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A Study on Consumers to Assess Their Knowledge Towards Virtual Fitting Room in Jaipur City

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Abstract:- The present study aims in assessing the knowledge & awareness towards Virtual Fitting Room in Jaipur industry. Importance for every consumer. The data was analyzed through a self-structure interview scheduled Descriptive - frequency & percentage method to find out the effect of demographic factors on knowledge of workers of apparel industries. The results of the study revealed that majority of recondenses purchase apparels from both online and offline mode and maximum 59% respondence used trial room before purchase. Majority of 52% respondent feel unsafe while changing in a trial room. The maximum number of respondent (70%) were totally unaware about the term of Virtual Fitting Room. On assessing the knowledge of consumers, a conversation session was conducted while data collection to spread awareness about Virtual Fitting Room, its policies & benefits.

Keywords:- *Virtual Fitting Room, Technology, Fashion World, Trial Room, Awareness and Perception.*

I. INTRODUCTION

A. Technology and Fashion

A virtual fitting room is a type of technology that allows shoppers to try on items virtually. Shoppers can virtually try on clothing items or beauty products without physically touching the item itself. The augmented reality (AR) or artificial intelligence (AI) technology places the item over live imaging of the customer, so they can check the size, style, and fit of a product they're thinking of buying. Other virtual fitting rooms are powered by artificial intelligence. Similar to augmented reality, AI uses algorithms and machine learning to create full-body 3D models of the shopper standing in front of the camera. Other virtual fitting rooms are powered by artificial intelligence. Similar to augmented reality, AI uses algorithms and machine learning to create full-body 3D models of the shopper standing in front of the camera.

B. Technological Advancements in Fashion Industry

A few years ago, the "Try before you buy" strategy was an efficient customer engagement method in outfit stores. Now, this strategy exists in the form of virtual fitting rooms. Fortune Business Insights predicted that the virtual fitting room market size is expected to reach USD 10.00 billion by 2027.

The pandemic has supercharged fashion's interest in augmented reality. Now, more than ever, the industry must embrace digital and explore new possibilities to give consumers the experiences they want – whether online or offline.

3D scanners revolutionize the idea of selecting ideal clothes. Clothes manufacturers get closer to their customers with the help of 3D scanning. First, when they develop new models with account of anthropometric measurements of a contemporary human being. Their body has noticeably changed for the last 50 years: now they are less involved in heavy labor, spend more time with gadgets, prefer sedentary lifestyle and fast food. Then the clothes manufacturers get closer, when they unite with other players of the fashion market and propose new tools for clothes selection. Using 3D scanning results, popular fashion retailers get more loyal customers, as they know: they will receive clothes that will fit not only by size, but by body type, fit and color type.

C. Virtual Fitting Room

A virtual fitting room is the online comparable of an in-store changing room. It allows shoppers to try on clothes to check one or more of size, fit or style, but virtually rather than physically. 3D customer's model solutions allow the shopper to create a 3D version of him/herself using either information taken scanning could be used to measure the person and see whether they like it or not. Real 3D Simulation fitting room incorporates the features of 3D solutions and photo-accurate fitting rooms. Using both photo and simple body measurements, the solution generates a 3D mannequin, which precisely visualizes customer in chosen apparel items. Normally, the system suggests a proper size for entered measurements, but customer can also choose other sizes to guess their fit. This technology is a convergence of two techniques: using real models and dress-up mannequins. Instead of photographing garments on people similar to customer's shape and size, images are made using shape-shifting, robotic mannequins.

D. Features of Virtual Fitting Room

- A virtual fitting room allows shoppers to try on items without touching them. It works by overlaying an item on a live video feed of a customer.
- The shopper can see the size, style, and fit of an item before they buy it. Also known as virtual dressing rooms, this type of technology has become more popular since the beginning of the COVID-19 pandemic.

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- Virtual fitting rooms, however, reduce that risk dramatically. People don't touch the items they're virtually trying on but still get the chance to see what a product looks like on their own body shape.

E. Need of Virtual Fitting Room

Treating fitting rooms as an integral part of your store's environment adds continuity to the apparel buying process and increases the likelihood that the customer will feel comfortable in using your fitting room, which increases the probability that they will buy

F. Objective of the Study

- To assess the knowledge of consumer towards virtual fitting room.

II. REVIEW OF LITERATURE

Review of literature aims to bring in front the relevant available studies, data & Facts limited and specific to the research topic. Main aim of this chapter was to access the information related to the subject of research which would further help in finding the result, with help of already available facts & studies done on similar topics. Basic and fundamental information was collected about consumer, & producer's knowledge and perception towards Virtual Fitting Room policies & benefits, impact of awareness program in consumers knowledge & understanding, on fashion industry.

Enough literature was not available on Virtual Fitting Room in context to Indian market & following Covid-19, it should current demand due to the Covid time to handle this pandemic situation for consumers. An attempt has been made to record the available literature under the following headings:
Knowledge and awareness on Virtual Fitting Room.
Knowledge of consumers.

To investigate the relation between knowledge & awareness of Virtual Fitting Room policies & consumers perception, it was essential to analyze the researches done on this topic and find the research gap. This chapter provides a deeper understanding of consumers knowledge on Virtual Fitting Room in Indian fashion industries.

Lee & Xu (2019), Explored the technologies of virtual fitting rooms in fashion industry few consumers perspective and found that virtual fitting rooms are new and innovative opportunity in the fashion industry. They explored the consumer experience through cognitive and affective approach. The major finding of the study was that there is major seven virtual fitting room technologies are available in the market place with different features and consumers had varied experience toward these technologies. The study revealed that high accuracy of full 3D body scanner in less utilized in the fashion industry and consumer are least aware about this.

Moroz (2019), Explored the scenario of using Virtual fitting room (VFRs) in generation Y – The study was conducted on youth study was that belongs to the age group 25-35 years. Major finding of the growing rapidly on a global scale. Maximum no. of respondents purchased products through online mode, and clothing is the most important in terms of purchase and frequency is very high in youth. The major issue faced by youth is that a virtual fitting room, is not a very consumer thing and respondent are not aware of size, fit, style, try on or color on a computer or smartphone screen. There is particular obstacle, which comprise, first and foremost, the consumer's fear of accommodating the clothing to their own figure or complexion and the inadequacy to touch the material when selling at a distance. The results of the study demonstrate that the respondents of the research have a positive attitude toward Virtual fitting room-on the other hand, they perceive virtual fitting room as a charming solution for online users (not only generation Y).

Noordin, Ashaari & Wook (2018), Proposed a model for Virtual fitting room based on consumer usability and emotional elements attached with them major finding of the study the issues in the e-commerce fashion industry, specifically fitting problem confrontational in existing Virtual fitting room (VFR) appeal letter. A proposed virtual fitting room model is based on the previous conclusion and discussions, it is important to combine the elements of usability and profound emotion in future virtual fitting room models. This study also proposed a new virtual fitting room model based on the unified theory of acceptance and use of technology (UTAUT), which consists of usability and profound emotional builds. These elements were mainly comprised to interpret the determined problems and to administer recommendations for a design solution, which is functional, beneficial, & fascinating for the consumer.

