Instagram Usage and Watching What Others are Doing: A Case Study of Lahore City

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Abstract: Instagram usage and its effects on the self-perception of university students in Lahore were investigated. The effects of its use on the self-perception of university students have been found through quantitative research design using survey method. Multistage sampling was utilized for the selection of the sample. In the first stage, the sample was selected from three universities. In the second stage, departments were selected for each university. In the third stage, the sample was further selected from the education, mass communication, psychology, and computer science departments. The results showed that users visit Instagram more than a few times a day and look at the lives of others through their photos. After comparison, Instagram users become unhappy about their lifestyle and dissatisfied with their bodies. The users do not get relaxed rather frustrated. Users are interested in presenting themselves like celebrities; they use filters and crop their photos to present them beautifully. They also look for the products and procedures to look beautiful and lose weight.

Key Words: Social Media, Satisfaction, Self-Comparison, Beauty Ideals

Introduction

Social media users are increasing rapidly worldwide. The majority of users, 89%, visit their accounts at least once a day. Eighty million photos are shared on Instagram every day, with more than 300 million users (Apodaca, 2017).

Instagram has become the most visited social media platform after Facebook and Snapchat; it visited more than Twitter and YouTube (PEW Research Center, 2018). The potential of Instagram as social media platform was realized early, when Facebook bought Instagram in 2012 (BBC, April 10, 2012) for "$1 billion" (Luckerson, 2016).

The analysis of 'active use of internet-powered mobile services' recorded 44.61 million users by the end of January 2019 (Farooq, 2019). According to the Global digital report, 21% of the total population of Pakistan uses mobile internet while active social media users are 18%. Instagram has become the second most used social media platform after Facebook, with 92% users according to Pakistan Social Media Stats (2018).

According to the digital report of 'We Are Social,' there are 6.40 million users of Instagram in Pakistan currently, with a growth rate of 8.5% every month. Twitter, Snapchat, and LinkedIn have 1.83, 4.40, and 6.40 million users, respectively (We Are Social, 2020).
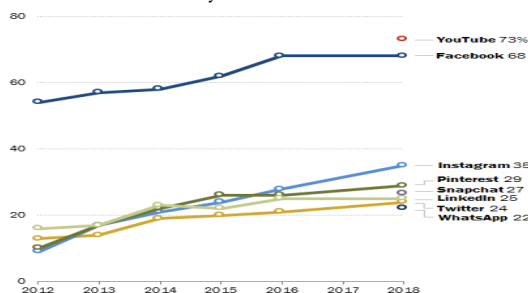

Figure 1: Usages Trend data from PEW Research Center Surveys 2018
Source: https://www.pewresearch.org/internet/2018/03/01/social-media-use-in-2018/

The widespread usage of social media is witnessed worldwide, and it has been found to bring changes in the lives of individuals, and those changes are diverse in nature (Koç and Tatlı, 2017).

The term social media was defined first in 2011 by Oxford (Zaharia, Vlad, Cercel, Rebedea, & Chiru, 2020), as websites used for social networking are collectively called social media. The most known, famous, and widely used social media are Facebook, Instagram, Tumblr, Twitter, LinkedIn, YouTube, My Space, WhatsApp, Skype, and Google Plus.

Students and young ones have been found it convenient to share information about their studies and school events through social media.

Another key benefit of using social media is that it provides a space to form new interpersonal relationships over the internet and is a source for making new connections (Abbas, Aman, Nurunnabi, & Bano, 2019).

Instagram: An Introduction

Instagram has emerged as a social networking site that has offered a place to share pictures and videos. This application was initially designed for IOS (operating system) only. Instagram became "an era of mobile photography" Manovich, 2016 as people started capturing precisely for Instagram.

Instagram Usage in Pakistan

There are 6,349,000 active users of Instagram in Pakistan. The users make up 3.2% of the total population of Pakistan. The analysis also found that the users comprise people 18 to 24 years as the leading segment; 65.3% are male users, making 3,100,000 users that are 1,100,000 more than female users that make 34.7%. The users from the young population (18-24 years) are 45.7%. The second highest age group that takes advantage of Instagram in Pakistan is 25 to 34 years, making 34.6%; 13 to 17 years old and 35 to 44 years old make 7.7% of the active users of the current time.

