

USE OF KALEIDOSCOPIC MOTIF PRINTS ON BLAZERS

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Abstract - The designs in a kaleidoscope are formed under the principle of reflection of light with the help of a reflecting surface such as mirror. These designs are aesthetic, appealing and create a variety of patterns when viewed through different angles across the kaleidoscope. Inspired by these beautiful designs, a variety of prints were created and printed on blazers to introduce a variation in a classic formal wear i.e the blazer. Selection of prints, blazer design, fabric, method of printing and the aesthetic appeal was endorsed through consumer survey. The durability of the prints was checked through quality controlling methods.

Key Words: Designs, kaleidoscope, prints, blazers, formals.

1. INTRODUCTION

A kaleidoscope is an optical device with two or greater reflecting surfaces (or mirrors) tilted to every different at an attitude, in order that one or more (elements of) items on one end of the mirrors are visible as a normal symmetrical sample whilst considered from the opposite end, because of repeated reflection. The reflectors are usually enclosed in a tube, frequently containing on one end a cell with loose, coloured portions of glass or different transparent (and/or opaque) substances to be contemplated into the considered pattern. Rotation of the cell results in movement of the substances, ensuing in an ever-converting view being presented.[48]



Plate 1 - Kaleidoscope

In a kaleidoscope, the daylight is bounced through the glass, and coloured beads present in the kaleidoscope and are contemplated withinside the mirrors to create amazing picturesque styles. These styles provide a great visible treat

to the person that seems thru the kaleidoscope. It's amusing to observe and have a look at the combination and matching sample created insides the kaleidoscopes.[49]

1.1 Principle of Kaleidoscope

The primary concepts used in the kaleidoscope are the law of reflection, and white mild is a mixture of VIBGYOR. When the white mild hits the floor of the mirror, it receives contemplated at an attitude such that the attitude of occurrence is same to the attitude of reflection. Due to those more than one reflection of light, there's a creation of those lovely patterns.

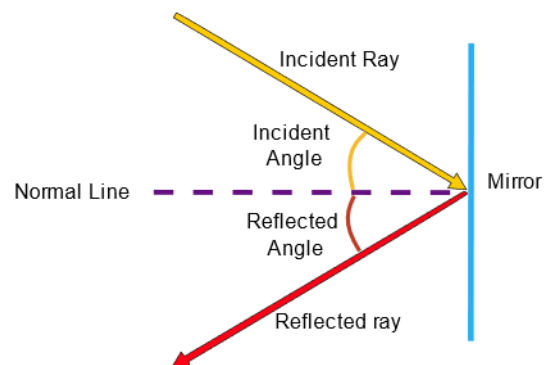


Plate 2 - Reflection of light in a kaleidoscope

According to the second one principle, white mild passes thru the coloured gadgets gift withinside the kaleidoscope in order that maximum of the mild is absorbed with the aid of using those gadgets.[2]

The use of kaleidoscopic prints over formal clothes thru a printing method became the purpose of this research. Making the beautiful prints look aesthetic on blazers. A blazer is a kind of jacket comparable to a in shape jacket, however reduce greater casually. A blazer is typically outstanding from a game coat as a greater formal garment and tailor-made from strong colour fabric.[50]



Plate 3 - Difference between sport coat, blazer and jacket [52]

The distinction between a sport coat, blazer, and suit jacket comes right all the way down to styles, buttons, and material.

A sport coat is a patterned jacket that coordinates with trousers that aren't made from the same cloth or have the same pattern. Whereas a blazer is a solid colour jacket with contrasting (regular metallic) buttons and a suit jacket has a pair of pants crafted from the same cloth/sample as coat.

1.2 Sport coat

The word sport coat originated within the nineteenth century whilst guys wore unique coats for outside sports, which include looking and fishing. It persists because the maximum informal alternative of all of the jackets and is the best alternative whilst environment. Unlike blazers (which might be outstanding with the aid of using a strong colour material), game coats are made the use of a patterned cloth. Like blazers, game coats are worn with coordinating trousers, generally a strong complimentary material.

Sport coats additionally are available in exclusive weights and textures for fall, winter, spring, and summer. Sport coat fabric provide a greater variety of fabric, from subtle, conventional styles to greater bold alternatives that could assist outline your specific style. Consequently, a game coat is the most flexible garment to your closet. Pair it with get dressed slacks and a tie, or put on it with a pair of jeans. The sport coat gives fashion and flexibility, extending your wardrobe.

1.3 Blazer

A blazer is described through its strong colour and metallic buttons. Oftentimes, the ones buttons feature a nautical motif because the blazer dates again to the nineteenth century while Britain's Royal Navy standardized its uniform to feature an easy military jacket. Historically, a blazer changed into a signal of membership in a group. The term, blazer is attributed to the "blazing red" jackets worn with the aid of using Cambridge's Lady Margaret Boat Club. They served as a standing image as rowers started carrying their blazers on dry land and round colleges.

In today's terms, the blazer is mostly a solid colour with blue or black being the maximum common, adding to their formality. Typically bedecked with silver, gold, or brass metallic buttons, the blazer is the best choice for occasions that was once black tie or formal.

1.4 Suit jacket

The simplest of the three to understand, the suit jacket is certainly the jacket of a suit. It's worn with trousers which are crafted from the same material, with the same pattern.

A jacket of today's bolder patterned suits would possibly work properly as a sport coat. However, a jacket from a pin-striped suit might be never worn as a sport coat.