III. METHODOLOGY

The study was carried out in following steps:
Knowledge and awareness for consumers.
Knowledge and awareness on Virtual Fitting Room.
• Apparel industry and its uses.
• Awareness of Virtual Fitting Room to apparel industry.
• Knowledge of Virtual Fitting Room consumers

In the process of achieving the objectives of the study, it is very important to follow an organized precise approach to present and interpret the results of the study. This chapter deals with the research procedure adopted for the present investigation. The present investigation aims to the study the knowledge and awareness of consumers towards Virtual Fitting Room and to make them aware about Virtual Fitting Room, products. The study was carried out using survey. Assessing knowledge and awareness of consumer towards Virtual Fitting Room is the nucleus of the study.

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Research design is a plan in which method and process of collecting the information needed to carry out the research work have been used. In order to study the demographics, knowledge and awareness of consumers towards Virtual Fitting Room descriptive research design with Virtual Fitting Room was adopted.

IV. RESULTS AND DISCUSSION

The importance of assessing knowledge of apparel industry towards Virtual Fitting Room is the first step to address the consumers issues related to comfort Virtual Fitting Room in fashion industries. Keeping this thing in mind a survey method was adopted & conducted among apparel industry consumers of Jaipur city through a questionnaire which was made to fulfill the requirements of the study. The questionnaire was made in a method which could access the knowledge & perception of consumers of fashion industries.

➢ *Demographic profile of the respondents-*

Section 1: **Knowledge of respondents towards Virtual Fitting Room.**

To assess the knowledge of consumers towards Virtual Fitting Room an questionnaire and surveys was used. Questions on Virtual Fitting Room like comfort, timing, sizes, hesitation & other factors related to same were included in the questionnaire. Questions where of yes/no & option-based questions type responses. Responses of all questions have represented in form of frequency & percentage.

TABLE: 1. Distribution of the respondents on the basis of Stream of study (Bachelor's in). N = 108

S No.	Stream of study (Bachelor's in)	F	%
1.	Commerce	10	9
2.	Science	36	33
3.	Arts	15	14
4.	Others (please specify)	47	44

Table: 1. Revealed that maximum 44% respondents were from professional study background followed by 33%, 14% and 9% were from commerce and arts background in bachelors.

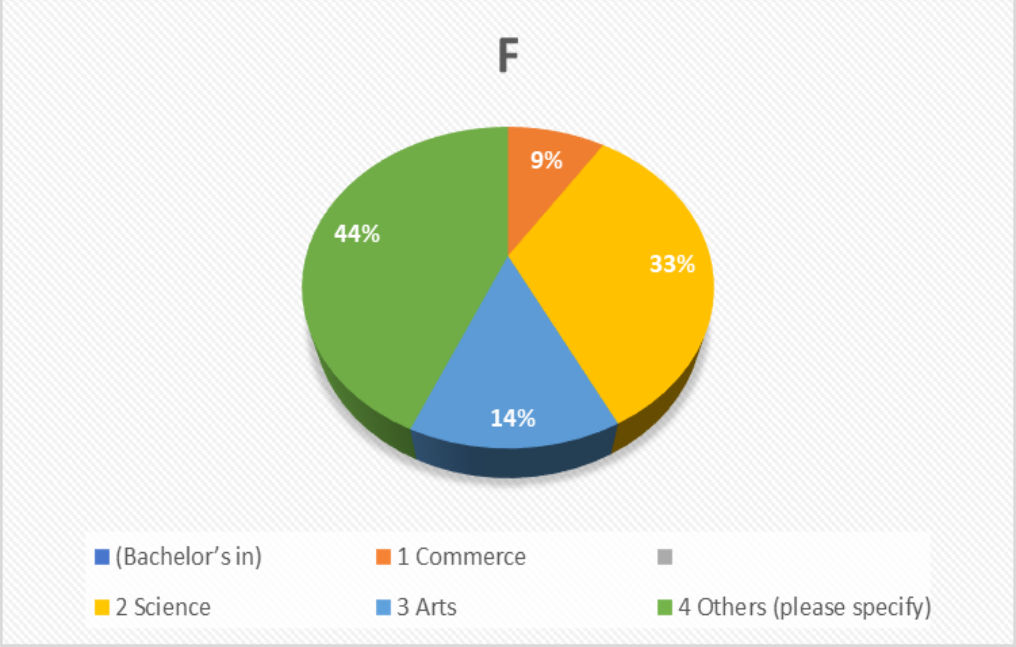

TABLE: 2. Distribution of the respondents on the basis of stream of study (Master's in). N = 108

S No.	Mode of study (Master's in)	F	%
1.	Commerce	10	9
2.	Science	14	13
3.	Arts	12	11
4.	Others (please specify)	13	12

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Table: 2. Revealed that maximum 13% respondents were from professional study background followed by 12%, 11% and 9% were from commerce, science and arts background in masters.

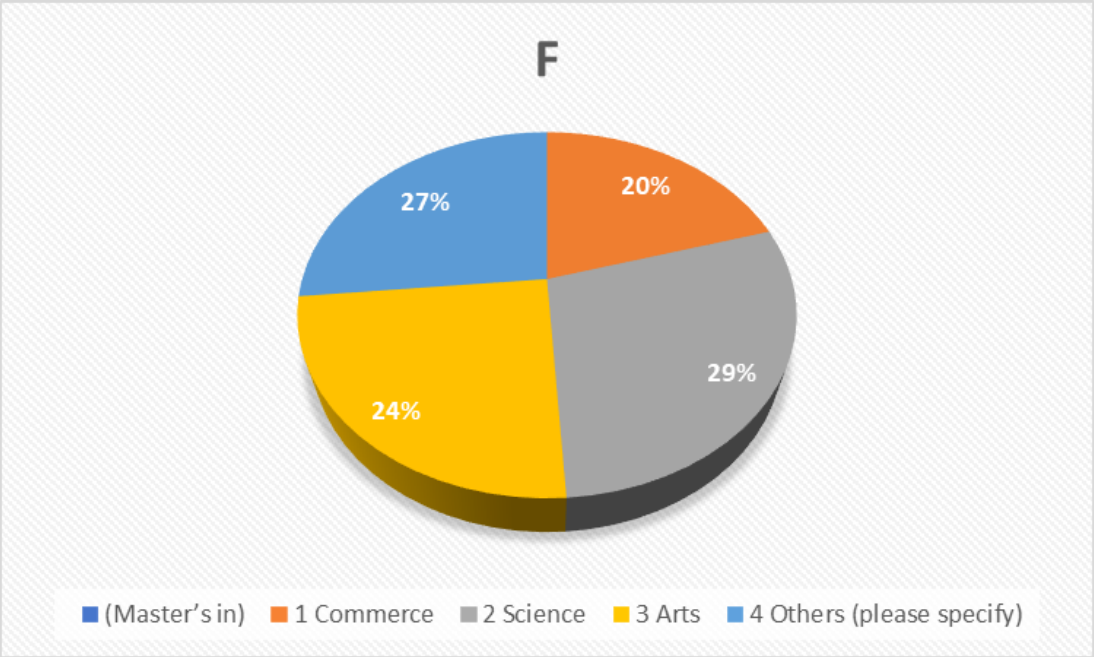

TABLE: 3. Distribution of the respondents on the basis of age group.N = 108

S No.	Mode of age group	f	%
1.	18 – 21	54	50
2.	22 - 25	54	50

Table: 3. Revealed that maximum 50% - 50% respondents were from professional study background followed by background in age.

