Project Report

On

A BRIEF STUDY ON THE IMPACT OF SOCIAL MEDIA ON BODY IMAGE CONCERNS AND SELF-ESTEEM

Submitted

in partial fulfillment of the requirements for the degree of

BACHELOR OF SCIENCE

in

MATHEMATICS

by

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MARCH 2024

ST. TERESA'S COLLEGE (AUTONOMOUS),
ERNAKULAM

CERTIFICATE

This is to certify that the dissertation entitled, **A BRIEF STUDY ON THE IMPACT OF SOCIAL MEDIA ON BODY IMAGE CONCERNS AND SELF-ESTEEM** is a bonafide record of the work done by Ms. **SREEDEVI A S** under my guidance as partial fulfillment of the award of the degree of **Bachelor of Science in Mathematics** at St. Teresa's College (Autonomous), Ernakulam affiliated to Mahatma Gandhi University, Kottayam. No part of this work has been submitted for any other degree elsewhere.

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DECLARATION

I hereby declare that the work presented in this project is based on the original work done by me under the guidance of Smt. NEENU SUSAN PAUL , Assistant Professor, Department of Mathematics and Statistics , St. Teresa's College(Autonomous), Ernakulam and has not been included in any other project submitted previously for the award of any degree.

Sreedevi 29/04/2024

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Date : 15-03-2024

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Ernakulam

Date : 15-03-2024

SREEDEVI A S

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Chapter 1
INTRODUCTION

1.1 INTRODUCTION

Social media has become a ubiquitous part of the daily lives of young people, providing them with a platform to connect with peers, express themselves, and access a vast amount of information. While it facilitates global connectivity, it also presents challenges. The constant stream of content can lead to information overload, and the curated nature of posts may contribute to the perpetuation of unrealistic standards, affecting individuals' mental well-being. Despite these challenges, social media remains a powerful tool for self-expression, activism, and community building. Acknowledging both its positive and negative aspects is crucial for fostering a balanced and mindful approach to social mediause in today's digitally connected world. Exploring how social media shapes body image and self-esteem, our project delves into the influence of online platforms on perceptionsof beauty and individual worth. The impact of social media on body image and self- esteem has become a prominent concern in contemporary society. As individuals engage with online platforms, they are exposed to a barrage of curated images and societal standards, influencing perceptions of beauty and self-worth. This project explores the multifaceted effects of social media on shaping body image and the consequential implications for overall self-esteem.

1.1.1 BODY IMAGE

Your ideas and feelings about your body come together to form your body image. A person's perception of their body can vary from favorable to negative experiences, and they may experience both positive and negative emotions at various times. Both internal (like personality) and external (like the social environment) elements can have an impact on one's body image. Social media use is unavoidable in the modern world. These sites frequently function as venues for people to showcase themselves, where they meticulously select and refine their photos to convey a specific message. The widespread

use of digitally edited photos has the potential to promote unattainable beauty standards. Regular exposure to this kind of material could cause people to compare themselves negatively, which would increase their body dissatisfaction. Comprehending these dynamics is crucial in tackling the possible adverse effects of social media on an individual's perception of themselves.

1.1.2 SELF ESTEEM

Self-esteem is a critical aspect of a person's psychological well-being, referring to an individual's evaluation of their worth or value. It is highly impressionable. A small word or an action from others may affect our self-esteem. The rise of influencer culture and the quest for likes and followers in social media can foster a culture of comparison, impacting self-esteem. While receiving positive feedback on social media can boost self-esteem, negative feedback or lack of attention can have the opposite effect. The prevalence of likes, comments, and followers on social media can further impact self-Worth. Additionally, concerns about privacy, cyberbullying, and the spread of misinformation underscore the complexities associated with social media. A culture that places value on external validation may lead individuals to seek affirmation through online interactions, potentially compromising their authentic sense of self. The curated reality on social media can create a distorted perception of others' lives, contributing to feelings of inadequacy and lower self-esteem.

1.2 OBJECTIVES

1. To investigate the relationship between the uses of social networking sites and the level of self-esteem among people.
2. To analyze how participants' exposure to fast fashion trends on social media platforms influences their clothing buying behavior and self-perception.
3. To examine how social norms and external perceptions, particularly related tofast fashion ideas, influence one’s body image and self-esteem.

4. To explore how concerns related to body image, influenced by fast fashion trends, drive individuals to seek changes in their appearance or clothing choices.
5. To analyze how age group is related to the use of social networking sites.

1.3 LITERATURE REVIEW

Numerous studies have investigated the impact of social media on body image and self-esteem. It's important to note that research in this area is ongoing, with scholars examining diverse factors such as the role of influencers, the impact of photo-editing apps, and the potential for positive body image movements on platforms. As the field evolves, a nuanced understanding of the relationship between social media and body image/self-esteem continues to emerge.

1. Fardouly et al. (2015) conducted a study titled "The impact of appearance comparisons made through social media, traditional media, and in person in women's everyday lives." The research explored how exposure to appearance-related content on various platforms, including social media like Instagram influences women's body image. Their findings indicated that frequent comparisons with others' appearances on social media, particularly on platforms like Instagram, were associated with increased body dissatisfaction among young women. The study contributed valuable insights to the understanding of the role of social media in shaping body image perceptions and the potential negative consequences of constant exposure to idealized images.

2. Perloff (2014) authored a study titled "Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research." This research delves into the impact of social media, specifically focusing on how it contributes to body image concerns among young women. Perloff's work explores the theoretical frameworks through which social media influences body image, emphasizing concepts like social comparison and self-presentation. The study discusses how engagement with social media platforms, where individuals often present idealized versions of themselves, can contribute to body dissatisfaction and concerns about physical appearance. Perloff provides valuable insights into the psychological mechanisms at play in the context of social media and body image concerns among young women.

3. Tiggemann and Slater (2014) conducted a study titled "Net Girls: The Internet, Facebook, and body image concern in adolescent girls." In this research, they explored the relationship between Facebook use and body image concerns among adolescent girls. The findings suggested that frequent Facebook use was associated with higher levels of body dissatisfaction and the drive for thinness in adolescent girls. The study highlighted the role of online social media platforms in shaping body image perceptions among young individuals.

1.4 LIMITATIONS

This study encountered several limitations. In the survey, the age group under 10 was not taken into consideration and proportion of participants of age 40 and above was relatively low. Moreover, the study's duration was limited to three to four weeks, raising uncertainty about how results might have evolved over a longer timeframe. But due to time and restrictions, the survey was limited to only 314 participants. Since the responses were the personal choices of the respondents there is a chance that the data may or may not be biased.

Chapter 2
METHODOLOGY

The people aged 10 and above were the survey's target demographic. A Google form was distributed to all individuals who are 10 years of age and older in order to collect surveydata. A 16-item questionnaire was sent, including topics such as age, gender, use of social media, screen time, contentment with one's body image, rate of self-esteem, and purchasing habits for fast fashion clothing. Microsoft Excel and SPSS were used to tabulate and analyze the acquired data.

2.1 CORRELATION

The degree and direction of a linear link between two variables are measured by correlation. The correlation coefficient, represented by the letter "r," is a number between -1 and 1. A correlation that is positive is denoted by a positive r, a negative correlation by a negative r, and a weak correlation by r that is close to 0. Remember that correlation merely measures the relationship between variables; it does not imply causality. We use the correlation coefficient, or r, a unit-free metric that runs from -1 to +1 to characterize correlations. A p-value indicates statistical significance. Correlations are therefore usually expressed using the two key values "r" and "p." The linear relationship is weaker the closer r comes to zero. Based on what we see in the sample, the p-value indicates that we may reasonably conclude that the population correlation coefficient is not zero.

2.2 CHI – SQUARE TEST

Statistical analytical methods were primarily used in biological data analysis in the nineteenth century, and researchers such as Sir George Airy and Mansfield Merriman assumed that observations followed a normal distribution, which Karl Pearson criticized in his 1900 paper. Pearson discovered substantial skewness in certain biological observations towards the close of the nineteenth century. Pearson, in a series of articles published from 1893 to 1916, devised the Pearson distribution, a family of continuous probability distributions that includes the normal distribution and many skewed distributions, and proposed a method of statistical analysis consisting of using the Pearson distribution to model the observation and performing a test of goodness of fit to determine how well it fits the data.

Pearson's Chi-Squared Test

Pearson's 1900 publication on the $\chi 2$ test is widely regarded as a foundational piece of contemporary statistics. Pearson's paper looked into a goodness of fit test. Assume a random sample of n observations from a population is divided into k mutually exclusive classes with corresponding observed numbers x_i (for i = 1, 2 ,…, k). A null hypothesis yields the probability p_i that an observation falls into the class. So, we have the predicted numbers $m_i = np_i$ for all i, where

$$\sum_{i=1}^{k} p_i = 1$$

$$\sum_{i=1}^{k} m_i = n \sum_{i=1}^{k} p_i = n$$

Pearson suggested that if the null hypothesis is accurate, the limiting distribution for thequantity given below is the $\chi 2$ distribution as n approaches infinity.

$$X^2 = \sum_{i=1}^{k} \frac{(x_i - m_i)^2}{m_i} = \sum_{i=1}^{k} \frac{x_i^2}{m_i} - n$$

Pearson found that as n increases, X^2 follows the $\chi 2$ distribution with $k - 1$ degrees of freedom, assuming that all observations x_i are normally distributed. However, Pearson next considered the case in which the expected numbers depended on the parameters that had to be estimated from the sample, and suggested that, with the notation of m_i being the true expected numbers and m_i being the estimated expected numbers, the difference.

$$X^2 - X'^2 = \sum_{i=1}^{k} \frac{x_i^2}{m_i} - \sum_{i=1}^{k} \frac{x_i^2}{m_i'}$$

In conclusion, Pearson argued that if we regarded X'^2 as also distributed as $\chi 2$ distribution with $k - 1$ degrees of freedom, the error in this approximation would not affect practical decisions. This conclusion caused some controversy in practical applications and was not settled for 20 years until Fisher's 1922 and 1924 papers. Pearson then studied the case in which the anticipated numbers depended on the parameters that needed to be estimated from the sample, and suggested that, with the notation of m_i being the genuine expected numbers and m_i' being the estimated expected numbers, the difference. Pearson concluded that if we consider X'^2 as a $\chi 2$ distribution with $k - 1$ degree of freedom, the mistake in this approximation will not affect practical decisions. This finding sparked debate in practical applications for 20 years, until Fisher's 1922 and 1924 articles resolved the issue.