More conventional fits are produced from styles which can be greater subtle, which include herringbone or birds' eye and supply greater of a strong colour appearance. It is exceptional to put on a in shape jacket most effective with its matching trousers in case you are unsure.[51]

2. REVIEW OF LITERATURE

According to Kaleidoscope of colors., (2021) thereafter, a paper was placed on the cut hardboard and the painting was started. A combination of bright and dark colors was chosen, and spreading orange colour through a wet cloth took place. The same process was repeated with yellow, black, and pink to give them digital effects. Soon, the shape of the cut hardboard appeared on the paper with beautiful colour combinations.[5]

Kim S.O. L., (2021) mentioned first, important factors of the gold foil image would be extracted as materials quality, color and pattern, and modern and practical qualities would be proceeded when developing the picture of the gold foil into modern quality material. Second, since gloss of fabric developed by a traditional method was somewhat strong, uniformity being a little bit low for hand-made manufacturing, and practical quality was low for high cost, deletion of the gold foil, etc. So, it wasn't been appropriate for studying modern fashion material. [3]

According to Printing and Publishing Patent News., (2021, Apr 23) a screen assembly was provided for screen printing and includes a screen with a perimeter frame and a tray covering the frame. The tray included a central opening with an inner peripheral lip or edge which press fits against the screen to keep ink from contacting the frame during the screen-printing process. After printing, the tray was removed from the frame so that the assembly could be cleaned and reused. The assembly and its method of use eliminated the need for conventional taping of the screen and frame." [4]

3. OBJECTIVES OF RESEARCH

- To create 50 kaleidoscopic prints by clicking photograph and making a pattern with use of CAD and develop rating scale for selection of prints from respondents.
- To select one appropriate fabric out of three and to investigate the best of the following methods for kaleidoscopic view digital printing, foil printing and screen printing.
- To investigate final printed fabric for quality control.
- To develop rating scale for selection of blazer designs from respondents and implement kaleidoscopic prints on blazers through printing method.
- To take feedback of developed product through consumer survey.

4. CONCLUSIONS

To begin with, 50 kaleidoscopic motif prints were created using some original kaleidoscopic patterns clicked through the view in kaleidoscope. These 50 motif prints were created using computer aided designing application named Inkscape 1.1 which is a free software and Canva pro which is the paid version of Canva was used. Then a consumer rating was conducted on these prints via google forms by those who were between the age group of 25 – 35 years and in total 102 responses were taken and the results were analyzed and interpreted. Accordingly, six best designs were selected. The prints which got highest ratings Print 27 (451 ratings), Print 3 (445 ratings), Print 10 (438 ratings), Print 9 (436 ratings), Print 12 (436 ratings), Print 49 (430 ratings). The first best print was used for sample creation and other best prints were used as blazer prints.

In addition, digital printing, foil printing and screen printing were the printing methods used for printing on the chosen fabrics i.e., velvet, satin silk, satin, polyester and lycra. In total 15 samples were obtained such that; Digital printing on Velvet, Screen printing on velvet, Foil printing on velvet, Digital printing on satin silk, Screen printing on satin silk, Foil printing on satin silk, Digital printing on satin, Screen printing on satin, Foil printing on satin, Digital printing on polyester, Screen printing on polyester, Foil printing on polyester, Digital printing on lycra, Screen printing on lycra, Foil printing on lycra. Then an online survey of 50 participants residing in Mumbai using google forms and offline survey of 50 participants was conducted. Here, the best sample selected was digital printing on satin as it obtained highest rating in both online as well as in offline survey. In online survey, 207 ratings were acquired and in offline survey 224 ratings were attained.

The best sample and printing method i.e digital printing on satin was then quality checked. The print's color fastness to washing, color fastness to rubbing, color fastness to rubbing, color fastness to perspiration and quality test to determine resistance to pilling was conducted in the university laboratory. The results were as such that the color fastness of the mentioned parameters was excellent and required no extra finishing.

Furthermore, 50 blazer designs were created using Inkscape 1.1 which is a free software and then consumer rating was conducted on these blazer designs via google forms by those who were between the age group of 25 - 35 years and accordingly. In total, 100 responses were taken and the results were analyzed and interpreted. Overall, one best blazer design was selected which had the highest number of ratings, which was design 9 (423 ratings).

Finally, satin fabric was digital printed using the best selected motif prints through a professional printing unit named Color Cube Graphics. The printed fabric was then given to the tailor for stitching of the blazers. A cost sheet was prepared to determine the value of the products in which, by adding the values and 50% of the profit. ₹ 4080 was the cost of each developed blazer.

Afterwards, an online consumer acceptance and feedback survey of 100 participants was conducted to check the aesthetics of the products through consumer's view, cost at which the consumer would like to buy the product and on which occasion they would like to wear the garment. In this survey 74% people were middle class, 20% were upper middle class and 6% were lower class. Whereas Product 1 received 404 ratings, Product 2 received 390 ratings, Product 3 received 436 ratings, Product 4 received 454 ratings and Product 5 received 438 ratings. 14% people would like to wear the garments at lunch/dinner date where 40% would like to flaunt it at a club/party. 28% would wear the blazers at a public event and 18% would wear them at formal meetings. 50% of the population would spend Rs. 3500 - Rs. 4000 on the garments, 26% would spend Rs. 4001 – Rs. 4500 and 10% would spend above the mentioned cost.

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