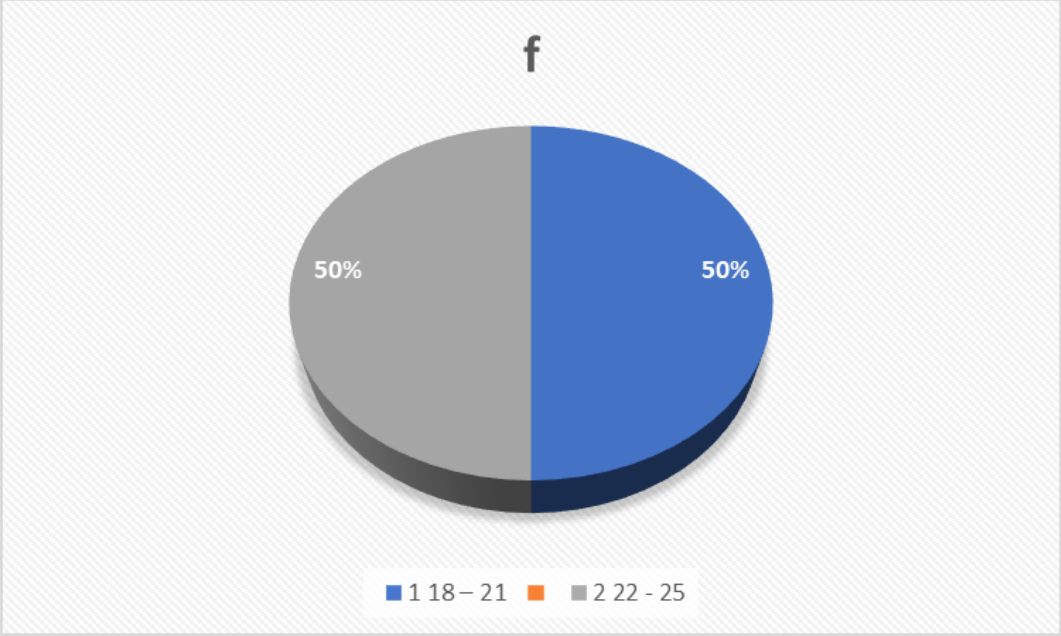

TABLE: 4. Distribution of the respondents on the basis of gender. N = 108

S No.	Mode of gender	f	%
1.	Male	54	50
2.	Female	54	50

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Table: 4. Revealed that maximum 50% - 50% respondents were from professional study background followed by background in gender.

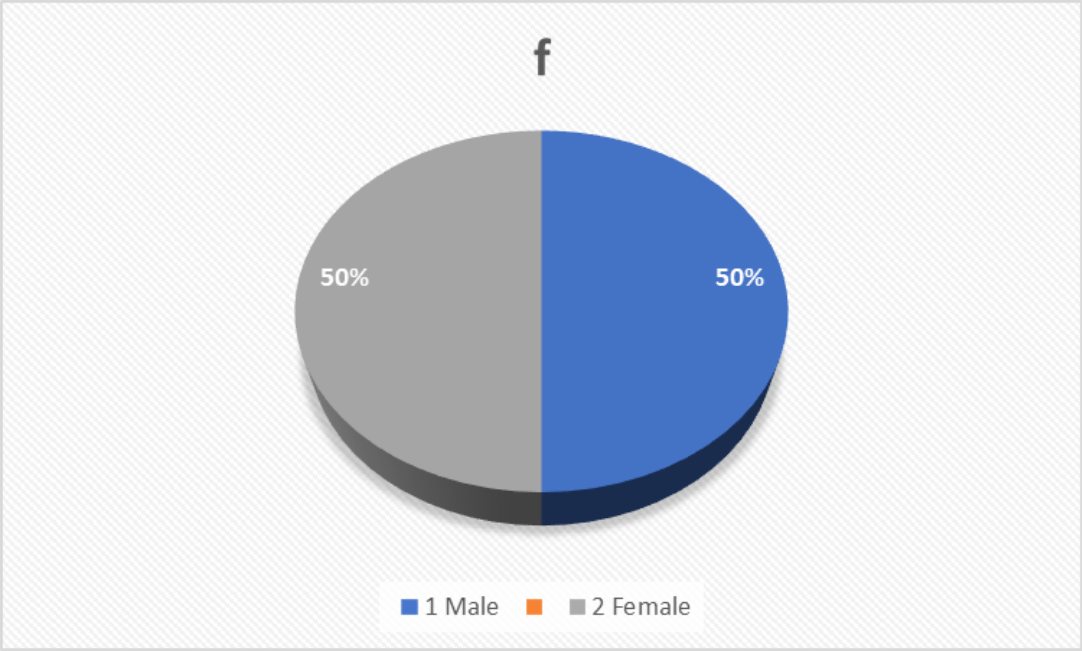

TABLE: 5. Distribution of the respondents on the basis of occupation. N = 108

S No.	Mode of occupation	f	%
1.	Student	89	82
2.	Working	18	17
3.	Others (please specify	1	1

Table: 5. Revealed that maximum 82% respondents were from professional study background followed by 17% and 1% were from other background in occupation.

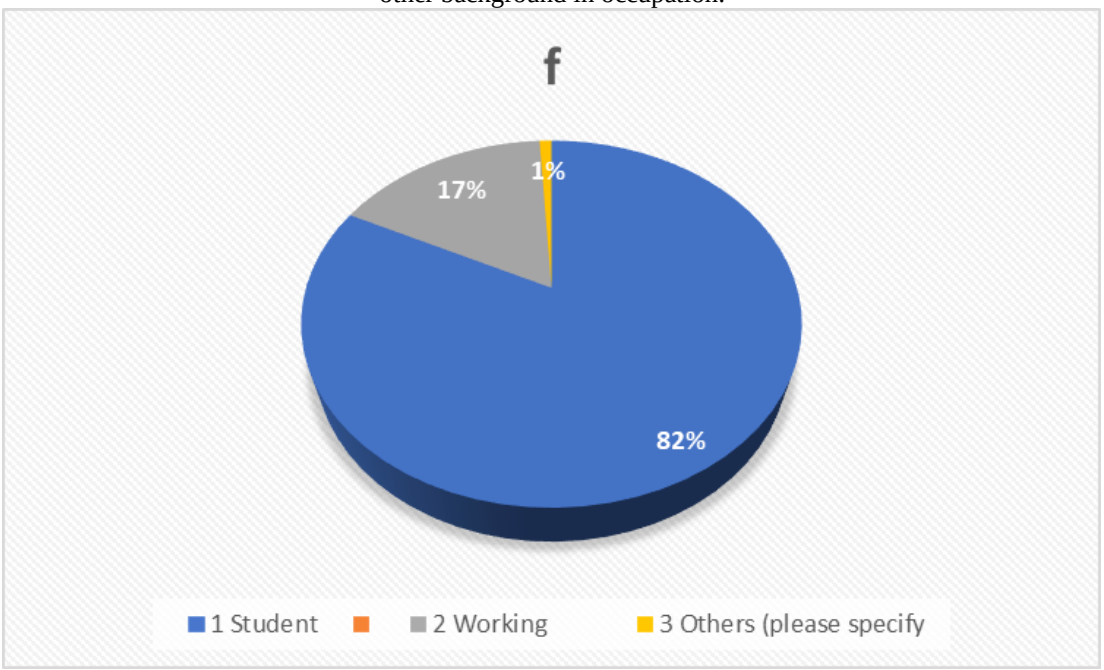

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TABLE: 6. Distribution of the respondents on the basis of type of family. N = 108

S No.	Mode of type of family	f	%
1.	Nuclear	64	59
2.	Joint	44	41

Table: 6. Revealed that maximum 59% respondents were from professional study background followed by 41% background in types of family.

