



---

## **ANALYZING SCISSORS OF DIFFERENT BRANDS**

*Pooja Saini, Dr. Promila Krishna Chahal*

Student and Assistant Scientist

Department of Family Resource Management , COHS, Chaudhry Charan Singh Haryana Agriculture University, Hisar

---

### **ABSTRACT**

The primary intention of writing the research paper is to show the Analyzing scissors of different brands. In this research researcher observed that different brands of scissor used by respondents according to comfortable and quality, size and grip . In this research researcher observed that who are using these brands of scissor because they are more comfortable for cutting the fabric. It cause less musculoskeletal disorder because off it has comfortable grip and standard size according to the respondents. So it increase the demand of these brands in market for tailor purpose because they are more comfortable for tailors except Westcott brand because it has less comfortable with short in length and handle also not has proper grip according to the respondents so they avoid this brand and Mario and Jupiter brand has proper handle with proper grip and size is also comfortable. In this research researcher observed that respondents buying the scissor according to our comfortable and grip and size also include. If these factors are not included while buying so their work decrease the productivity in work. Some time using pattern also affect the health and comfortable to the hand because some time some people used scissor from wrong side so it also effect the comfortableness of the respondents.

---

### **Introduction**

Scissors are essential tools in different occupations including sewing and clothes making. Improper design of fabric cutting scissors can lead to the development of musculoskeletal symptoms among users. (Maury A.Nussbaum,2020)

There is wide evidence that the occupational use of hand tools increases the risk of musculoskeletal disorder, evidence is limited regarding manual scissors, commonly used by custom tailors for bespoke garment production. We assessed whether scissor design impacts physical demands (muscle activity, perceived discomfort, and wrist posture) and task performance (quality and perceived efficiency). Two wide-handles scissors appeared superior overall, which may be related to the distinct grip type employed with this type of design. These results suggest that careful scissor selection has the potential to both reduce injury risk and enhance performance during fabric cutting tasks, though future testing is needed under more realistic conditions(Adeleye,2020)

Scissors design significantly affected all outcomes measures, and differences between scissors design were consistent across workstation height and fabric types.Two wide handles scissors appeared superior overall, which may be related to the distinct grip type employed with this type of design. These results suggest that careful scissor selection has the potential to both reduce injury risk and enhance performance during fabric cutting tasks, through future testing is needed under more realistic conditions(Alandurkharim,2020).

It has been acknowledged that bent handle hand tools could not be used under all working condition but only for limited particular tasks .Ergonomics principle is applicable to improve the design of fabric cutting scissors .For this the bent handle and traditional scissors were compared in term of no. Of hand performance and usability measures to determine which design is superior(Iman Dianat,2017).

One of the ergonomic principles for designing hand tools is that it is better to bend the tools handle rather than bend the users wrist to reduce wrist deviation( Asadollahi,2017).

### **Objectives**

- 1.To study different type of scissors according to user
- 2.To find out the more suitable scissors according to user

---

### **Methodology**

**Locale of study:**The research will be carried out in Hisar, Haryana.

**Sampling procedure:** A sample of 5 respondents was selected randomly who was actively involved in this activity.

**Standards measurement of different brands of scissors :**

● **Westcott:**

L\*W\*H: 12.7\*40.6\*26.7cm

- **Mario:**

L\*W\*H: 27.8\*9.7\*2.1cm

- **Jupiter:**

L\*W\*H: 10\*5\*4cm

**Observation workers during work:** I choosed 3 different scissor brands used by tailors to analyse the comfortable levels when they used it for long hours.

I observed every tailor for 30 minutes and realised that different brands used by tailors make them feel fatigue at different intervals.

When I observed 1st tailor using Mario scissor he feels satisfied because of the grip present in the handle and it cause less fatigue but the muscle pain is coming after using it for 4 hours or above. We can minimize this pain by providing soft cushion in the handle. I observed a 2nd and 3rd tailor using Jupiter scissor he feels very comfortable thanks for the cushion in the grip, compared to the Mario brand the Jupiter brand is more comfortable to use. After using long time that feel muscle pain and wrist pain.

4th and 5th tailor is also using Mario brand. I suggested this tailor to use westcott scissor for 15 minutes and he felt very uncomfortable because of the small length handle in the scissor and because of the rough grip it's not fitting with the thumb this driving them to use Mario scissor because of the level of comfortableness it provides .