The statistics of social media use in Pakistan support that Instagram is the second most used application with 6.40 million users currently with an increasing rate of 8.5% monthly (We are Social, 2019).
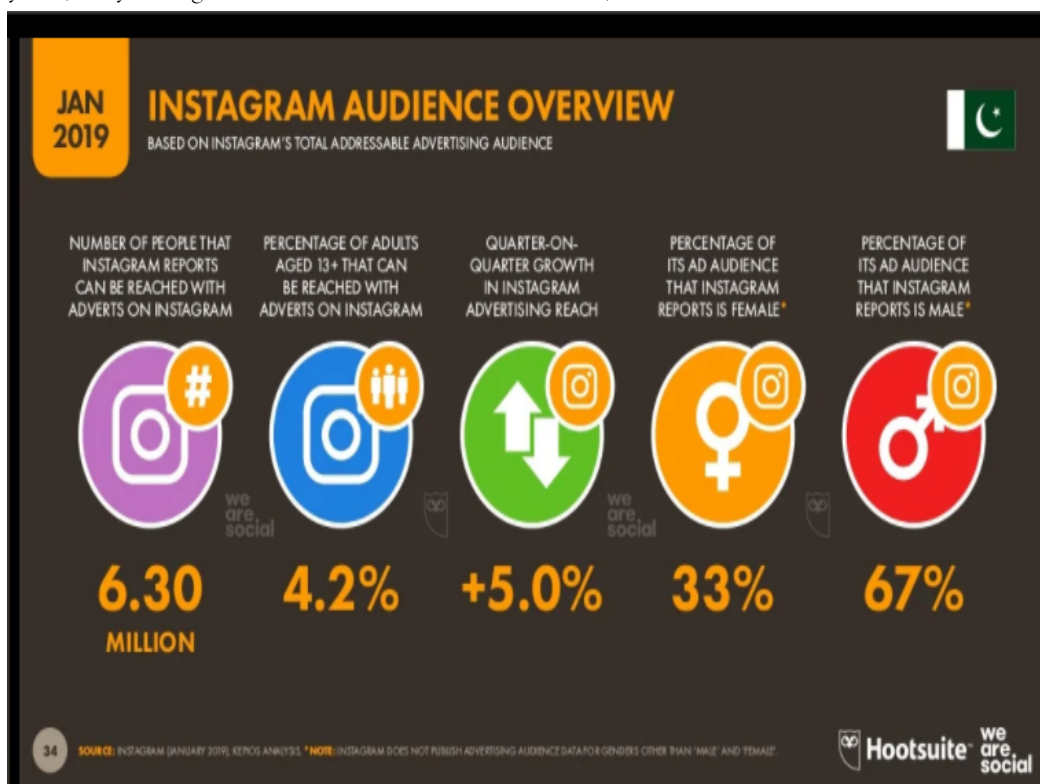

Figure 2: Instagram Audience Overview Pakistan
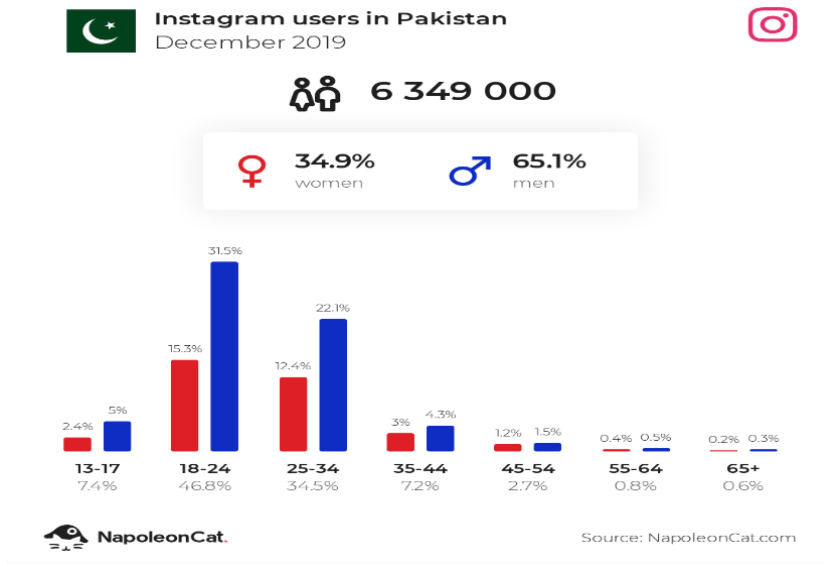*Source: We Are Social, https://datareportal.com/reports/digital-2019-pakistan*

Figure 3: Instagram Users in Pakistan by NapoleonCat
Source: https://napoleoncat.com/stats/instagram-users-in-pakistan/2019/12

Instagram Usage

The use of Instagram was increasing with time. The use of this application was increasing day by day. People appreciated the idea of using an app to post videos and photos, which became the reason for its popularity.

The initial analysis of the use of Instagram found that the young generation of the country uses this application more than any other age group (Smith & Anderson, 2018). The count showed that 71% of youth use Instagram.

Instagram among University Students

It is not only an observation that young people use social media more than any age group, but the research and studies worldwide have also supported the fact.

Instagram has been used by individuals and organizations as well. There were and are businesses using this application for marketing and promotion (Martikainen & Pitkänen, 2019).

Instagram for Social Interaction

Social media and the internet have played a significant role in decreased face-to-face interaction (Clark, Algoe, & Green, 2017), where communication and social interaction are incorporated by technology.