The chi-squared test, also known as the chi-square or $\chi 2$ test, is a statistical hypothesis test used to analyze contingency tables with large sample sizes. In layman's words, this

test is used to determine if two categorical variables (two dimensions of the contingency table) have independent effects on the test statistic (table values). The test is valid when the test statistic is chi-squared distributed under the null hypothesis, such as Pearson's chi-squared test and its variants. Pearson's chi-squared test determines whether there is a statistically significant discrepancy between predicted and observed frequencies in one or more contingency table categories. For contingency tables with smaller sample sizes, the Fisher's exact test is employed instead. Chi-squared distribution, showing $\chi 2$ on the x-axis and p-value (right tail probability) on the y-axis. In the standard applications of this test, the observations are classified into mutually exclusive classes. If the null hypothesis that there are no differences between the classes in the population is true, the test statistic computed from the observations follows a $\chi 2$ frequency distribution. The purpose of the test is to evaluate how likely the observed frequencies would be assuming the null hypothesis is true. Test statistics that follow a $\chi 2$ distribution occur when the observations are independent. There are also $\chi 2$ tests for testing the null hypothesis of independence of a pair of random variables based on observations of the pairs. The chi-squared distribution plots $\chi 2$ on the x-axis and p-value (right tail probability) on the y-axis. In the conventional applications of this test, observations are divided into mutually exclusive categories. If the null hypothesis (no differences across classes in the population) is true, the test statistic generated from the observations will follow a $\chi 2$ frequency distribution. The test's objective is to determine how likely the observed frequencies are provided if the null hypothesis is true. Independent observations yield test statistics with a $\chi 2$ distribution. The $\chi 2$ test can be used to test the independence of two random variables based on their observations. In chi-squared tests, the distribution of the test statistic approaches the $\chi 2$ distribution asymptotically. This means that as sample sizes increase, the sampling distribution of the test statistic becomes more similar to the chi-squared distribution (if the null hypothesis is true).

2.3 ANOVA TEST

Analysis of variance (ANOVA) is a statistical method that divides observed aggregate variability within a data set into two parts: systematic and random variables. The systematic factors have a statistical impact on the supplied dataset, but the random factors do not. In regression research, analysts employ the ANOVA test to examine how independent factors influence the dependent variable. The t- and z-test procedures established in the twentieth century were utilized for statistical analysis until 1918, when Ronald Fisher invented the analysis of variance approach. ANOVA, commonly known as Fisher's analysis of variance, is an extension of the t- and z-tests. The word became popular in 1925, when it appeared in Fisher's book "Statistical Methods for Research Workers." It was initially used in experimental psychology before being applied to more complex subjects. Analysis of variance, or ANOVA, is a statistical procedure that divides observed variance data into multiple components for further testing. A one-way ANOVA is performed with three or more groups of data to determine the relationship between the dependent and independent variables. If there is no real variation between the groups, the ANOVA's F-ratio should be near to one.

The Formula for ANOVA is:

$$F = \frac{MST}{MSE}$$

Where:

F=ANOVA coefficient

MST=Mean sum of squares due to treatment

MSE=Mean sum of squares due to error.

The ANOVA test is the first stage in examining the factors that influence a particular data set. After the test is completed, an analyst conducts extra testing on the methodological variables that significantly contribute to the data set's inconsistency. The analyst uses the ANOVA test findings in an f-test to create extra data that is consistent

with the proposed regression models.

The ANOVA test allows you to compare more than two groups at once to see if there is a relationship between them. The F statistic (also known as the F-ratio) is the output of the ANOVA formula, and it allows for the examination of many sets of data to evaluate variability across and within samples. If there is no significant difference between the tested groups, known as the null hypothesis, the ANOVA's F-ratio statistic will be near to one. The F-distribution represents the distribution of all potential values for the F statistic. This is actually a collection of distribution functions with two characteristic numbers: numerator degrees of freedom and denominator degrees of freedom. There are two types of ANOVA: one-way (or unidirectional), and two-way. There are also variations on ANOVA. For example, MANOVA (multivariate ANOVA) varies from ANOVA in that the former examines for numerous dependent variables at the same time, whilst the latter only assesses one dependent variable. In an analysis of variance test, the number of independent variables is referred to as one-way or two-way. A one-way ANOVA determines the effect of a single factor on a single response variable. It determines whether all the samples are identical. The one-way ANOVA is used to find statistically significant differences between the means of three or more independent (unrelated) groups. The two-way ANOVA is an expansion of the one-way ANOVA. A one-way relationship has one independent variable influencing a dependent variable. With a two-way ANOVA, there are two independent variables. For example, a two-way ANOVA enables a corporation to compare worker productivity based on two independent factors, such as income and skill set. It is used to examine the interaction of two elements and to test their effects at the same time.

Chapter 3

DATA PRESENTATION

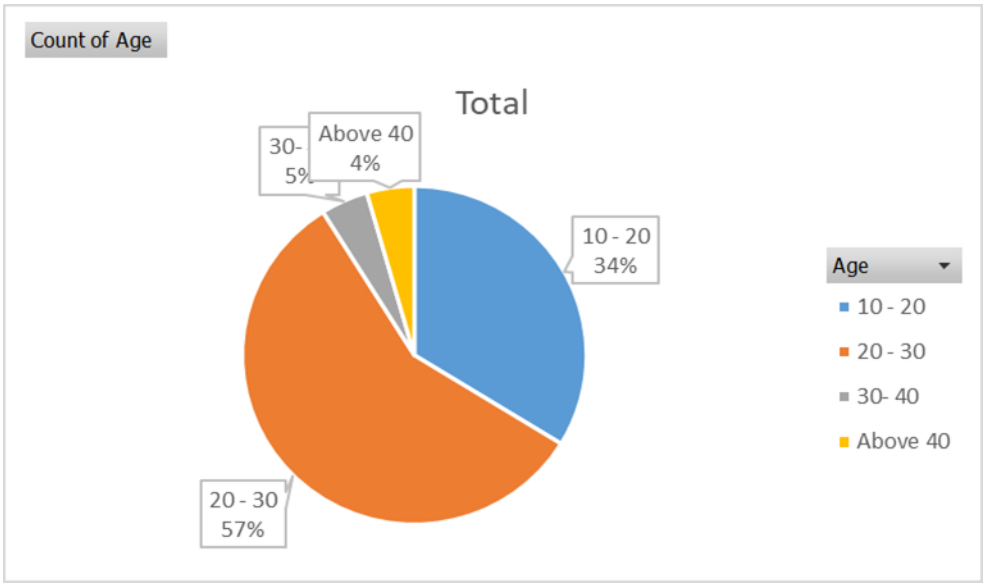
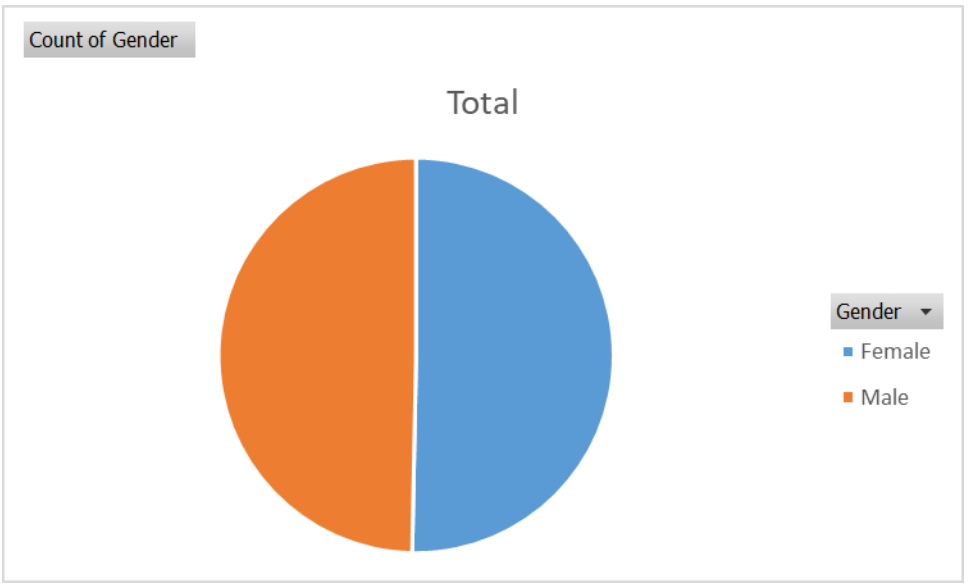


Figure 3.1



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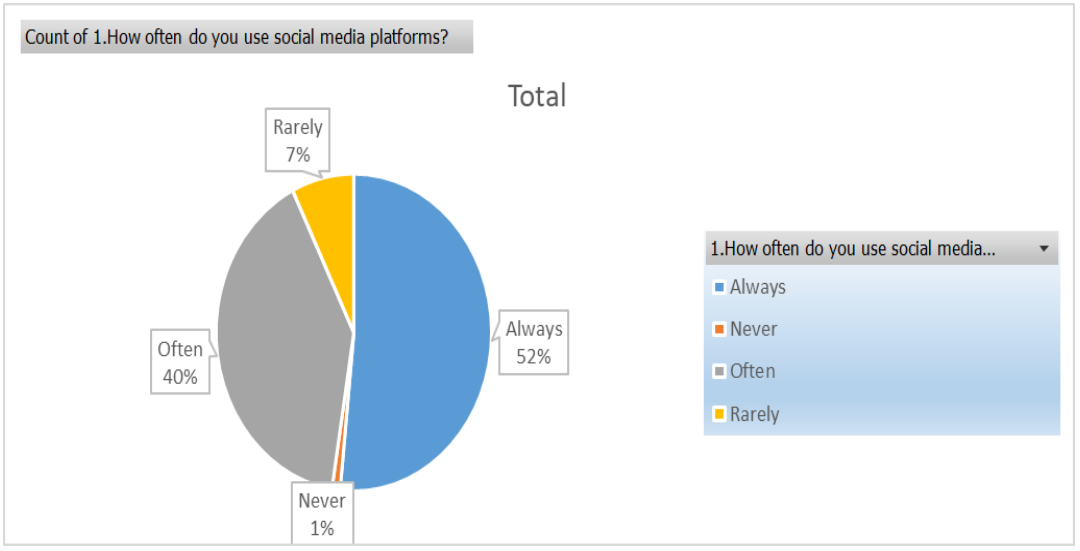