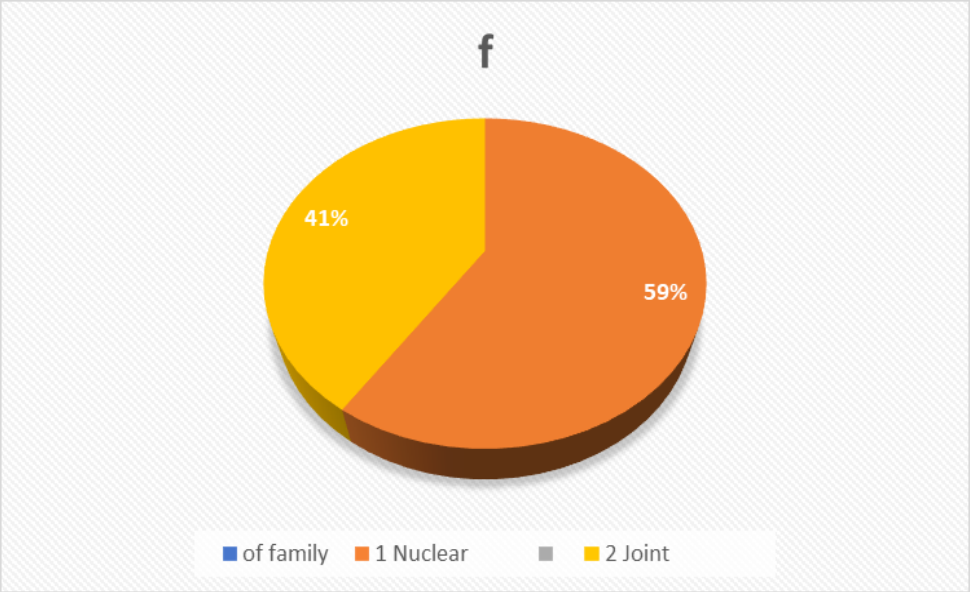

TABLE: 7. Distribution of the respondents on the basis of purchase of clothes. N = 108

S No.	Mode of Purchase	f	%
1.	Online	10	9.25
2.	Offline	22	21
3.	Both	76	70

Table: 7. Revealed that maximum 70% respondents purchase clothes both, 21% respondents purchased clothes offline followed by 9% purchased their clothes online.

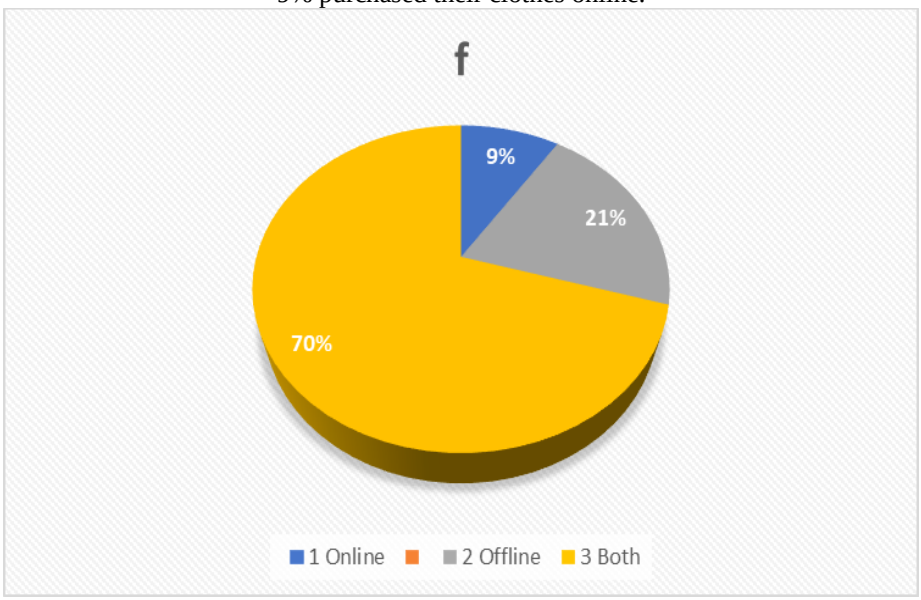

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TABLE: 8. Distribution of the respondents on the basis of purchasing frequency Online. N = 108

S No.	Mode of Purchase Frequency in online	f	%
1.	Once in a week	10	9
2.	Once in a month	37	34
3.	Rarely	50	47
4.	None of above	11	10

Table: 8. Revealed that maximum 46% respondents purchase clothes rarely, 34% respondents purchased clothes once in a month followed by 10% and 9% purchased their clothes never or once in a week.

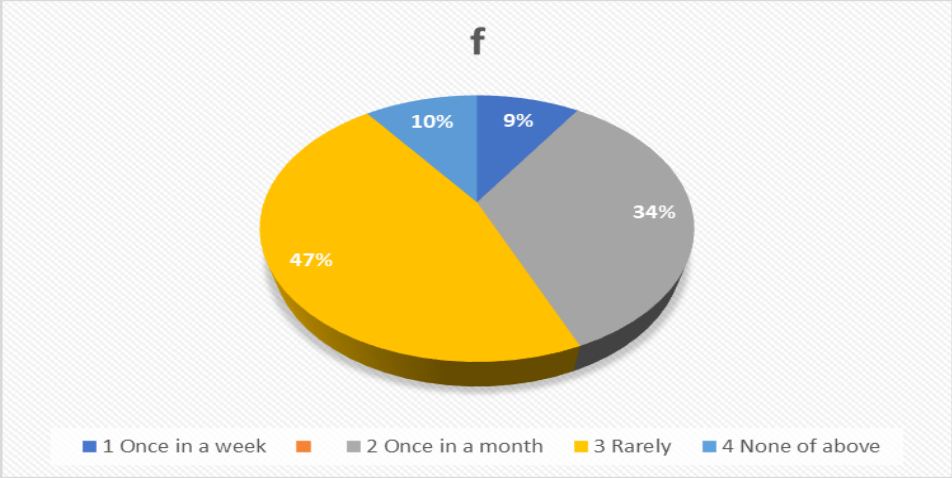

TABLE: 9. Distribution of the respondents on the basis of purchasing frequency Offline. N = 108

S No.	Mode of Purchase Frequency in Offline	f	%
1.	Twice in a week	6	6
2.	Twice in a month	51	47
3.	Rarely	44	41
4.	None of above	7	6

Table: 9. Revealed that maximum 47% respondents purchase clothes twice in a month, 41% respondents purchased clothes rarely followed by 6% and 6% purchased their clothes never or twice in a week.

