	I
2	Spectacle case	4.2	V	4.6	III	4.2	V	4.6	III
3	Wrist band	4.2	V	4.4	IV	4.6	III	4.2	V
4	Mobile cover pouch	4.2	V	4.4	IV	4.2	V	4.2	V
5	Slip on	4.8	II	5.0	I	5.0	I	5.0	I
6	Trimming for kurta	4.8	II	5.0	I	4.2	V	5.0	I
7	Hair garter	4.8	II	4.8	II	4.8	II	4.6	III
8	Wall hanging	4.2	V	4.0	VI	4.2	V	4.8	II
9	Multipurpose kit	4.8	II	4.8	II	4.8	II	4.4	IV
10	Toran	4.6	III	4.6	III	4.4	IV	4.4	IV
11	Pad for hot pot	4.0	VI	4.2	V	4.2	V	4.4	IV
12	Stole	5.0	I	5.0	I	4.4	IV	5.0	I

13	Muffler	5.0	I	4.6	III	4.6	III	5.0	I
14	Cowl	4.6	III	4.6	III	4.6	III	4.8	II
15	Poncho	4.2	V	4.8	II	5.0	I	5.0	I
16	Fingerless gloves	4.4	IV	4.6	III	4.2	V	4.6	III
17	Calf cuffs	4.8	II	5.0	I	4.8	II	4.8	II
18	Cap	5.0	I	5.0	I	5.0	I	5.0	I
19	Scarf	4.2	V	4.2	V	4.4	IV	4.6	III
20	Bag	5.0	I	5.0	I	4.6	III	4.8	II
21	Guitar belt	4.4	IV	4.2	V	4.8	II	4.8	II
22	Pooja mat	4.4	IV	4.8	II	4.4	IV	4.8	II
23	Aasan mat	4.8	II	4.8	II	5.0	I	4.8	II
24	Multipurpose strap	4.8	II	5.0	I	4.4	IV	4.8	II
25	File folder	4.8	II	4.8	II	5.0	I	4.6	III

According to table no. 1, it was found that mean scores range for parameter *time taken in preparation and completion of product*, product code numbers 12, 13, 18 and 20 (stole, muffler, cap and bag respectively) were liked the most and scored maximum mean scores i.e. 5.0.

The mean score for parameter *intricacy of pattern developed* was ranged between 4.0 to 5.0 and product codes 1, 5, 6, 12, 17, 18, 20 and 24 (waist belt, slip-on, trimming for kurta, stole, calf cuffs, cap, bag and multipurpose strap respectively) scored maximum mean score 5.0 so liked the most.

In case of parameter *possibility of creating yarn variations*, product codes 1, 5, 15, 18, 23 and 25 (waist belt, slip-on, poncho, cap, pooja mat and file folder) were liked the most with maximum mean score (5.0). In parameter *possibility of developing larger width articles*, higher ranking and maximum mean score (5.0) was depicted by product codes 1, 5, 6, 12, 13, 15 and 18 (waist belt, slip-on. Trimming for kurta, stole, muffler, poncho and cap) scored 1<sup>st</sup> rank.

Virk and phadke (1984) conducted a study on handmade carpets, durries and *khes* of Punjab. The study revealed that the carpets were made on handmade wooden looms locally called as *khaddi*, along with locally termed accessories like *Punja*, *Khes*, *Kenchi* etc. *Durries* also were woven on *adda* and horizontal pitloom. These were mainly woven for floor covering and bedding purpose.

#### IV. CONCLUSION

The present study explored the possibility of structural variations in selected three types of holed card patterns. In each of the 2,4 and 6 holed cards, ten pattern drafts each were prepared and multiple variations were visualized through variations in movement of card rotation. Interesting effects were created through card weaving by the researcher which were highly appreciated by the judges also. The developed patterns can be effectively used in a wide variety of articles as revealed by the mean scores and ranking of the data analyzed. The developed “Card Weaving Module” will also facilitate the users in outsourcing business in the form of the design ideas & products development.

#### V. REFERENCES

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