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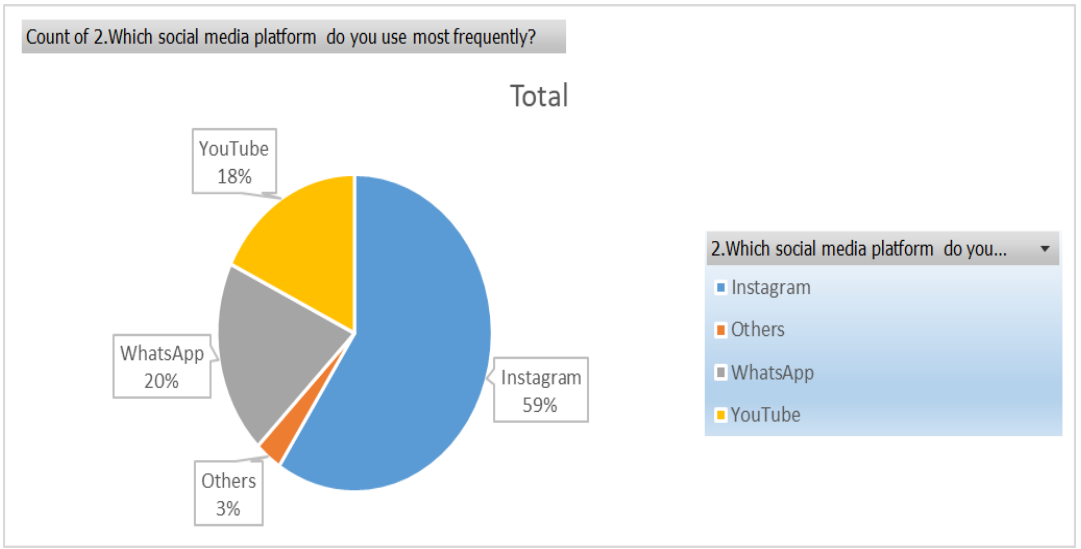

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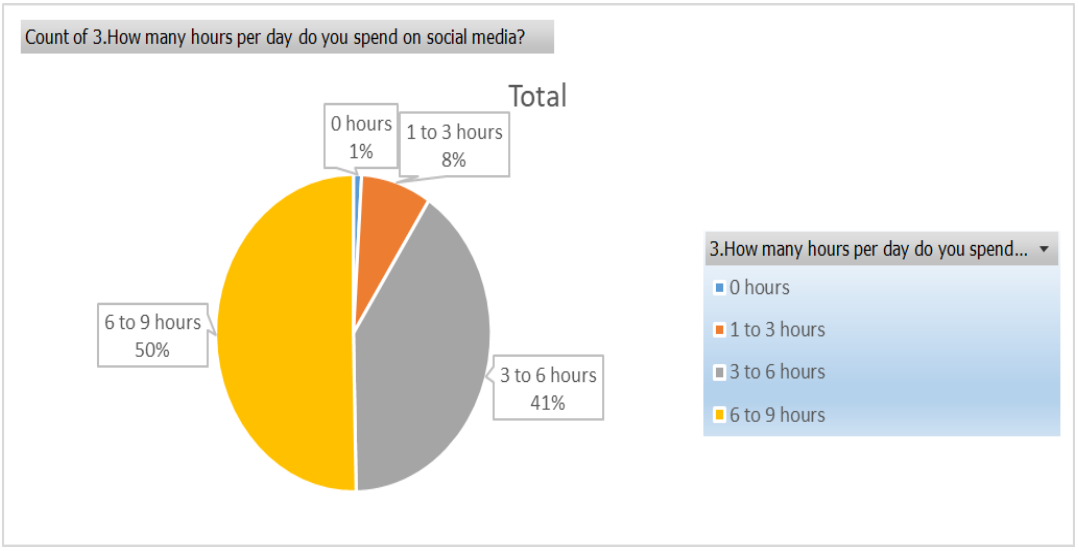

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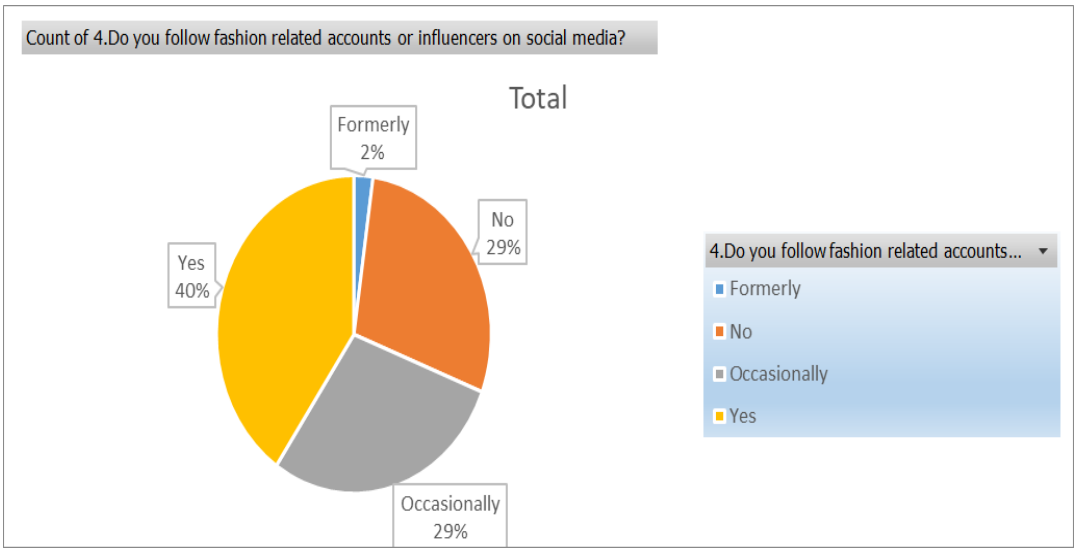

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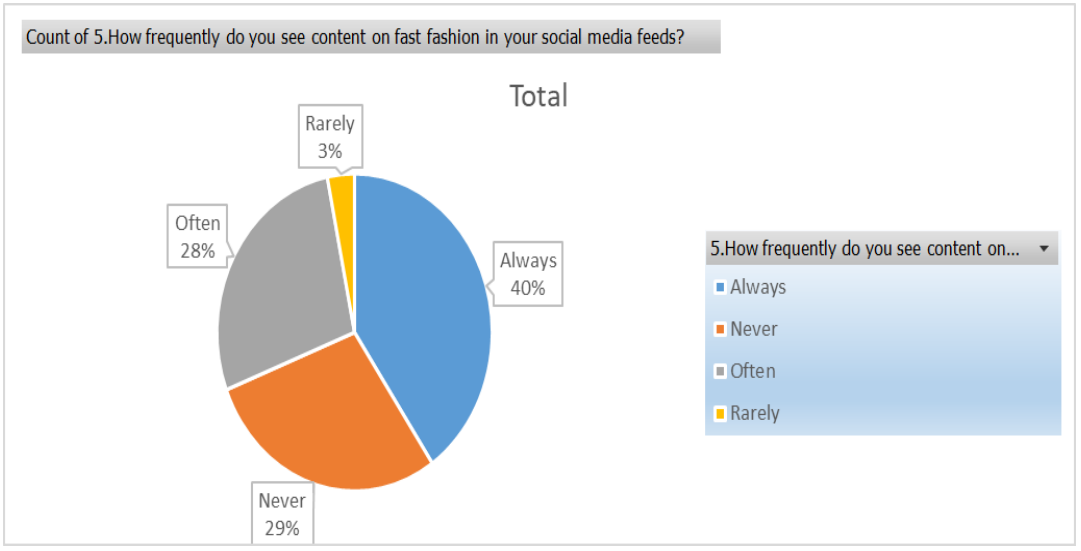

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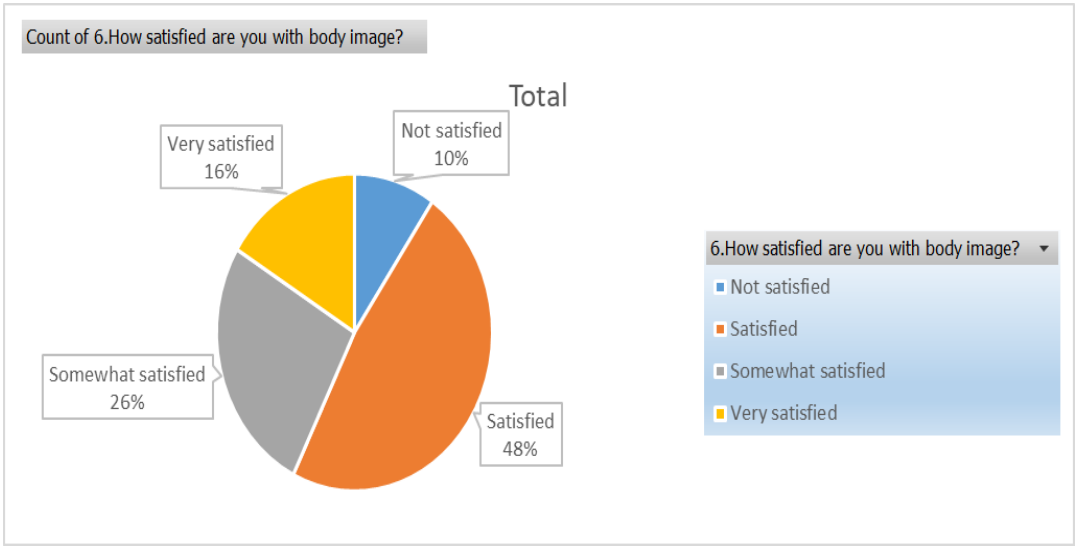

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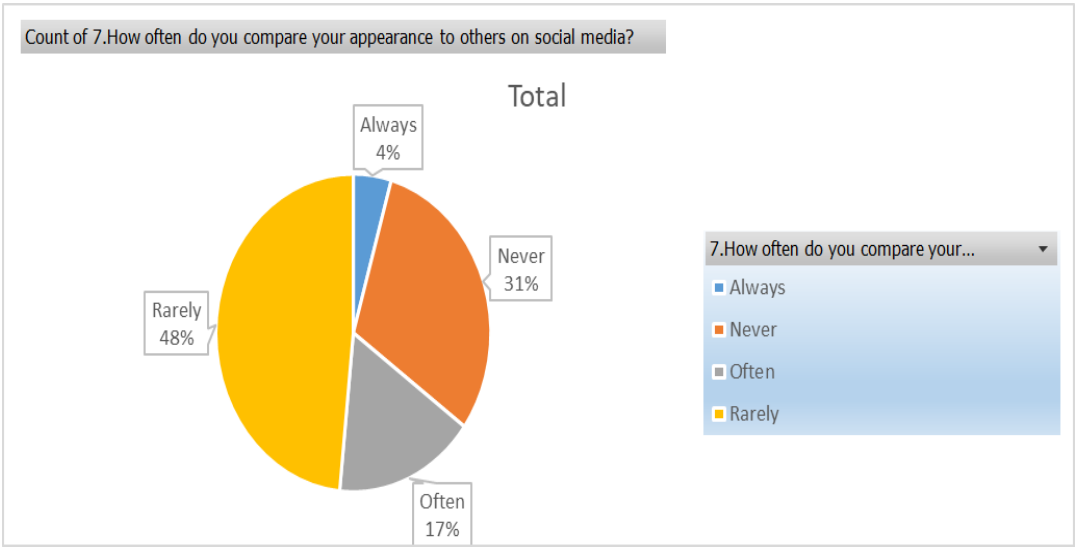