Body Image and Ideals

Previous researches have found the significant trends of Instagram as #fitspiration and #thinspiration (Tiggemann & Zacc1ardo, 2018). These two trends were introduced to inspire users and followers to look fit and thin. The models or the social media celebrities used to post their photos of thin and fit bodies to be the ideal. People want to be like them.

Lifestyle on Instagram

Instagram is used to project a version of one's lifestyle by posting photos depicting their routine (Wallace & Jun 2019). The lifestyle-related photos are also intended to create the image of an ideal lifestyle in people's minds and portray the life events to improvise a lifestyle for the followers.

Literature Review

Instagram Use among University Students

The excessive use of Instagram has been a concern as

it has the incline and risks of addiction for university students (Kuss & Griffiths, 2017).

University students addicted to Instagram have their academic performance, and life satisfaction gets affected due to this addiction. It directly affects the students' well-being (Satici, 2019).

The use of Instagram among university students has raised to the level of addiction where university users have an emotional involvement in using Instagram. Isada and Isada (2019) found that addiction and emotional attachment with Instagram correlate with the number of followers and followings on the profile. The more followers and followings a user has, the more he or she is addicted to and attached to Instagram (Isada & Isada, 2019).

Ershad and Aghajani (2017) studied Instagram addiction based on alexithymia, attachment styles, and neuroticism. Alexithymia is also a risk factor as it is relevant to interpersonal issues. People with disturbed emotions tend to be addicted to Instagram because they have interpersonal issues, so they like to stay busy in the virtual world and on Instagram (Ershad & Aghajani, 2017).

Kırcaburun and Griffiths (2018) found that users find themselves away from the real world and emotionally attached to their online relationships as they leave more comments and likes on their posts (Kırcaburun & Griffiths, 2018).

For minimizing the negative body image generated among the users of Instagram, #fatspiration/#fatspo and #healthateverysize/ #haeshashtags came into the trend for bringing overall well-being to the users (Webb, Vinoski, Bonar, Davies & Etzel, 2017).

Pseudo Self Presentation: Motives Behind

Different reasons for using Instagram differ from culture to culture (Schaffer & Debb, 2020). Instagram is the platform that offers space to upload and post photos of yourself for self-expression (Andalibi, Ozturk, & Forte, 2017).

Lee, Abu Bakar, Muhammad Dahri, and Sin (2015) examined the use of photo-sharing application Instagram use and found that the main reasons are "community support, self-representation, status-seeking, and informativeness."

The feelings about self are related to the likes and comments on one's picture posted on Instagram (Bay, 2015).

Change and Jerry (2019) found that Instagram users' self-esteem and self-esteem are related to the comments about their looks and likes on their pictures.

Instagram Selfies and Body Satisfaction

The users who are seriously addicted to Instagram have reported less body satisfaction as they compare themselves with people on social media. As they see more appearance-related content on social media, they are more involved in social comparison and become less satisfied with their own selves and their appearance (Lee, 2019).

Instagram has this selfie posting trend that is self-objectification with the presentation of perfect facial features. It affects the eating patterns of the viewers to achieve those body features (Cohen, Newton-John & Slater, 2017).

Picture about the body on Instagram is directly related to body dissatisfaction. The more a person is dissatisfied with the body, the more he takes selfies to find a better self-picture (Wagner, Aguirre, & Sumner, 2016).

Social Comparison

Social comparison has affected the individuals' perceptions about self, and there are depression symptoms found after social comparison. It leads to competition among the individuals who want to have social control with their power or attractive appearance (Donnelly & Kuss, 2016).

Uses and Gratification Theory

Instagram usage is related to specific needs and motives. "Self-presentation" and "usage" are correlated with the number of followers on Instagram. Self-presentation and self-expression are essential motives for Instagram use (Ting, 2014).

Instagram addiction is positively associated with the uses and gratification of Instagram (Ponnusamy, Iranmanesh, Foroughi & Hyun, 2020). Users with different inclines, interests, and traits have different gratifications to be achieved through Instagram (Ryan, Chester, Reece, & Xenos, 2014).

Gratification is that outcome that users expect from the use of social media. The use of the internet, social media and specifically Instagram is hence a concern for the researchers to find the relationship between addictive use and gratification of the users (Donnelly, & Kuss, 2016).

Table 1. Research Gird

Objectives	Research Questions	Hypothesis
To find the usage of Instagram among university students	What is the usage pattern and motives of Instagram among university students?	
To investigate the correlation between motives and self-presentation	To what extent are users interested in presenting themselves on Instagram?	More User interest in self-promotion, greater pseudo-self-portrayal on Instagram
To explore user attitudes regarding beauty trends and celebrities	What is the perception of Instagram users about social media celebrities and beauty trends?	
To explore university students perception of Instagram	What is the effect of Instagram on university students' self-perception after comparing themselves with others?	The use of Instagram decreases the level of satisfaction among university students regarding their self and lifestyle.
To find the level of satisfaction of Instagram users about self after comparing self with others.	What is the level of satisfaction of Instagram users about self after comparing self with others?	
To find whether Instagram users are interested in taking any measure to look like social media celebrities.	Whether Instagram users interested in taking any measure to look like social media celebrities?	The use of Instagram develops students' Interest in beauty and weight loss procedures and products.