---

## Result:

**Table 1**

Brand name	Frequency	Percentage
Westcott	0	0
Mario	3	60
Jupiter	2	40

I analyzed the 3 brands of scissors so I found that 60% tailors comfortable with Mario brand and 40% comfortable with Jupiter brand because its according to the grip of users and no one can use westcott brand of scissor , that is short in length or handle is not according to grip of user. They are more satisfied with Mario brand scissor has less weight so it is more comfortable for users. Mario brand scissor cuts all types of fabric more comfortably. Mario scissor gives more outcomes

**Table 2**

Using what time	Frequency	Percentage
Day	4	80
night	1	20

Mostly all user used scissor in day time because day time is more comfortable than night. One user used scissor(cutting) in night because that have lots of work so that using scissor in free time.

**Table 3**

Using hand	Frequency	Percentage
Right	5	100
left	0	0

All users used scissor by right hand no one used by left hand.

**Table 4**

How long you use	frequency	Percentage
1-2hr	2	40
2-3hr	2	40
3-4hr	1	20
More than 4	0	0

40% user used scissor 1-2hrs and other 40% user user 2-3hrs and 20% user used 3-4hrs. Female using only 1-2 hrs because it cause fatigue & wrist pain when they are used more than 1-2 hrs. male used more than 1-2 hrs because they are habitual to doing a task and they are doing only stitching and cutting but they are used more than 3-4 hrs they also affect by muscle pain and fatigue so they taking break for a minute.

Table 5

Problem face during using	frequency	Percentage
Swelling	0	0
Fatigue	1	20
Muscle pain	2	40
Weist pain	1	20
Thumb pain	1	20

I observed that these problems not created on short duration using scissor but they affect when they are using for long time duration. Fatigue created by used for long duration and muscle pain created by because they work for long duration in this profession. Thumb pain created by because in scissors cushions are not provided so that cause thumb pain.

---

### Discussion

Different brands of scissors has different grip so worker buying the scissors according to our comfortness and grip. So different brands effect the different worker. In this research researcher found that 60% respondents comfortable with Mario, 40% with Jupiter and no one comfortable with Westcott. 100% respondents used scissor in day time for cutting the fabric. It revealed that all user used scissors by right hand. It was found that 40% respondents used scissor 1-2 hr, other 40% used 2-3hr and 20% used 3-4 hr and female using only 1-2hr because it cause fatigue & wrist pain and male used more than 1-2 hr. Researcher observed that fatigue caused by scissor used for long duration and muscle pain also. Thumb pain caused by because in scissor cushion are not provided so that it caused thumb pain.

---

### Summary and conclusion

Through this research researcher observed that Analyzing scissors of different brands. I observed different brands of scissors so i found that which is more comfortable and used by the users. Mostly user satisfied with Mario brand of scissor because its blade is very sharp and cutting fabric easily and handle also comfortable so they are more satisfied with Mario brand. 40% satisfied with Jupiter brand westcott is not comfortable for cutting the fabric because handle space is very less. so no one can satisfied with westcott brand. And user faced problem during using scissors such as muscle pain, fatigue, wrist pain and thumb pain. 40% user suffer with muscle pain, 20% user suffer with fatigue, 20% suffer with wrist pain and 20% suffer with thumb pain.

---

### References

1. [https://www.researchgate.net/publication/324908530\\_Ergonomic\\_Design\\_and\\_Evaluation\\_of\\_Fabric\\_Cutting\\_Scissors\\_with\\_Regard\\_to\\_Pinch\\_Force\\_and\\_Wrist\\_Posture](https://www.researchgate.net/publication/324908530_Ergonomic_Design_and_Evaluation_of_Fabric_Cutting_Scissors_with_Regard_to_Pinch_Force_and_Wrist_Posture)
2. <https://www.sciencedirect.com/science/article/abs/pii/S0003687020301691>
3. [https://www.researchgate.net/publication/343172375\\_Impacts\\_of\\_different\\_fabric\\_scissor\\_designs\\_on\\_physical\\_demands\\_and\\_performance\\_in\\_simulated\\_fabric\\_cutting\\_tasks](https://www.researchgate.net/publication/343172375_Impacts_of_different_fabric_scissor_designs_on_physical_demands_and_performance_in_simulated_fabric_cutting_tasks)
4. Alandurkarim,2020.applied ergonomic,vol.89.<https://doi.org/10.1016/j.apergo.2020.103219>