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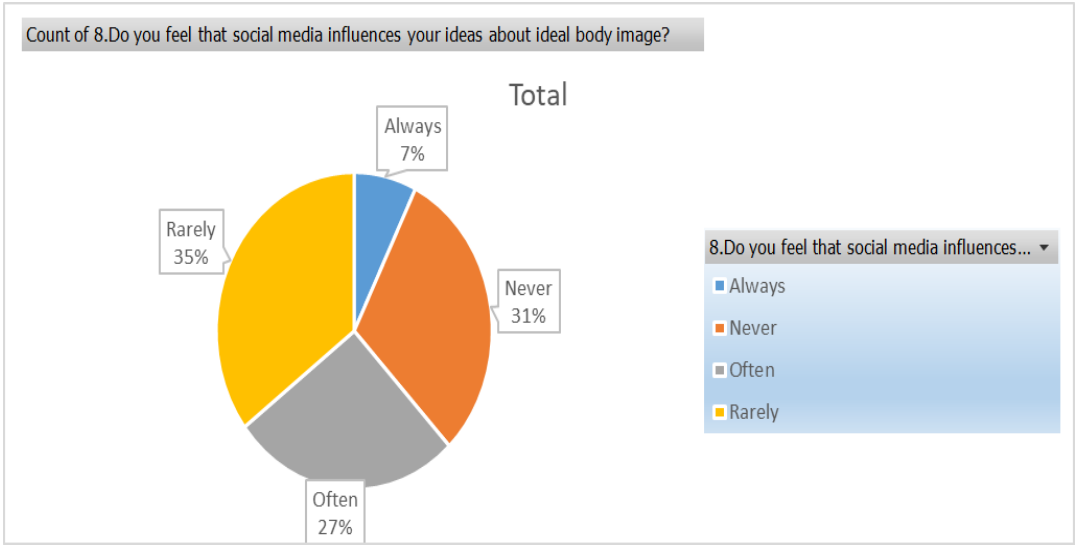

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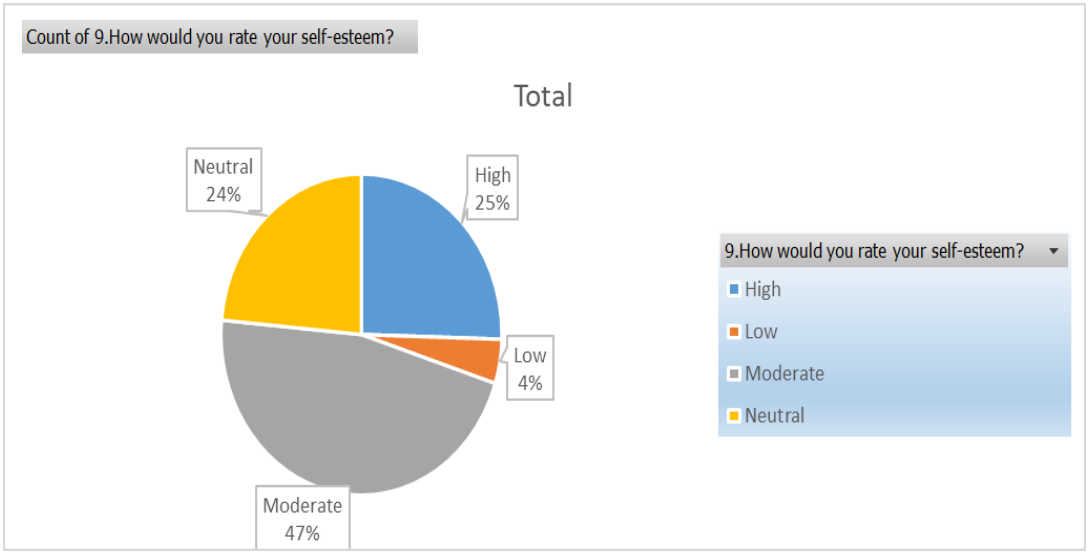

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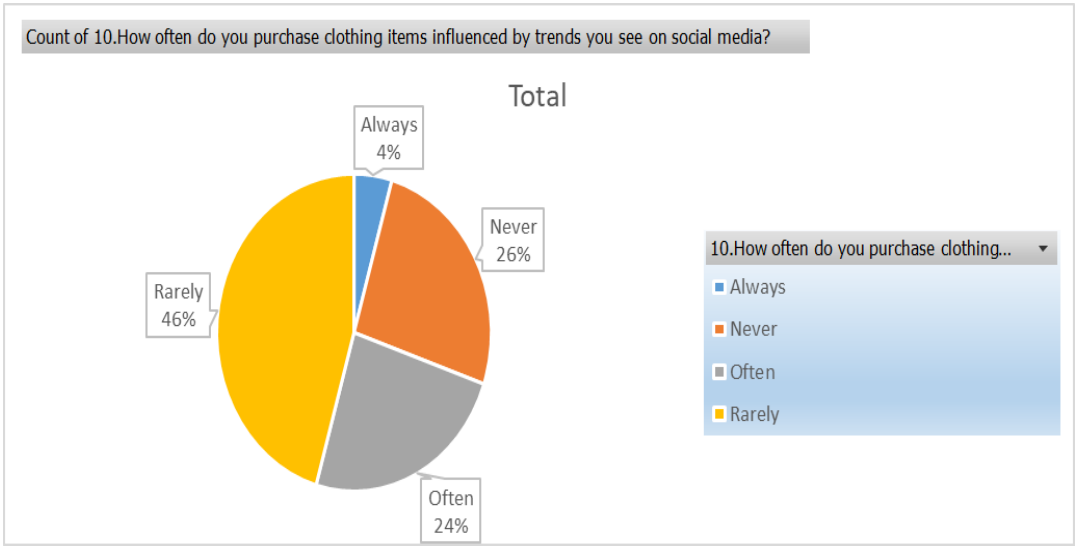

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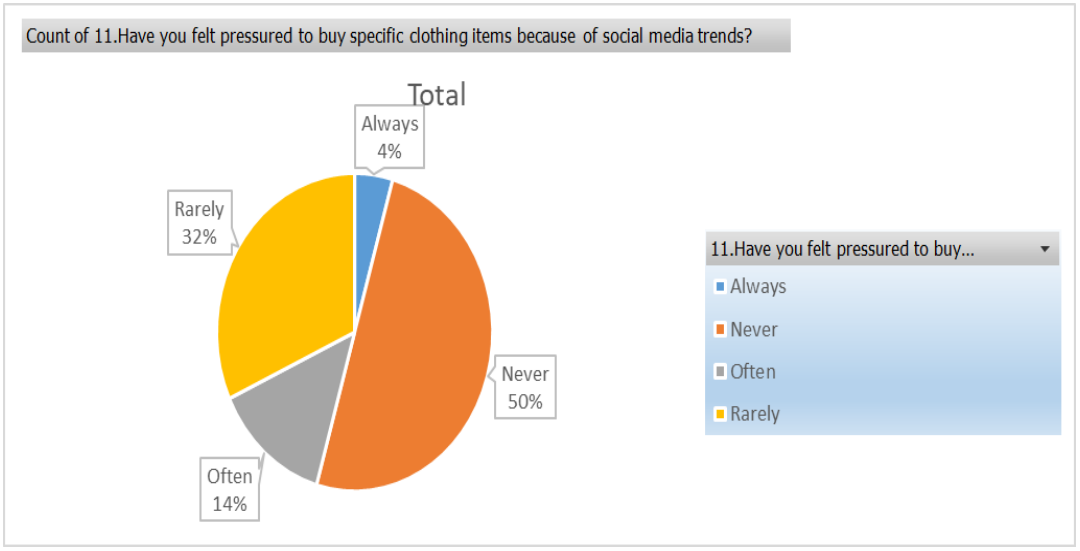

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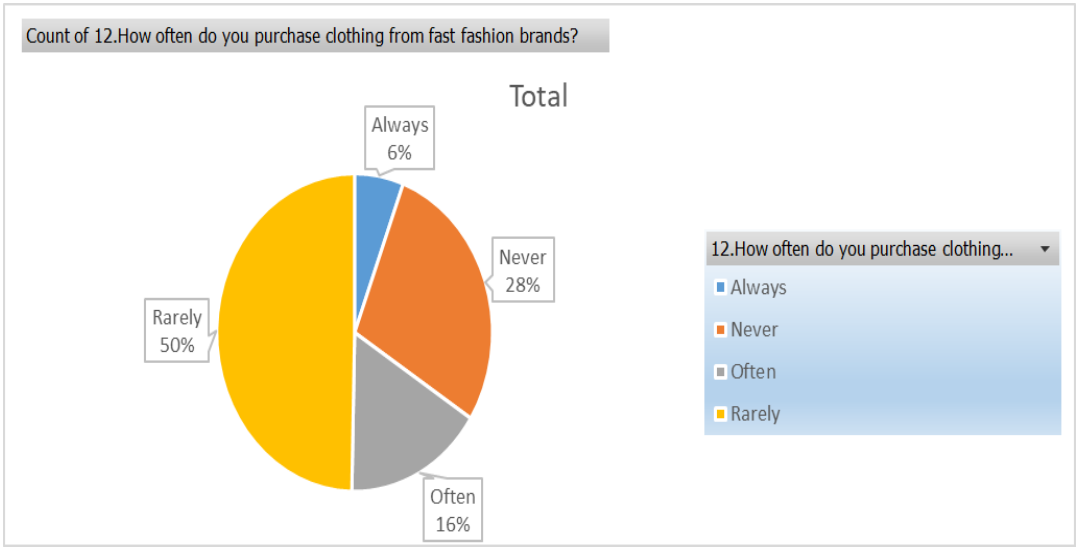