Methodology

The researcher has adopted a quantitative research design seeking the usage pattern of Instagram and its effect on the self-perceptions of university students. The selected users' opinions about self-perceptions were gathered through the survey. The population of this study consisted of all Instagram users aged 18-29 years at universities. The sample has been withdrawn as representative of the population. The sample represents 18-29 years university students in Lahore who use Instagram comprising 320 respondents.

The following themes have been studied under the significant constructs of Social Interaction, Self-Promotion, and Well-being.

- Instagram Usage (adopted by Fardouly, Willburger, and Vartanian, 2017)
- Response to Beauty Ideals (adopted by Baker, Ferszt, and Breines, 2019)
- Comparing Self with Others (adopted by Baker, Ferszt, and Breines, 2019)
- Selfie Feedback Investment (adopted by Butkowski, Dixon, and Weeks, 2019)
- Physical Appearance Pride (adopted by Webb, Vinoski, Bonar, Davies, and Etzel, 2017)
- Body Satisfaction (adopted by Slater, Varsani, and Diedrichs, 2017)
- Body Appreciation (adopted by Slater, Varsani, and Diedrichs, 2017)
- Eating and Weight Loss Related Content (adopted by Webb, Vinoski, Bonar, Davies, and Etzel, 2017)
- Lifestyle Photos
- Pseudo Self Presentation

Table 2. Conceptual and Operational Definitions, Measuring Scale, and Indicators of Variables

S. No	Variable	Conceptual Definition	Operational Definition	Measuring scale	Indicators
1	Instagram usage	The use of Instagram	Measured in hours per day	Ordinal	Numbers of hours spend using Instagram
2	Frequency	The number of visits of Instagram	Measured in visits per day	Ordinal	Number of visits in a day
3	Motives	The goals or incentives sought	Gratification sought by the use of Instagram	Nominal	The reasons for using Instagram

S. No	Variable	Conceptual Definition	Operational Definition	Measuring scale	Indicators
4	Knowledge	Familiarity or information of something	The knowledge of beauty ideals	Nominal	Familiarity with beauty ideals
5	Response	Reaction to something	Response of the targeted users towards beauty ideals promoted on Instagram	5-point Likert scale	Attainable, appreciated, idealized or inspiration
6	Comparing appearance	Comparing self with the way someone looks	Comparing self with the appearance of others on Instagram	5-point Likert scale	Comparison of Skin tone, body shape, features, makeup and styling, dress, likes, and comments Feeling about self after comparison
7	Idealization of celebrities	Representing someone as perfect	Consideration of Instagram celebrities as ideals	5-point Likert scale	The response towards Instagram celebrities
8	Feedback on photos	Reaction or comments on photos	Response of peers on Instagram photos	5-point Likert scale	Like and comments
9	Body visibility and skin exposure	Photos showing body and skin showing ideally beautiful body	Physical appearance pride photos on Instagram	5-point Likert scale	Attainable, appreciated
10	Lifestyle Photos	Photography showing lifestyle	Photos about lifestyle on Instagram	5-point Likert scale	Response on photos of the home, places they visit, dresses, accessories they have
11	Use of editing apps and cropped photos	Using photo editing mobile applications for presenting photos beautiful	Photos on Instagram posted after editing	5-point Likert scale	Response on pseudo presentation of self
12	Body satisfaction	Satisfaction about overall self, appearance, and life	Satisfaction with features, weight, and appearance	5-point Likert scale	Satisfaction level
13	Eating and weight loss related content		Photos of the meal at a restaurant on Instagram	5-point Likert scale	Response on photos related to eating and weight loss

The response rate was 94.68%, as 303 out of 320 respondents filled and submitted the questionnaire. The data collected was analyzed using SPSS-23 with AMOS.

Reliability of Tool

Cronbach's alpha is the statistical measure used to evaluate scale or test items' reliability or internal consistency.

Data Analysis

Univariate or descriptive analysis of the data describes and summarizes each variable individually and presents the patterns in the data. Univariate analysis is helpful to present the data in tabular and graphical forms.

Demographics

This section presents the demographics of the respondents. The study explored five demographic variables. Table 18 shows descriptions for gender (M=1.52, SD=0.500), age (M=2.06, SD=1.052), institute (M=2.48, SD=1.094) and department (M=2.46,

SD=1.120).

It is manifested that 146 (48.2%) study participants were female, and 157 (51.8%) were male, while the total number of participants was 303.