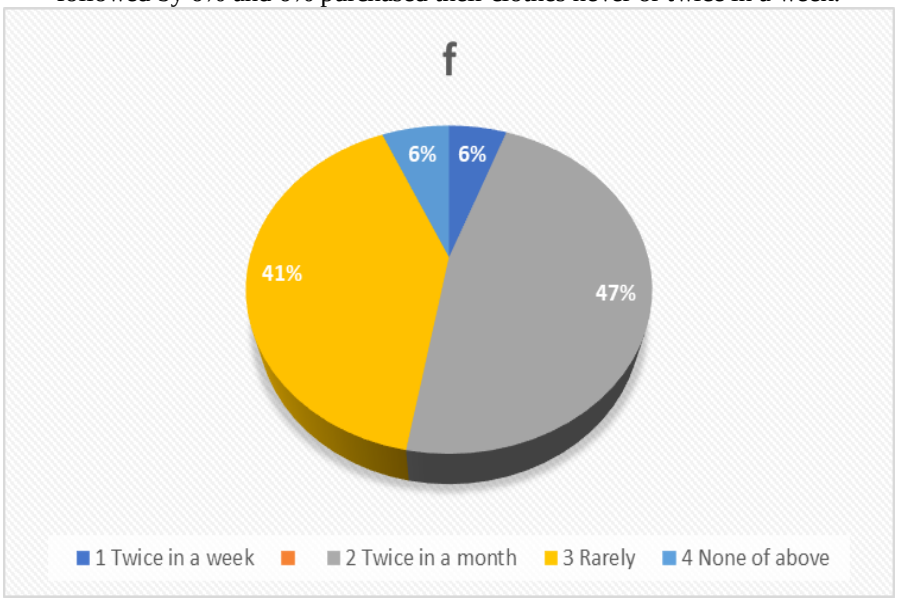

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TABLE: 10. Distribution of the respondents on the basis of using trial room while shopping offline N = 108

S No.	Mode of Purchase Frequency in Offline	f	%
1.	Every time	63	58
2.	Rarely	39	36
3.	Never	5	5
4.	None of above	1	1

Table: 10. Revealed that maximum 58% respondents using trial room clothes every time, 36% respondents purchased clothes rarely followed by 5% and 1% purchased their clothes never or none of above.

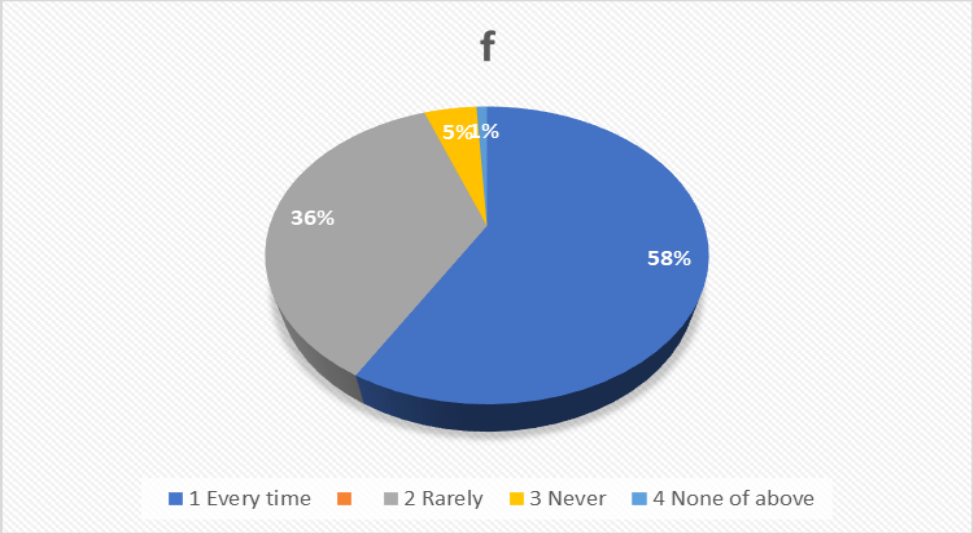

TABLE: 11. Distribution of the respondents on the basis of feeling while changing in a trial room. N = 108

S No.	Mode of feeling frequency while changing in a trial room	f	%
1.	Very comfortable	27	25
2.	Slightly comfortable	46	43
3.	Less comfortable	26	24
4.	Not at all comfortable	9	8

Table: 11. Revealed that maximum 43% respondents feeling while changing in a trial room slightly comfortable, 25% respondents very comfortable followed by 24% and 8% less comfortable and not at all.

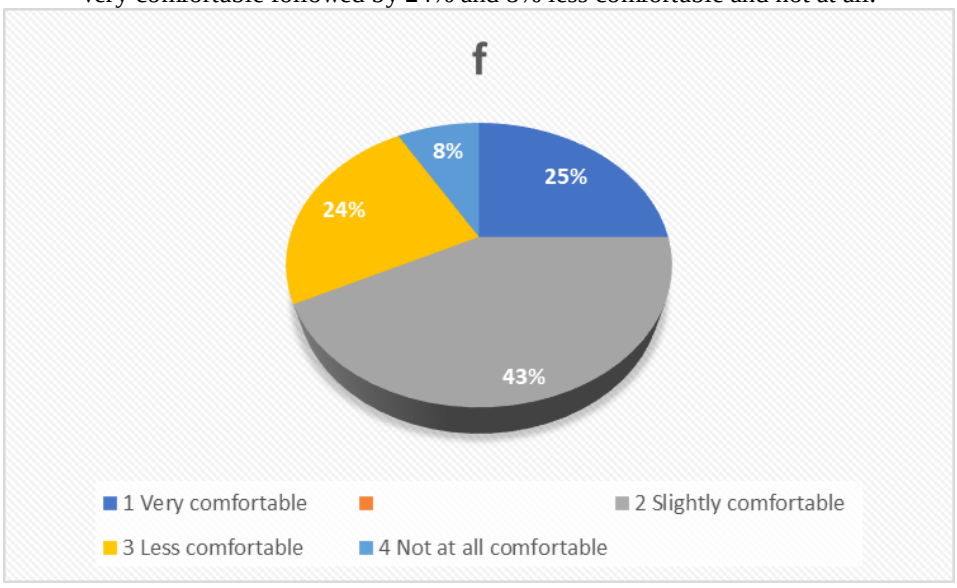

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TABLE: 12. Distribution of the respondents on the basis of feel safe changing in a trial room. N = 108

S No.	Mode of feeling frequency while changing in a trial room	f	%
1.	Yes	56	52
2.	No	52	48

Table: 12. Revealed that maximum 52% respondents feel safe changing in a trial room, yes, 48% no response.