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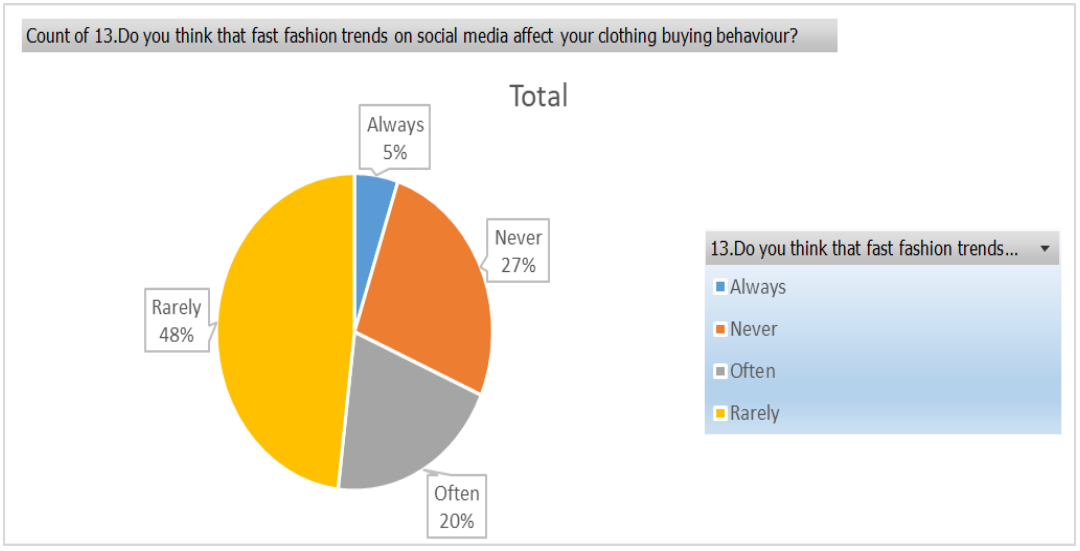

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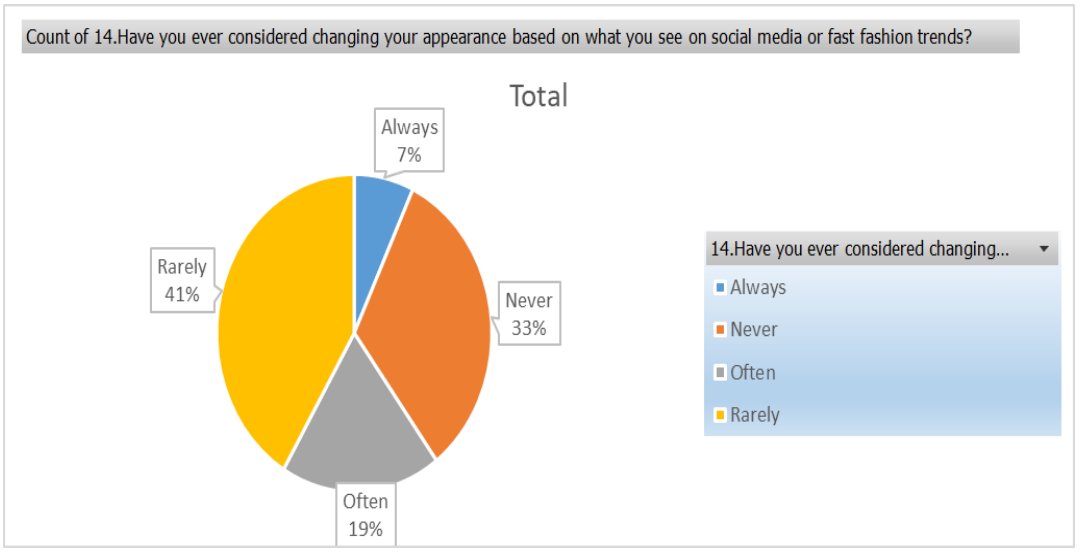

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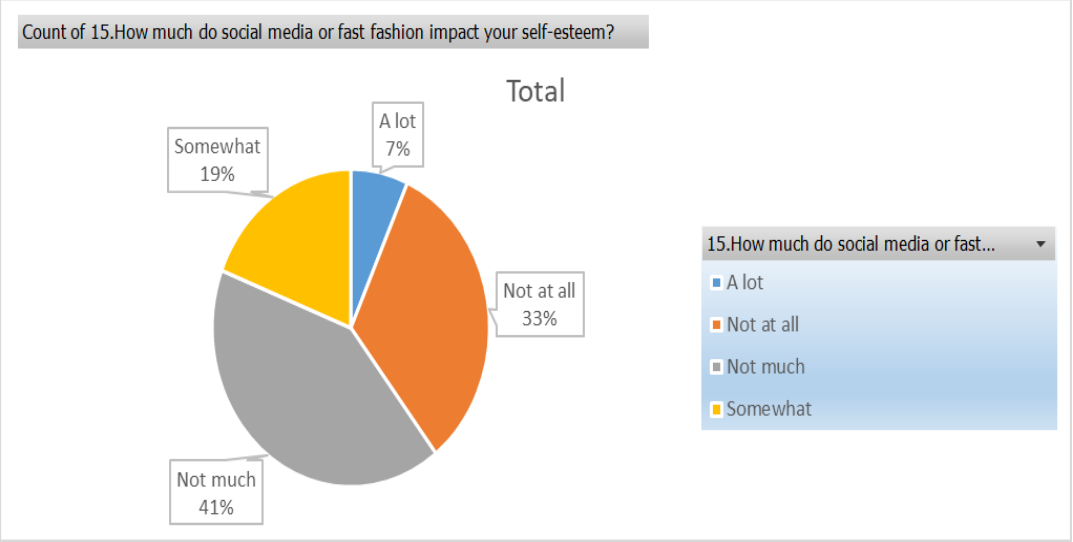

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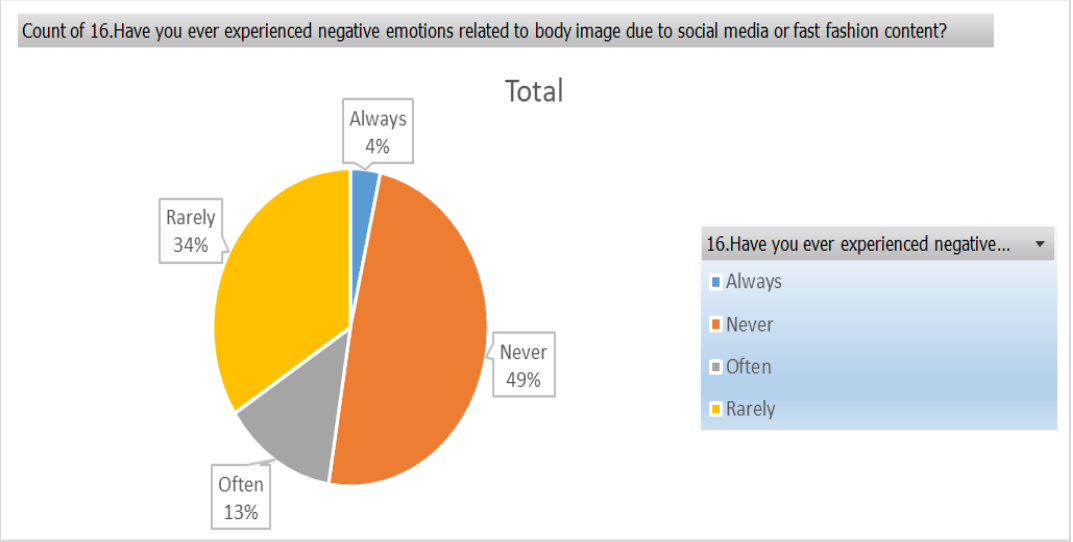


Figure 3.18

Chapter 4

DATA ANALYSIS

4.1 CORRELATION

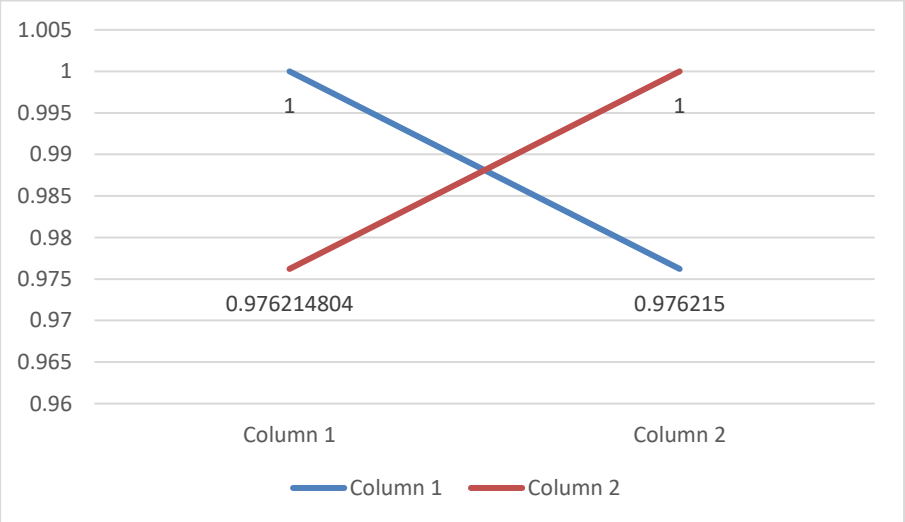
Test 4.1.1

	Column 1	*Column 2*
Column 1	1	0.976215
Column 2	0.976215	1

Table 4.1

r = 0.976215

Our analysis revealed a strong positive correlation between the frequency of social media platform usage and the number of hours spent on social media per day. This indicates that individuals who use social media more frequently tend to spend more hours per day on these platforms.