Table 3. Demographics of Participants

Demographics				
	Frequency	**Percent**	**Mean**	**Standard deviation**
Gender of the Users			1.52	.500
Male	157	51.8		
Female	146	48.2		
Age of the Users			2.06	1.052
18-20	109	36.0		
21-23	118	38.9		
24-26	26	8.6		
27-29	50	16.5		
Institute			2.48	1.094
Forman Christian College	74	24.4		
Government College University	80	26.4		
University of Central Punjab	80	26.4		
University of Punjab	69	22.8		
Department			2.46	1.120
Education	79	26.1		
Mass Communication	80	26.4		
Computer Science	71	23.4		
Psychology	73	24.1		

The findings after analysis are that 79 (26.1%) participants studied at the Department of Education, 80 (26.4%) studied at the Department of Mass Communication, 71 (23.4%) studied at the Department of Computer Science, and 73 (24.1%) studied at the Department of Psychology.

Social Interaction

Usage

The findings show that the number of participants using Instagram less than one hour per day was 25 (8.3%), 31 (10.2%) participants visit for 2 hours per day, 54 (17.8%) use for 3 hours per day, 96 (31.7%) use for 4 hours per day, and 97 (32%) spend more than 4 hours in a day, using Instagram. The majority of the participants spend four or more 4 hours on Instagram.

Response to Beauty Ideals

The analysis shows that 32 (10.6%) of the participants mostly met people who promote beauty ideals on Instagram, 112 (37%) participants encountered the beauty ideals very often, 99 (32.7%) often, 31 (10.2%) sometimes, and 29 (9.6%) rarely.

Comparing Self with Others

The descriptive analysis of questions related to comparing self with others has been discussed in detail. Table 21 shows the analysis of the comparison of appearance with others, including body shape (M=2.42, SD=1.060), skin tone (M=2.45, SD=1.044), features (M=3.56, SD=1.049), makeup and styling (M=3.54, SD=1.161), dress (M=3.65, SD=1.084), and likes and comments (M=3.47, SD=1.150) and Feeling after comparison including feel about life after comparison (M=3.38, SD=1.236) and feeling about the body after comparison (M=3.42, SD=1.255).

Celebrity Worship

Analysis of responses to the question of whether users believe celebrities are just like them but are intrigued and want attention themselves was rated with 5 (1.7%) totally disagreeing, 8 (5.9%) , 55 (18.25) were natural, 55 (18.25) rated. 144 (47.5%) agreed, and 81 (26.7%) totally agreed. Most participants agreed that celebrities are like ordinary people, self-obsessed, and want attention.

Selfie Feedback Investment

The descriptive analysis of the responses to selfie feedback investment questions includes concern about getting likes and positive comments (M=3.71, SD=1.077), appreciation of all kinds of comments (M=3.75, SD=0.972), and like to be appreciated (M=3.79, SD=1.024).

Self-Promotion

The responses to self-promotion questions include an appreciation for physical appearance pride photos (M=3.89, SD=0.910) and Interest in posting physical appearance photos (M=3.55, SD=1.203), which have been presented under this heading.

Physical Appearance Pride

The responses are recorded towards physical appearance pride photos, including an appreciation for physical appearance pride photos (M=3.89, SD=0.910) and Interesting in posting physical appearance photos (M=3.55, SD=1.203).

Lifestyle Photos

The descriptive analysis of the feeling after comparing lifestyle with others on Instagram has been recorded under the heading lifestyle photos in table 25. The questions include comparing home and feeling inadequate (M=3.65, SD=1.071), comparing traveling practice and feeling inadequate (M=3.96, SD=0.918), comparing styling, makeup skills, and accessories and feeling inadequate (M=3.68, SD=1.010), and comparing photography accessories and feeling inadequate (M=3.80, SD=1.009).

Pseudo Self Presentation

The responses to the questions about pseudo-self-presentation, including photos, are cropped and photoshopped (M=3.98, SD=0.919) and manipulation of photos with filters (M=3.73, SD=1.074).

Well-being

Body Appreciation

Table 27 shows the descriptive analysis of the responses to body appreciation questions including perception about body after comparison; overall features (M=3.67, SD=0.971), hair (M=3.71, SD=0.949), body shape (M=3.51, SD=1.051), height (M=3.77, SD=0.923), skin tone (M=3.80, SD=0.961), weight (M=3.63, SD=0.987), and facial features (M=3.63, SD=1.087).