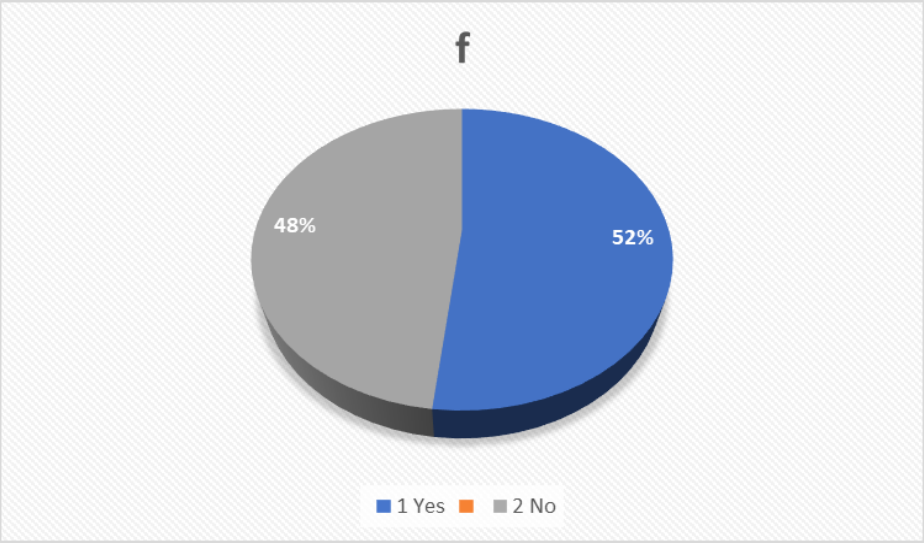

TABLE: 13. Distribution of the respondents on the basis of heard about the term Virtual fitting room before. N = 108

S No.	Mode of feeling frequency heard about VFR	f	%
1.	Yes	35	32
2.	No	73	68

Table: 13. Revealed that maximum 68% respondents no to heard about the term virtual fitting room, 32% respondents yes.

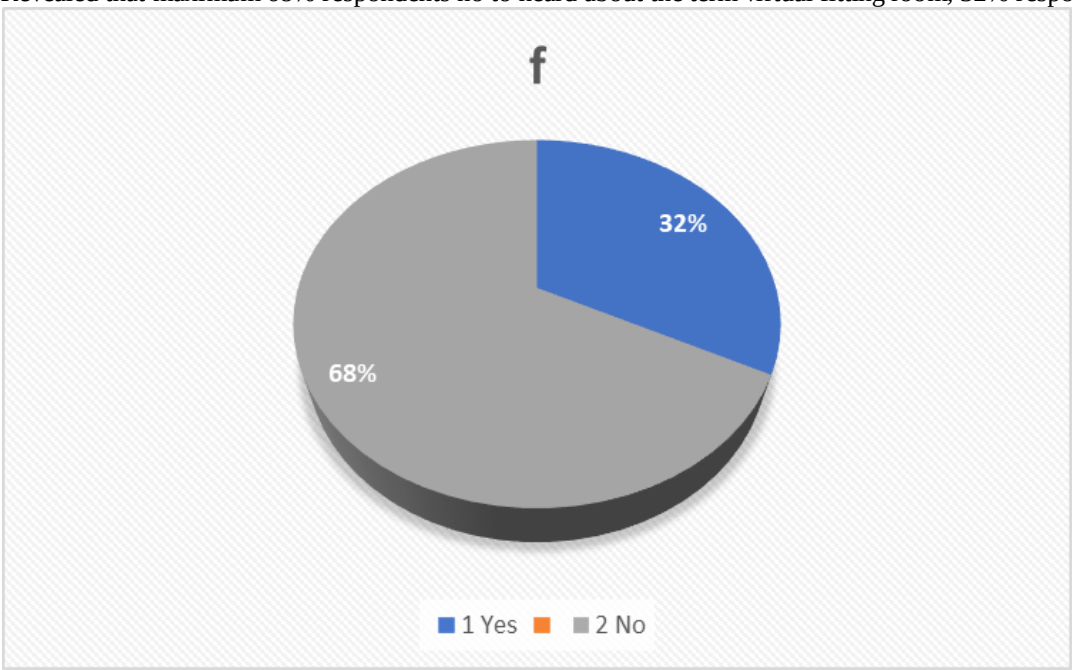

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TABLE: 14. Distribution of the respondents on the basis of used Virtual fitting room. N = 108

S No.	Mode of feeling frequency of used VFR	f	%
1.	Yes	12	11
2.	No	96	89

Table: 14. Revealed that maximum 89% respondents used virtual fitting room, 11% respondents followed by 11%.

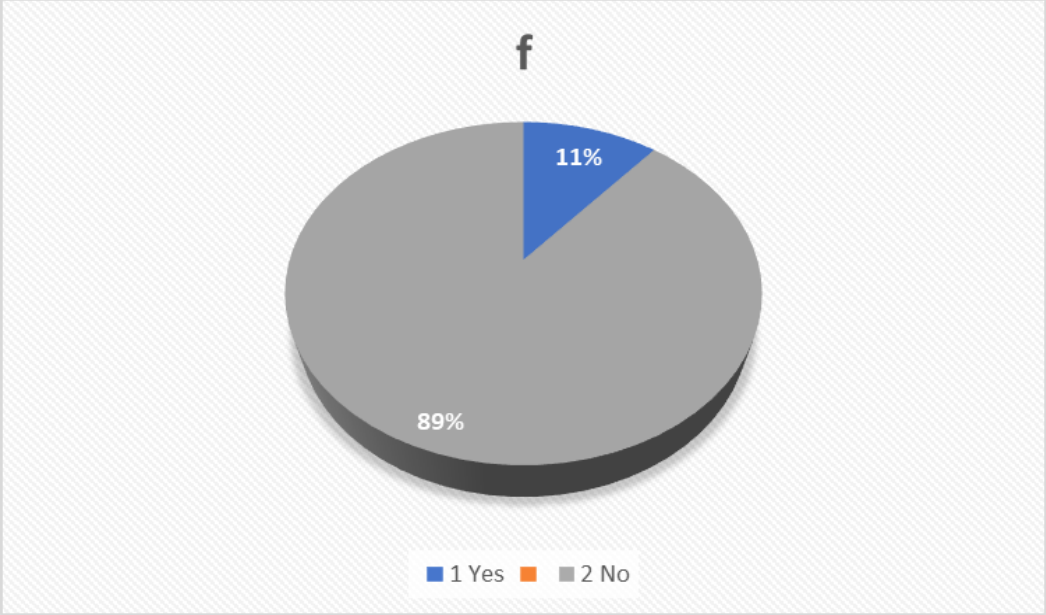

TABLE: 15. Distribution of the respondents on the basis of know more about Virtual fitting room. N = 108

S No.	Mode of feeling frequency of know more about VFR	f	%
1.	Yes	88	81
2.	No	20	19

Table: 15. Revealed that maximum 81% respondents know more about virtual fitting room, 19% respondents don't want to know more about virtual fitting room.