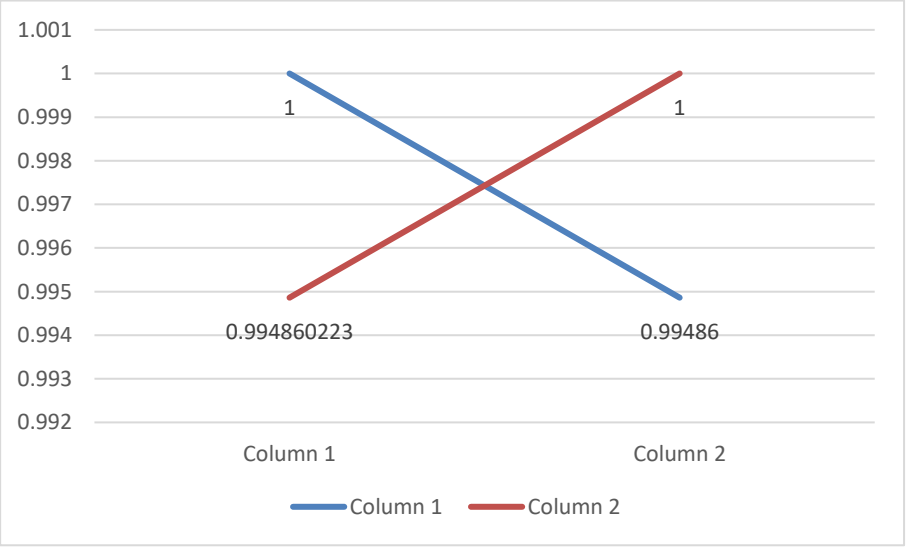
Test 4.1.2

	Column 1	*Column 2*
Column 1	1	0.99486
Column 2	0.99486	1

Table 4.2

r = 0.99486

We found a strong positive correlation between the frequency of encountering fast fashion content in social media feeds and following fashion-related accounts or influencers. This suggests that individuals who follow fashion-related content on social media are more likely to be exposed to fast fashion content in their feeds.



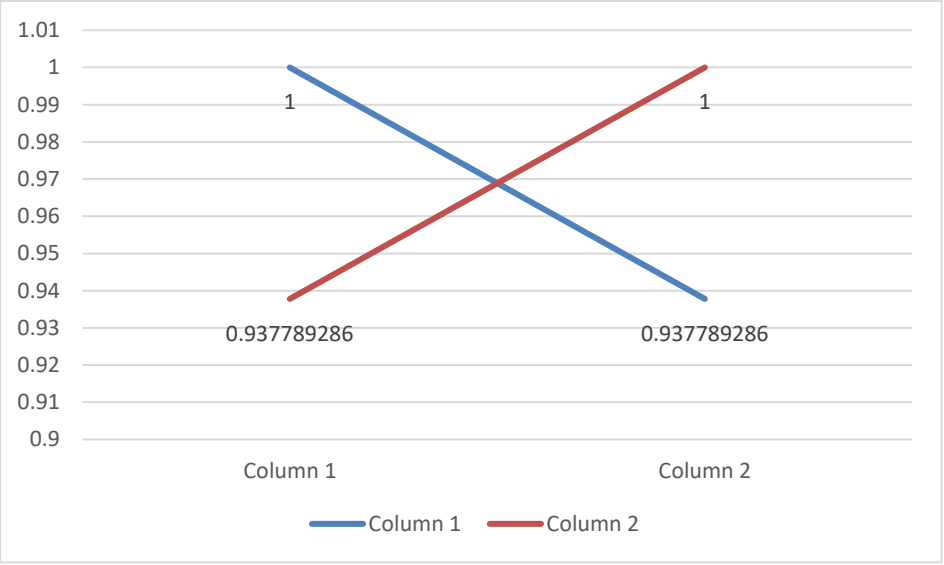
Test 4.1.3

	Column 1	*Column 2*
Column 1	1	0.937789286
Column 2	0.937789286	1

Table 4.3

r = 0.93779.

We observed a strong positive correlation between the frequency of purchasing clothing from fast fashion brands and the perception of fast fashion trends influencing clothing buying behaviour on social media. This suggests that individuals who frequently purchase clothing from fast fashion brands are more likely to perceive that fast fashion trends on social media affect their clothing buying behaviour.



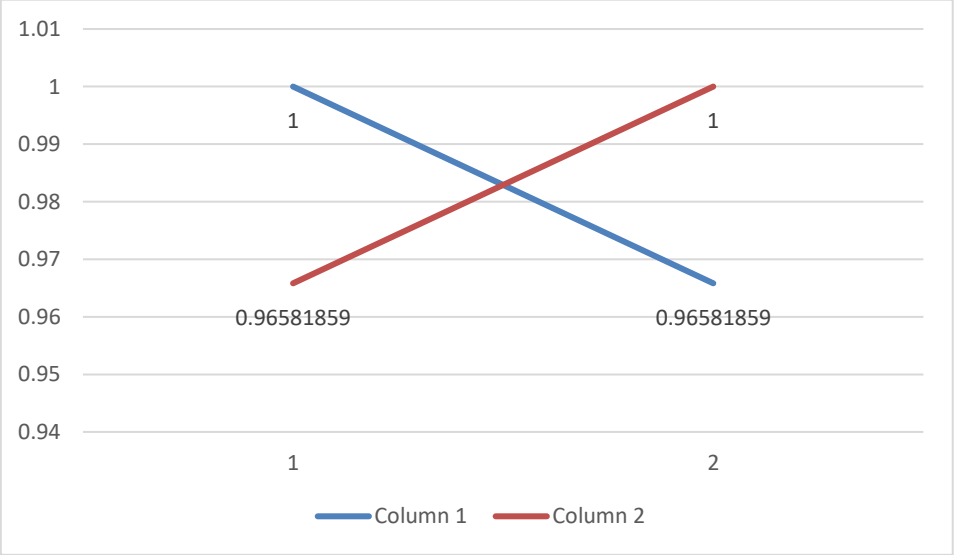
Test 4.1.4

	Column 1	*Column 2*
Column 1	1	0.96581859
Column 2	0.96581859	1

Table 4.4

r = 0.9658186

We observed a strong positive correlation between considering changing one's appearance based on social media or fast fashion trends and the perceived impact of social media or fast fashion on self-esteem. This suggests that individuals who have considered changing their appearance based on these trends are more likely to perceive a higher impact on their self-esteem from social media or fast fashion.



4.2 CHI SQUARE TEST

Test 4.2.1

Q_1) How satisfied are you with body image?

a) Very satisfied
b) Satisfied
c) Somewhat satisfied
d) Not satisfied

Q_2) How often do you compare your appearance to others on social media?

a) Never
b) Rarely
c) Often
d) Always

Frequency table

	Always	**Never**	**Often**	**Rarely**	**Grand Total**
Not satisfied	5	9	8	8	30
Satisfied	8	45	27	70	150
Somewhat satisfied	4	27	14	38	83
Very satisfied	5	22	10	14	51
Grand Total	**22**	**103**	**59**	**130**	**314**

H_0 : There is no significant relation between comparing one's appearance to others on social media and feeling satisfied with one's body image.

H_1 : There is significant relation between comparing one's appearance to others on social media and feeling satisfied with one's body image.

Using SPSS Programing:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
6. How satisfied are you with body image? 7. How often do you compare your appearance to others on social media?	314	100.0%	0	0.0%	314	100.0%

6. How satisfied are you with body image?

7. How often do you compare your appearance to others on social media?

Count

		7. How often do you compare your appearance to others on social media?				Total
		Always	Never	Often	Rarely	
6. How satisfied are you with body image?	Not satisfied	5	13	8	4	30
	Satisfied	1	37	23	89	150
	Somewhat satisfied	4	21	15	43	83
	Very satisfied	4	25	6	16	51
Total		14	96	52	152	314

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43.328[a]	9	.000
Likelihood Ratio	43.831	9	.000
N of Valid Cases	314		

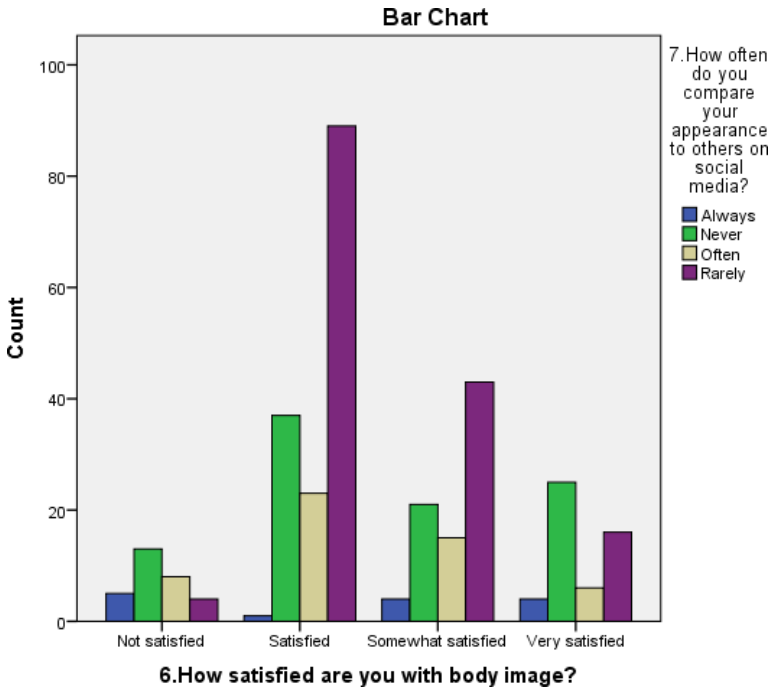
a. 4 cells (25.0%) have expected count less than 5. The minimum expected count is 1.34.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.371	.000
	Cramer's V	.214	.000
N of Valid Cases		314	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.



Test 4.2.2

Q_1) How often do you purchase clothing items influenced by trends you see on social media?

a) Never
b) Rarely
c) Often
d) Always

Q_2) Have you felt pressured to buy specific clothing items because of social media trends?

a) Never
b) Rarely
c) Often
d) Always

Frequency table

	Always	Never	Often	Rarely	Grand Total
Not satisfied	5	9	8	8	30
Satisfied	8	45	27	70	150
Somewhat satisfied	4	27	14	38	83
Very satisfied	5	22	10	14	51
Grand Total	**22**	**103**	**59**	**130**	**314**

H_0 : There is no significant relation between social media trends and purchase of clothing items.

H_1 : There is significant relation between social media trends and purchase of clothing items.