Body Satisfaction

Results show the descriptive analysis of the responses on questions about life satisfaction, including Interest in beauty products and procedures (M=3.77, SD=0.999), prefer posting other stuff (M=3.63, SD=1.087). Society only accepts those meeting beauty standards (M=3.85, SD=0.923), happy about self after using Instagram (M=3.64, SD=1.080), motives of getting relaxed (M=3.51, SD=1.112); and body satisfaction, including overall satisfaction with self (M=3.80, SD=0.974), thinking about self not good as others (M=3.57, SD=1.042), and feeling low in self-esteem (M=3.71, SD=1.077).
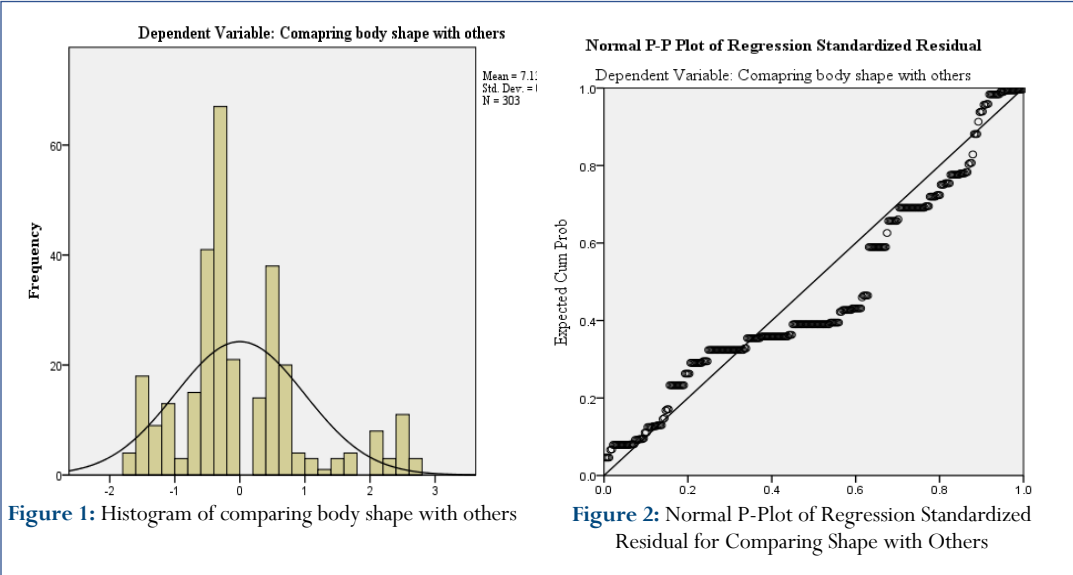
Eating and Weight Loss Related Content

Results show the descriptive analysis of eating and weight loss-related responses, including weight loss. Content on Instagram is inspiring to stay healthy, thin, and fit (M=3.51, SD=1.088), weight loss content on Instagram is frustrating (M=3.59, SD=1.117), gym photos are inspiring to stay fit and get perfect shape (M=3.49, SD=1.115), thinking of using beauty and weight loss products to look like Instagram (M=3.52, SD=1.193), and considering weight while eating for not getting fat (M=3.65, SD=1.155).

Multiple Regression

Multiple regression analysis has been used to predict the independent variable(s) effects on the dependent variable. Multiple regression assumes that data is typically distributed and a linear relationship between the dependent and independent variables.

The results of multiple regression show a positive correlation between social interaction and comparing self with others (R^2=0.32), and significance F change is 0.008 ($p<0.05$), and it was the positive indicator. The histogram shows the data as normally distributed (M=7.13E-17, SD=0.997) with no skewness. Normal P-Plot of regression shows the values near the best fit line.

Figure 1: Histogram of comparing body shape with others

Figure 2: Normal P-Plot of Regression Standardized Residual for Comparing Shape with Others

KMO and Bartlett's Test

The Kaiser-Meyer-Olkin measure shows the proportion of variance in the study's variables. Some factors can cause variance. KMO values close to 1.0 are high values that indicate that helpful factor analysis for the data. KMO values less than 0.50 are usually not valid. Bartlett's test of sphericity is used to tell if the correlation matrix is an identity matrix. For Bartlett's test, Small values (less than 0.05) of the significance level mean a factor analysis is suitable with the data.

Table 3. KMO and Bartlett's Test

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.930
Bartlett's Test of Sphericity Approx. Chi-Square	0.033E4
df	1128
Sig.	.000

Bartlett's sphericity test indicates a correlation between the variables, and the Kaiser-Meyer-Olkin (KMO) measure a 0.93 indicated satisfaction for the factor analysis. The test yielded a value of chi-square 0.0001063 at 1128 degrees of freedom with a p-value of 0.000, s correlation matrix has significant matrix sig

Hypothesis Testing

Hypothesis testing is the way to test the observed and developed assumptions. Null hypotheses have been tested, and a separate model has been made for each testing each hypothesis. In the end, the model has been tested and analyzed for being a good fit or not. The fifth and the last hypothesis has been tested by comparing means in SPSS 23.

H1: Usage of Instagram decreases the level of satisfaction among university students regarding their self and lifestyle.