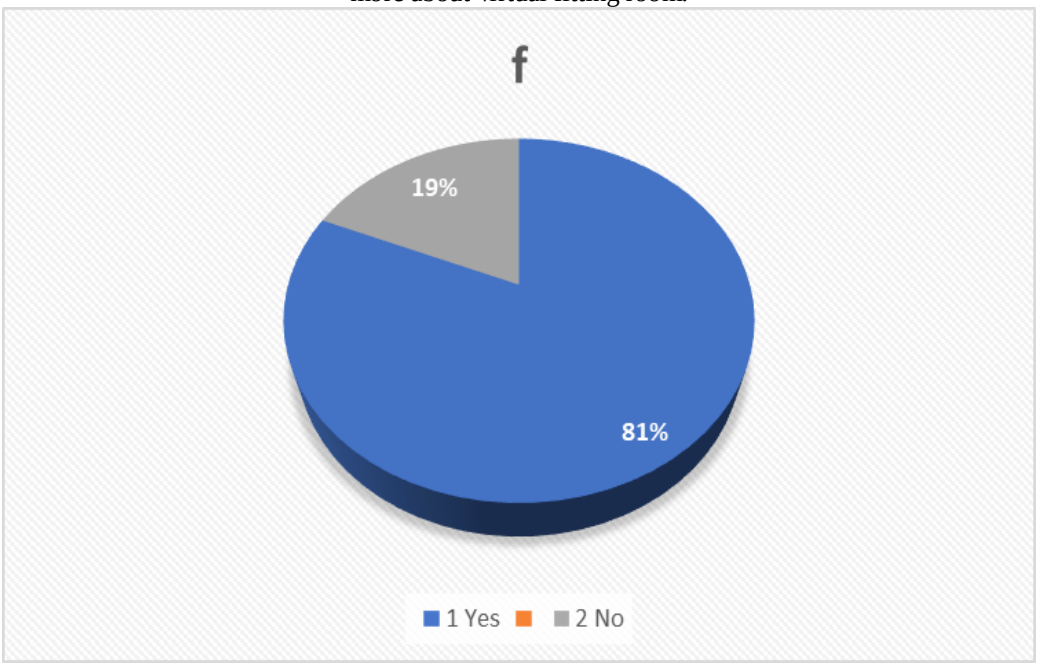

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TABLE: 16. Distribution of the respondents on the basis of VFR gives you more easiness as compare to trial room. N = 108

S No.	Mode of feeling frequency of easy as compare to trial room	f	%
1.	Yes	62	57
2.	No	46	43

Table: 16. Revealed that maximum 57% respondents yes about virtual fitting room gives you more easiness as compare to trial room, and 43% respondents no.

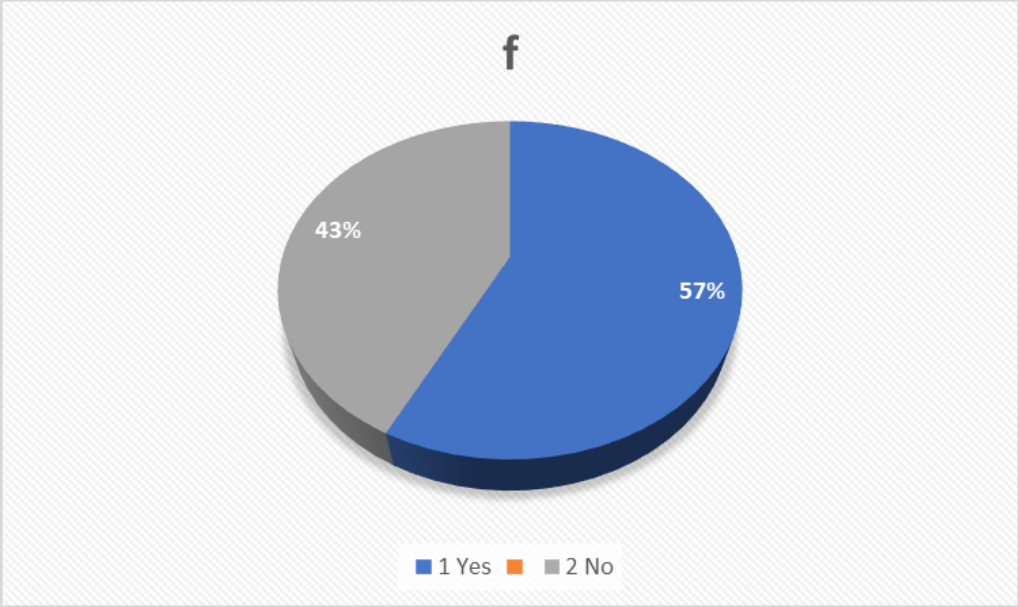

TABLE: 17. Distribution of the respondents on the basis of long queues at trial room is a waste of time. N = 108

S No.	Mode of feeling frequency of trial room is a waste of time	F	%
1.	Yes	85	79
2.	No	23	21

Table: 17. Revealed that maximum 79% respondents yes about long queues at trial room is a waste of time, 21% respondents no response.

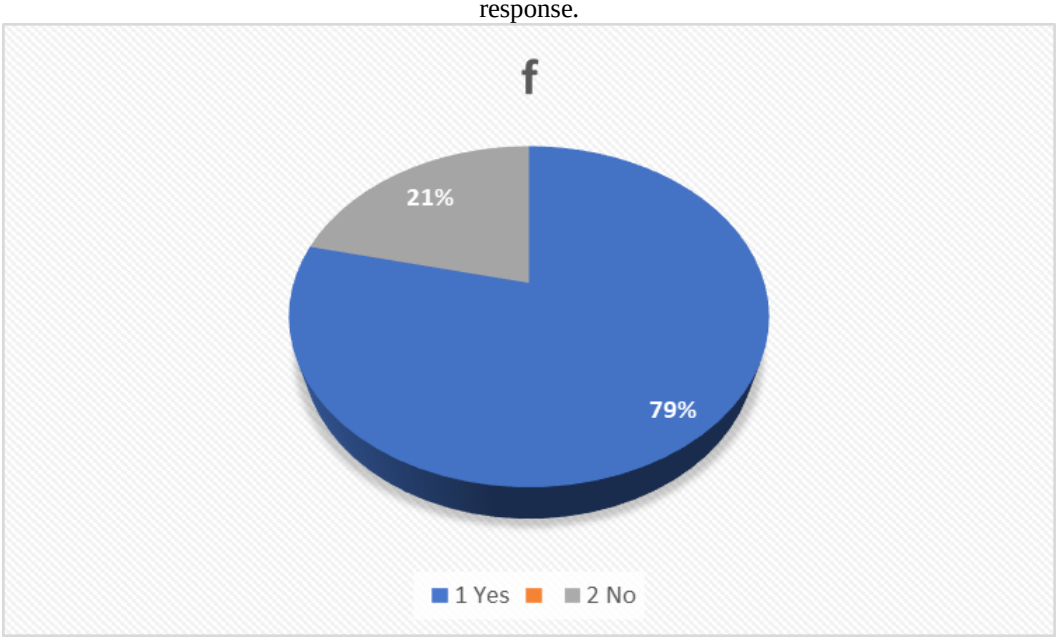

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TABLE: 18. Distribution of the respondents on the basis of VFR are time saving as compare to trial room. N = 108

S No.	Mode of feeling frequency of it is time saving as compare to trial room	F	%
1.	Yes	97	90
2.	No	11	10

Table: 18. Revealed that maximum 90% respondents yes about virtual fitting room are time saving as compare to trial room, 10% respondents no response.