Using SPSS Programing:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
10. How often do you purchase clothing items influenced by trends you see on social media? 11. Have you felt pressured to buy specific clothing items because of social media trends?	314	100.0%	0	0.0%	314	100.0%

10. How often do you purchase clothing items influenced by trends you see on social media?

11. Have you felt pressured to buy specific clothing items because of social media trends?

Count

		11 .Have you felt pressured to buy specific clothing items because of social media trends?				Total
		Always	Never	Often	Rarely	
10. How often do you purchase clothing items influenced by trends you see on social media?	Always	6	2	3	3	14
	Never	0	67	1	13	81
	Often	3	27	17	29	76
	Rarely	5	61	22	55	143
Total		14	157	43	100	314

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	99.895[a]	9	.000
Likelihood Ratio	79.335	9	.000
N of Valid Cases	314		

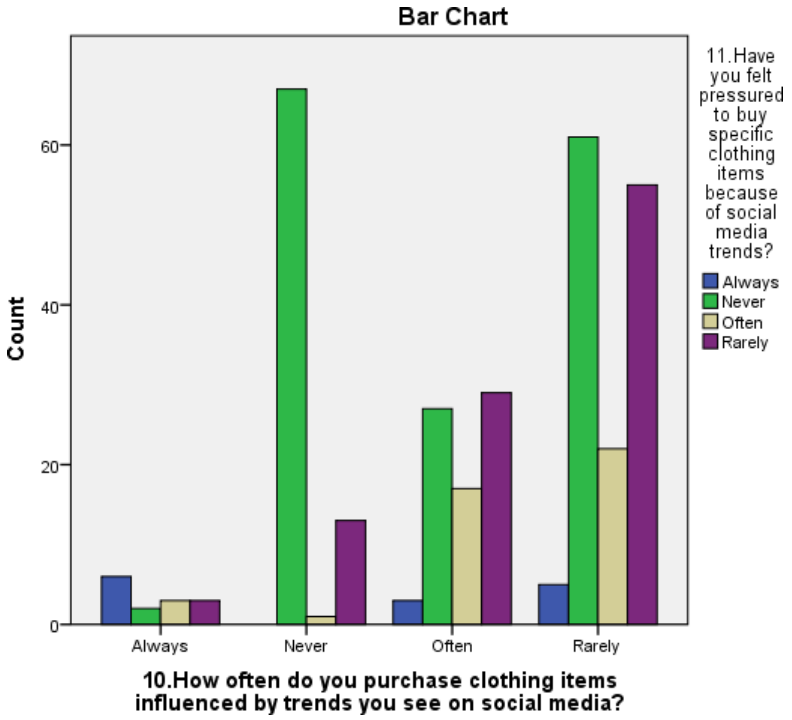
5 cells (31.3%) have expected count less than 5. The minimum expected count is .62.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.564	.000
	Cramer's V	.326	.000
N of Valid Cases		314	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.



Since p value is less than 0.05 we will reject the null hypothesis and accept the alternative hypothesis. Hence there is significant relation between social media trends and purchase of clothing items.

Test 4.2.3

Q_1) How often do you purchase clothing from fast fashion brands?

a) Never
b) Rarely
c) Often
d) Always

Q_2) Do you think that fast fashion trends on social media affect your cloth buying behaviour?

a) Never
b) Rarely
c) Often
d) Always

Frequency Table

	Always	**Never**	**Often**	**Rarely**	**Grand Total**
Always	15	0	3	0	18
Never	0	83	0	6	89
Often	1	0	47	3	51
Rarely	0	0	14	142	156
Grand Total	**16**	**83**	**64**	**151**	**314**

H_0 : There is no significant relation between frequency of purchasing clothing from fast fashion brands and the perception of fast fashion trends affecting clothing buying behaviour on social media.

H_1 : There is significant relation between frequency of purchasing clothing from fast fashion brands and the perception of fast fashion trends affecting clothing buying behaviour on social media.

Using SPSS Programing:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
12. How often do you purchase clothing from fast fashion brands? 13. Do you think that fast fashion trends on social media affect your clothing buying behavior?	314	100.0%	0	0.0%	314	100.0%

12. How often do you purchase clothing from fast fashion brands?

13. Do you think that fast fashion trends on social media affect your clothing buying behavior?

Count

		13. Do you think that fast fashion trends on social media affect your clothing buying behavior?				Total
		Always	Never	Often	Rarely	
12. How often do you purchase clothing from fast fashion brands?	Always	15	0	3	0	18
	Never	0	83	0	6	89
	Often	1	0	47	3	51
	Rarely	0	0	14	142	156
Total		16	83	64	151	314

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	715.647[a]	9	.000
Likelihood Ratio	553.897	9	.000
N of Valid Cases	314		

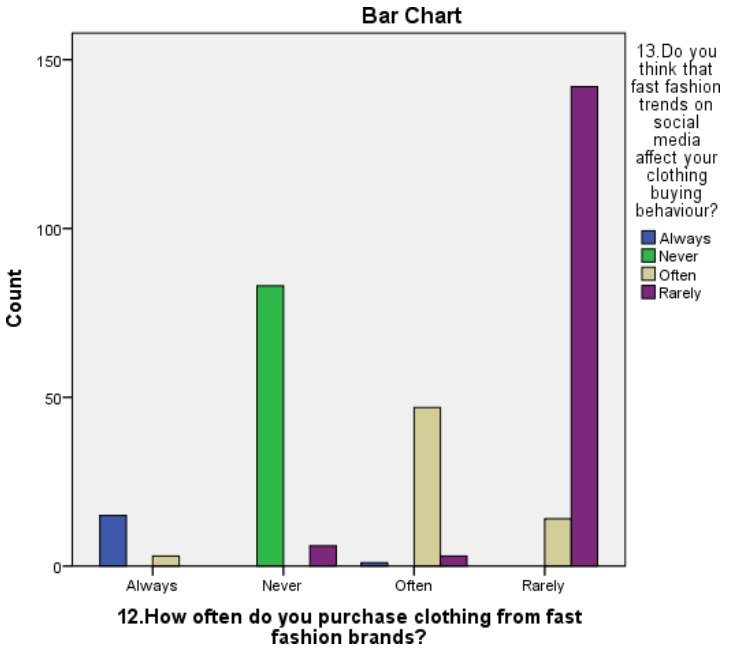
5 cells (31.3%) have expected count less than 5. The minimum expected count is .92.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	1.510	.000
	Cramer's V	.872	.000
N of Valid Cases		314	

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.



Since p value is less than 0.05 we will reject the null hypothesis and accept the alternative hypothesis. Hence there is significant relation between frequency of purchasing clothing from fast fashion brands and the perception of fast fashion trends affecting clothing buying behaviour on social media.

4.3 ANOVA TWO WAY TEST WITHOUT REPLICATION

Test 4.3.1

Q_1) How would you rate your self-esteem?

a) High
b) Moderate
c) Neutral
d) Low

Q_2) How many hours per day do you spend on social media?

a) 0 hours
b) 1 to 3 hours
c) 3 to 6 hours
d) 6 to 9 hours

Frequency Table

	0 hours	1 to 3 hours	3 to 6 hours	6 to 9 hours	Grand Total
High	1	7	29	43	80
Low	1	1	5	7	14
Moderate	0	10	69	67	146
Neutral	1	8	24	41	74
Grand Total	**3**	**26**	**127**	**158**	**314**

Null hypothesis for ROW

1. There is no difference in the means of level of self-esteem

Null hypothesis for COLUMNS

2. There is no difference in the means of hours per day spend on social media.

Null hypothesis for INTERACTION

3. There is no interaction between hours per day spend on social media and level of self- esteem.

Alternative Hypothesis for ROW

1. There is difference in the means of level of self-esteem.

Alternative hypothesis for COLUMN

2. There is difference in the means between the hours per day spend on social media.

Alternative hypothesis for INTERACTION

3. There is interaction between hours per day spend on social media and level of self-esteem.

ANOVA: Two-Factor Test Without Replication

SUMMARY	*Count*	*Sum*	*Average*	*Variance*
Row 1	5	160	32	1005
Row 2	5	28	5.6	28.8
Row 3	5	292	58.4	3403.3
Row 4	5	148	29.6	854.3
Column 1	4	3	0.75	0.25
Column 2	4	26	6.5	15
Column 3	4	127	31.75	723.5833333
Column 4	4	158	39.5	609
Column 5	4	314	78.5	2913

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	6991.2	3	2330.4	4.828760382	0.019816984	3.490295
Columns	15374.3	4	3843.575	7.964170394	0.002248532	3.259167
Error	5791.3	12	482.6083333	0	0	0
Total	28156.8	19				

Conclusion for ROW

Since the P value is less than 0.05, we reject the null hypothesis and accept the alternative hypothesis. Hence there is difference in the means between the level of self-esteem and there is interaction between hours per day spend on social media and level of self-esteem which implies the amount of time spent on social media has an impact on self-esteem levels, and this impact varies depending on the hours spend on social media.

Conclusion for COLUMN

Since P value is less than 0.05, we reject the null hypothesis and accept alternative hypothesis. Hence there is difference in the means of the hours per day spend on social media and there is interaction between the hours per day spend on social media and level of self-esteem which implies the amount of time spent on social media influences self-esteem, and this influence varies depending on the hours spend on social media.

Test 4.3.2

Q_1) Age

a) 10 – 20
b) 20-30
c) 30 -40
d) Above 40

Q_2) How many hours per day do you spend on social media?

a) 0 hours
b) 1 to 3 hours
c) 3 to 6 hours
d) 6 to 9 hours

Frequency Table

	0 hours	**1 to 3 hours**	**3 to 6 hours**	**6 to 9 hours**	**Grand Total**
10 - 20	0	6	46	54	106
20 - 30	3	16	66	95	180
30- 40	0	2	6	6	14
Above 40	0	2	9	3	14
Grand Total	**3**	**26**	**127**	**158**	**314**

Null hypothesis for ROW

1. There is no difference in the means between the ages.

Null hypothesis for COLUMNS

2. There is no difference in the means of the hours per day spend on social media.

Null hypothesis for INTERACTION

3. There is no interaction between hours per day spend on social media and ages.

Alternative Hypothesis for ROW

1. There is difference in the means between the ages.

Alternative hypothesis for COLUMN

2. There is difference in the means of the hours per day spend on social media.

Alternative hypothesis for INTERACTION

3. There is interaction between hours per day spend on social media and ages.

Anova: Two-Factor Without Replication				
SUMMARY	*Count*	*Sum*	*Average*	*Variance*
Row 1	5	212	42.4	1828.8
Row 2	5	360	72	5031.5
Row 3	5	28	5.6	28.8
Row 4	5	28	5.6	33.3
Column 1	4	3	0.75	2.25
Column 2	4	26	6.5	43.66667
Column 3	4	127	31.75	852.25
Column 4	4	158	39.5	1915
Column 5	4	314	78.5	6459.667

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	15503.2	3	5167.733	5.035427	0.017374	3.490295
Columns	15374.3	4	3843.575	3.745171	0.033527	3.259167
Error	12315.3	12	1026.275			
Total	43192.8	19				

Conclusion for ROW

Since the P value is less than 0.05, we reject the null hypothesis and accept the alternative hypothesis. Hence there is difference in the means between the ages and there is interaction between hours per day spend on social media and age which implies that age group has an impact on the amount of hours spend on social media, and this impact varies depending on the different age groups.