Table 4. Regression Estimates for Hypothesis-1

	The use of Instagram decreases the level of satisfaction among university students regarding their self and lifestyle.			
	Estimate	S.E.	C.R.	P
Satisfaction <… Use of Instagram	-0.202	0.086	-2.353	0.019

	The use of Instagram decreases the level of satisfaction among university students regarding their self and lifestyle.			
	Estimate	S.E.	C.R.	P
Standardized Regression Satisfaction <… Use of Instagram	-0.134			

Estimation of regression weights shows a positive relationship between Instagram use and decreased self and lifestyle satisfaction. It states that the model fits the data well. The finding supports the hypothesis of the p-value 0.01 (p≤0.05).

H2: The use of Instagram develops students' Interest in beauty and weight loss procedures and products.

In addition, it indicated that the regression estimate (CFI=1.000, SRMR=0.10, RMSEA=0.045) for using Instagram as the independent variable and the Interest in using beauty and weight is Loss Products is the dependent variable, while the standardized estimate is -0.147.

Table 5. Regression Estimates for Hypothesis-4

	The use of Instagram develops students' Interest in beauty and weight loss procedures and products.			
	Estimate	S.E.	C.R.	P
Interest in the use of beauty and weight loss products <… Use of Instagram	-2.10	0.081	-2.585	0.010
Standardized Regression Interest in the use of beauty and weight loss products <… Use of Instagram	-0.147			

Table 6. Regression Estimates of Effect of Instagram Usage on Satisfaction after Comparison

			The Effect of Instagram Usage on Satisfaction after Comparison			
			Estimate	S.E.	C.R.	P
Comparing body shape	<---	Use	.074	.049	1.510	.031
Comparing features	<---	Use	-.011	.048	-.217	.028
Comparing feedback	<---	Use	.008	.053	.142	.007
Comparing Lifestyle	<---	Use	.147	.049	3.028	.002
Comparing Styling	<---	Use	.071	.042	1.685	.092
Comparing Accessories	<---	Visits	-.157	.073	-2.162	.031
Comparing Body Shape	<---	Visits	-.087	.079	-1.096	.027
Comparing Features	<---	Visits	-.104	.072	-1.438	.050
Comparing Skin Tone	<---	Visits	-.190	.073	-2.590	.010
Happy about Self	<---	Comparing body shape	-.231	.055	-4.188	***
Happy about self	<---	Comparing features	.051	.056	.901	.068
Happy about self	<---	Comparing feedback	.229	.051	4.441	***
Satisfaction	<---	Comparing lifestyle	.231	.055	4.180	***
Happy about self	<---	Comparing lifestyle	-.170	.064	-2.639	.008

Conclusion

The study concluded that people are not satisfied with their appearance after comparing themselves to others on Instagram. People watch more appearance-related pictures and compare themselves with them. It creates dissatisfaction with their own selves about their appearance. It was found that there is no difference between the effects of Instagram on the self-perception of male and female students. The photos on Instagram affect both male and female users equally. The study also refuted the assumption of the uses and gratification theory and found that users are unhappy

and dissatisfied with themselves after using Instagram. Their motive for getting relaxed was not fulfilled. The more young people got involved, the more discomfort and disappointment levels increased among them. They become more dissatisfied rather than being gratified.

References

Abbas, J., Aman, J., Nurunnabi, M., & Bano, S. (2019). The impact of social media on learning behavior for sustainable Education: Evidence of students from selected universities in Pakistan. *Sustainability*, *11*(6), 1683.

Andalibi, N., Ozturk, P., & Forte, A. (2017, February). Sensitive Self-disclosures, Responses, and Social Support on Instagram: the case of# depression. *In Proceedings of the 2017 ACM conference on computer supported cooperative work and social computing* (pp. 1485-1500).

Apodaca, J. (2017). True-self and the uses and gratifications of Instagram among college-aged females. Unpublished Bachelor's Thesis. University of Nevada, Las Vegas.

Bay, L. (2015). *Filtering ourselves: Associations between early adolescent self-perceptions and Instagram activity* (Doctoral dissertation, Education: Faculty of Education).

BBC News. (April 10, 2012). Facebook buys Instagram photo-sharing network for $1bn. https://www.bbc.com/news/technology-17658264

Chang, F. M., & Jarry, J. L. (2019). Selfie feedback on Instagram: The impact on self-esteem and appearance satisfaction. https://scholar.uwindsor.ca/research-result-summaries/58 on June 8, 2019.

Clark, J. L., Algoe, S. B., & Green, M. C. (2017). Social Network Sites and Well-Being: The Role of Social Connections. *Current Directions in Psychological Science*, *27*(1), 32–37. doi:10.1177/0963721417730833

Cohen, R., Newton-John, T., & Slater, A. (2017). The relationship between Facebook and Instagram appearance-focused activities and body image concerns in young women. *Body Image*, *23*, 183-187.

Donnelly, E., & Kuss, D. J. (2016). Depression among users of social networking sites (SNSs): The role of SNS addiction and increased usage. *Journal of Addiction and Preventive Medicine*, 1(2), 107.