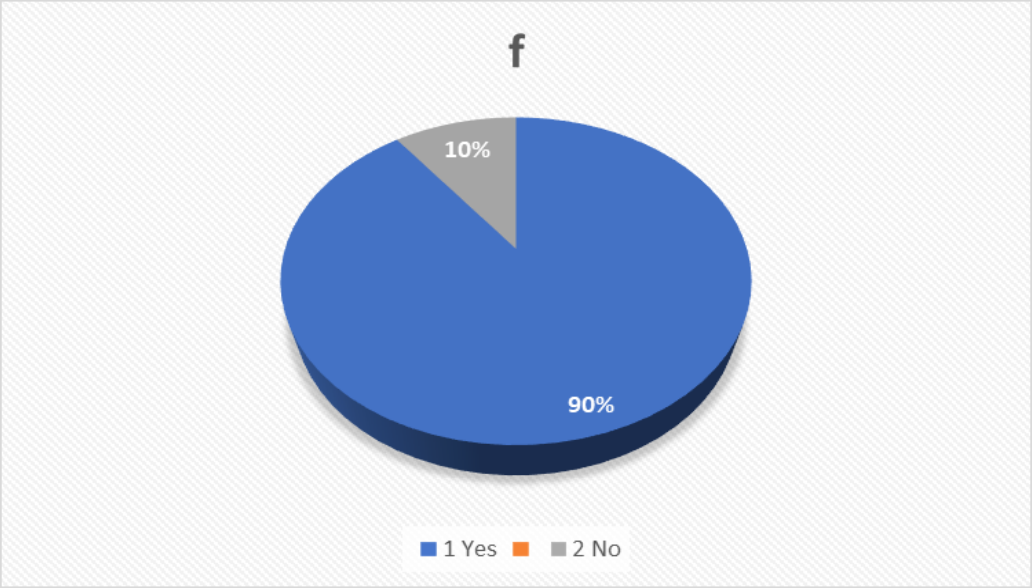

TABLE: 19. Distribution of the respondents on the basis of know VFR are based on artificial intelligence. N = 108

S No.	Mode of feeling frequency of know VFR are based on artificial intelligence	F	%
1.	Yes	79	73
2.	No	29	27

Table: 19. Revealed that maximum 73% respondents yes about know virtual fitting room are based on artificial intelligence and 27% respondents no response.

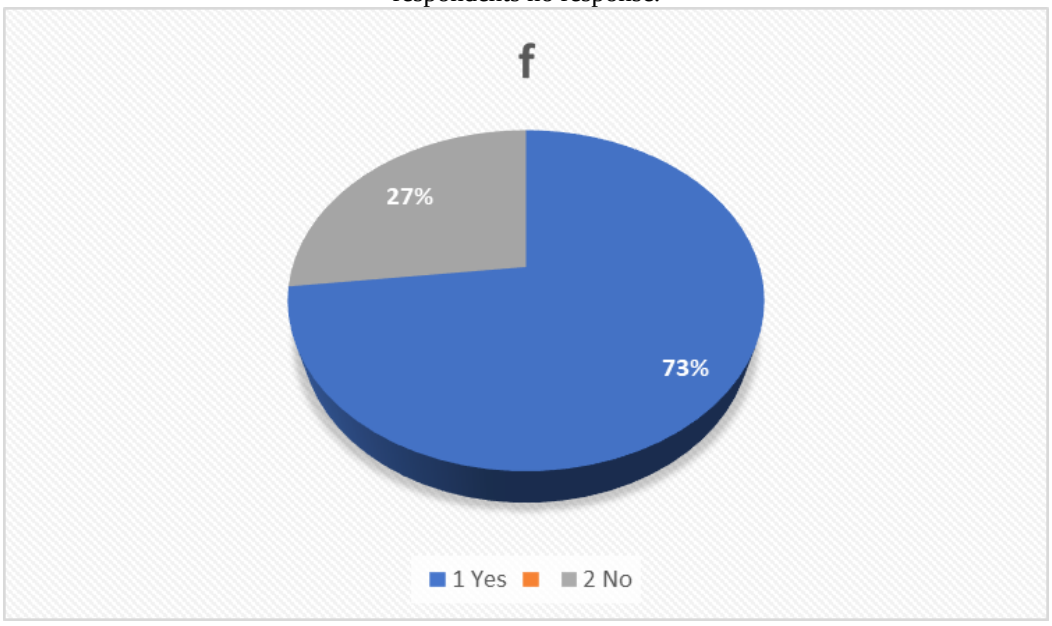

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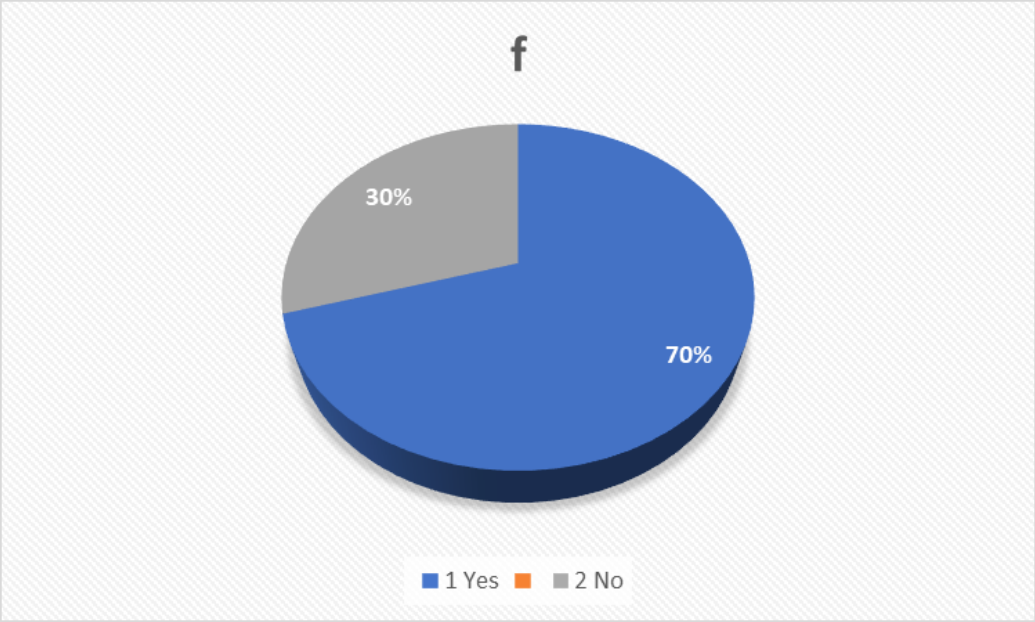
TABLE: 20. Distribution of the respondents on the basis of VFR gives you a Hassel free shopping experience. N = 108

S No.	Mode of feeling frequency of it gives a Hassel free shopping experience.	F	%
1.	Yes	76	70
2.	No	32	30

Table: 20. Revealed that maximum 70% respondents yes about to virtual fitting room gives you a Hassel free shopping experience and 30% respondents no.



V. CONCLUSION

The word Virtual Fitting Room is mostly recognized and trusted as technology label in the world. Virtual Fitting Room is an arrangement made to help out the peoples & consumers in developing cities achieve this technology virtually & safely. The implementation of Virtual Fitting Room in Indian market fully depends on consumers who are willing to make active ethical choices in available technology and competitions in the market that has direct impact on upliftment of the society and providing consumers proper facilities and actual rates.

Fashion is a major part of the basic need of human being and consumers are usually not aware about the technology. The changing or fast fashion of the apparel & fashion industry has forced consumers to buy more clothing, but this time. The present study focuses on spreading awareness towards fair Virtual Fitting Room among fashion industry consumers was an attempt to assess the knowledge and awareness of consumers of Jaipur city to change their attitude towards shopping and make their behaviour friendly to accept Virtual Fitting Room technology. When consumers lack knowledge about Virtual Fitting Room this affect their knowledge & awareness.

Hence the study was planned to find the knowledge of fashion industry consumers towards Virtual Fitting Room. The study further spreads awareness among them so that they have a positive attitude towards Virtual Fitting Room & are able to understand the technology.

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