Conclusion for COLUMN

Since P value is less than 0.05, we reject the null hypothesis and accept alternative hypothesis. Hence there is difference in the means of the hours per day spend on social media and there is interaction between the hours per day spend on social media and the age groups which implies that age group has an impact on the amount of hours spend on social media, and this impact varies depending on the different age groups.

Chapter 5

RESULT AND CONCLUSION

5.1 FINDINGS

1) After analysing the data, 52% of respondents are female and 48% are male.
2) Approximately 57% of the respondents are of the age group 20 – 30.
3) The app that is most often used is Instagram.
4) Majority of the respondents use social media on average for six to nine hours each day.
5) 48% of the respondents are satisfied with their body image and 10% are not satisfied.
6) About 24% of the respondents often purchase clothing items influenced by trends seen on social media and 26% are never influenced.
7) About 26% of the respondents consider altering their appearance in response to what they observe on social media platforms or fast fashion trends.
8) About 49% of the respondents haven't experienced negative emotions related to body image due to social media or fast fashion contents.

5.2 RESULT

1) After carefully analysing the data we were able to find out that there exist a relationship between the use of social networking sites and the level of self-esteem among people.
2) While examining the collected data, we can deduce that participants' exposure to fast fashion trends on social media platforms influences their clothing buying behaviour and self-perception.
3) After analysing the data, we came to the conclusion that social norms and external perceptions, particularly related to fast fashion ideals has an impact on body image and self-esteem.

4) Fromthe obtained data, we came to the conclusion that the concerns related to body image, influenced by fast fashion trends, drive individuals to seek changes in their appearance or clothing choices.
5) After carefully analysing the data, we were able to conclude that age group is related to the use of social networking sites.

5.3CONCLUSION

In conclusion, the findings of this study underscore the interconnected relationships between social media use, fast fashion trends, body image, and self-esteem among individuals. The positive correlations observed highlight the significant impact of social media and fast fashion culture on individuals' perceptions, behaviours, and psychological well-being. These results emphasize the importance of raising awareness about the potential negative effects of excessive social media use and exposure to fast fashion ideals on body image and self-esteem. Strategies aimed at promoting media literacy, fostering a positive body image, and encouraging critical reflection on social media content may be essential in mitigating these adverse effects. Overall, this research contributes to our understanding of the complex dynamics between social media, fast fashion, body image, and self-esteem, providing valuable insights for future interventions, policies, and advocacy efforts aimed at promoting holistic well-being and positive self-image in contemporary society.

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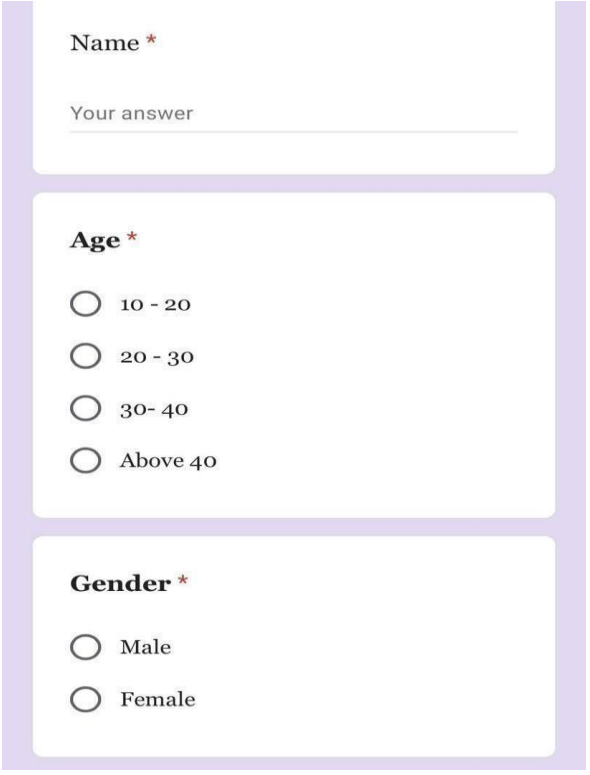
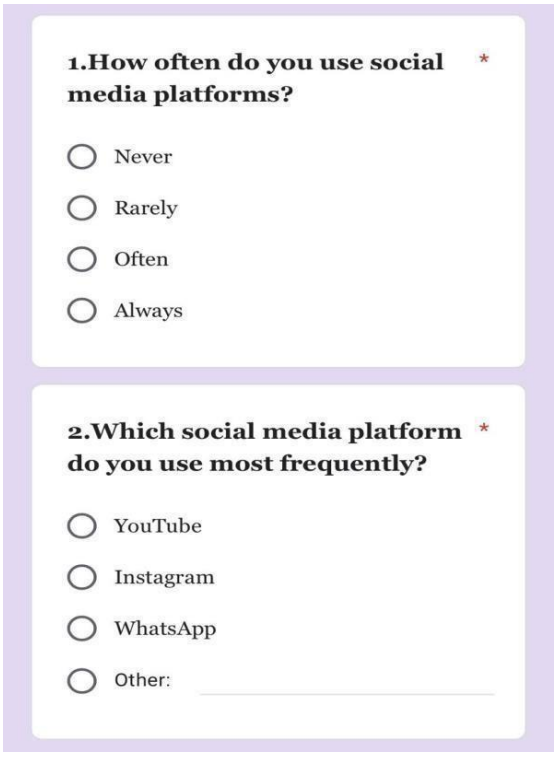
7) Meier, E. P., & Gray, J. (2014). Facebook photo activity associated with body image disturbance in adolescent girls. Cyberpsychology, behavior, and social networking, 17(4), 199-206.

ANNEXURE


Name *
Your answer
Age *
10 - 20
20 - 30
30- 40
Above 40
Gender *
Male
Female


1.How often do you use social media platforms? *
Never
Rarely
Often
Always
2.Which social media platform do you use most frequently? *
YouTube
Instagram
WhatsApp
Other:

3.How many hours per day do you spend on social media? *

- ◯ 0 hours
- ◯ 1 to 3 hours
- ◯ 3 to 6 hours
- ◯ 6 to 9 hours

4.Do you follow fashion irelated accounts or influencers on social media? *

- ◯ Yes
- ◯ No
- ◯ Occasionally
- ◯ Formerly

5.How frequently do you see content on fast fashion in your social media feeds? *

- ◯ Never
- ◯ Rarely
- ◯ Often
- ◯ Always

6.How satisfied are you with body image? *

- ◯ Very satisfied
- ◯ Satisfied
- ◯ Somewhat satisfied
- ◯ Not satisfied

7.How often do you compare your appearance to others on social media? *

- ◯ Never
- ◯ Rarely
- ◯ Often
- ◯ Always

8.Do you feel that social media influences your ideas about ideal body image? *

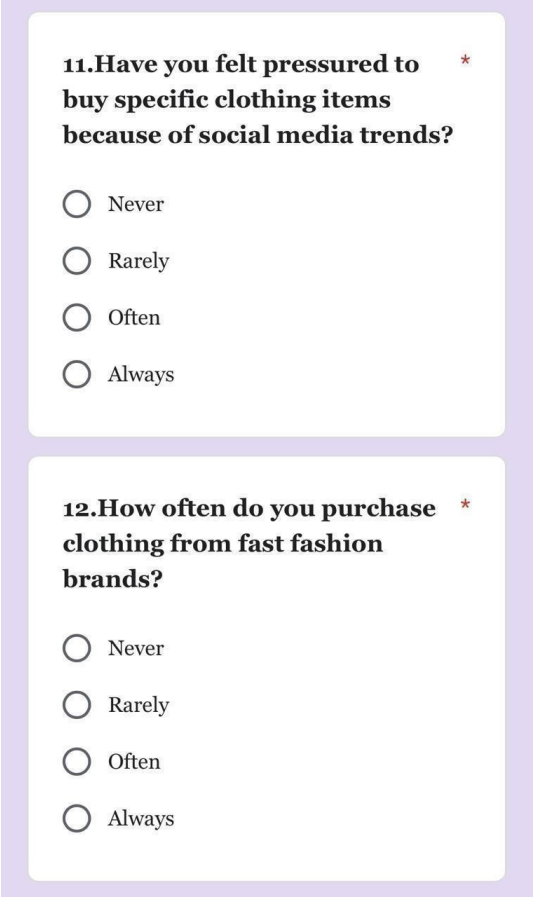
- ◯ Never
- ◯ Rarely
- ◯ Often
- ◯ Always

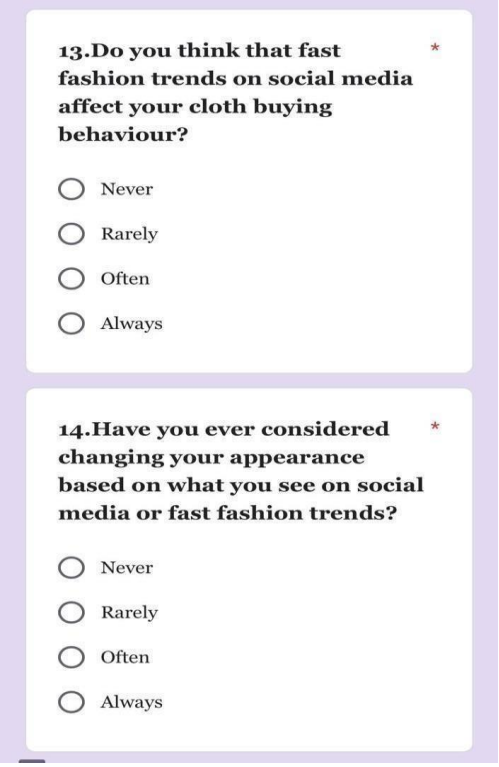
9.How would you rate your self-esteem? *

- ◯ High
- ◯ Moderate
- ◯ Neutral
- ◯ Low

10.How often do you purchase clothing items influenced by trends you see on social media? *

- ◯ Never
- ◯ Rarely
- ◯ Often
- ◯ Always


11.Have you felt pressured to buy specific clothing items because of social media trends? *
Never
Rarely
Often
Always
12.How often do you purchase clothing from fast fashion brands? *
Never
Rarely
Often
Always


13.Do you think that fast fashion trends on social media affect your cloth buying behaviour? *
Never
Rarely
Often
Always
14.Have you ever considered changing your appearance based on what you see on social media or fast fashion trends? *
Never
Rarely
Often
Always

15.How much do social media or fast fashion impact your self-esteem? *

- ◯ A lot
- ◯ Somewhat
- ◯ Not much
- ◯ Not at all

16.Have you ever experienced negative emotions related to body image due to social media or fast fashion content? *

- ◯ Never
- ◯ Rarely
- ◯ Often
- ◯ Always