Ershad, Z. S., & Aghajani, T. (2017). Prediction of Instagram social network addiction based on the personality, alexithymia and attachment Styles. *Sociological Studies of Youth, 8*(26), 21–34.

Farooq, M. (2019). Active social media users in Pakistan grow by 5.7%: Report. Profit by Pakistan Today. https://datareportal.com/reports/digital-2019-pakistan

Kelly, L., & Daneshjoo, S. (2019). 263. Instagram & Body Positivity Among Female Adolescents & Young Adults. *Journal of Adolescent Health*, *64*(2), S134-S135. doi: https://doi.org/10.1016/j.jadohealth.2018.10.280.

Kircaburun, K., & Griffiths, M. D. (2018). Instagram addiction and the Big Five of personality: The mediating role of self-liking. Journal of Behavioral Addictions, 7(1), 158–170. doi:10.1556/2006.7.2018.15

Kuss, D., & Griffiths, M. (2017). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, 14(3), 311.

Lee, C. S., Abu Bakar, N. A. B., Muhammad Dahri, R. B., & Sin, S.-C. J. (2015). Instagram This! Sharing Photos on Instagram. *Lecture Notes in Computer Science*, 132–141. doi:10.1007/978-3-319-27974-9_13

Lee, M. (2019). The effects of appearance-related photo activity and appearance comparison on body satisfaction-focusing on the moderating effects of instagram addiction. *Journal of the Korean Society of Clothing and Textiles, 43*(1), 81-94.

Luckerson, V. (2016, April 19). Here's Proof That Instagram Was One of the Smartest Acquisitions Ever. Time Magazine. http://time.com/4299297/instagram-facebook-revenue/

Martikainen, I., & Pitkänen, A. (2019). The Significance of Consumers' Perceived Authenticity to Engagement: Explorative Research of Influencer Marketing in Instagram.

Musarrat, R., Masood, A., Rashid, S., & Mazahir, S. (2017). Social Networking , Perceived Loneliness and Psychosocial Well-Being in Adolescents, *The International Journal of Indian Psychology*, 4(3).

Oliver, M. B. (2003). Mood management and selective exposure. *In communication and emotion* (pp. 93-114). Routledge.

PEW Research Center. (2018). Social Media Use in 2018.

https://www.pewinternet.org/2018/03/01/social-media-use-in-2018/

Ponnusamy, S., Iranmanesh, M., Foroughi, B., & Hyun, S. S. (2020). Drivers and Outcomes of Instagram Addiction: Psychological Well-Being as Moderator. *Computers in Human Behavior*, 106294. doi:10.1016/j.chb.2020.106294

Ryan, T., Chester, A., Reece, J., & Xenos, S. (2014). The uses and abuses of Facebook: A review of Facebook addiction. *Journal of Behavioral Addictions, 3*(3), 133–148. doi:10.1556/JBA.3.2014.016.

Satici, S. A. (2019). Facebook addiction and subjective well-being: A study of the mediating role of shyness and loneliness. International Journal of Mental Health and Addiction, *17*(1), 41–55.

Smith, A., & Anderson, M. (2018). Social media use in 2018. *Pew research center*, *1*, 1-4.

Tatlı, H., & Koç, B. (2017). An application about the problems that women face in business and family life from the perspective of working women. *Economics* , *1*(1), 145-170.

Tiggemann, M., & Zaccardo, M. (2018). "Strong is the new skinny": A content analysis of #fitspiration images on Instagram. *Journal of Health Psychology, 23*(8), 1003–1011*.doi:10.1177/1359105316639436.

Tiggemann, M., & Zaccardo, M. (2018). "Strong is the new skinny": A content analysis of #fitspiration images on Instagram. *Journal of Health Psychology, 23*(8), 1003–1011*.doi:10.1177/1359105316639436.

Ting, C. T. (2014). A study of motives, usage, self-presentation and number of followers on Instagram. *Discovery–S.S. student e-journal, 3,* 1-35.

Wagner, C. N., Aguirre Alfaro, E., & Bryant, E. M. (2016). The relationship between Instagram selfies and body image in young adult women. *First Monday*, *21*(9).

Webb, J. B., Vinoski, E. R., Bonar, A. S., Davies, A. E., & Etzel, L. (2017). Fat is fashionable and fit: A comparative content analysis of Fatspiration and Health at Every Size ® Instagram images. *Body Image, 22,* 53–64*.doi:10.1016/j.bodyim.2017.05.003.

Zaharia, G. E., Vlad, G. A., Cercel, D. C., Rebedea, T., & Chiru, C. G. (2020). UPB at SemEval-2020 Task 9: Identifying Sentiment in Code-Mixed Social Media Texts using Transformers and Multi-Task Learning. *arXiv preprint arXiv:2009.02780*.