



## **Predisposition from Instagram and Snapchat Interactive Effect on Narcissism**

**Adeel Ahmad Aamir**

Assistant Professor

Forman Christian College University Lahore

[aamir.adeel@gmail.com](mailto:aamir.adeel@gmail.com)

**Abul Hassan**

Assistant Professor

The University of Lahore, Lahore, Pakistan

[abulhassaneesa@gmail.com](mailto:abulhassaneesa@gmail.com)

**Mohsin Ali Shams**

Lecturer

GIFT University

[mohsin.shams@gift.edu.pk](mailto:mohsin.shams@gift.edu.pk)

### **Abstract**

Digital age and new technologies have defined the way young adults are leading their lives and multipurpose use of SNS has become the cornerstone of young adult's lives especially students studying at undergraduate level. Present study devolves in to two important social media networking applications (Instagram and Snapchat) their addictive use and effect of level of narcissism among undergraduate students (N=659). SNS frequency and its interactive effect were measured on level of undergraduate students. Results indicated addictive use of social media for a longer period has significant impact on levels of narcissism among undergraduate students. Results showed a significant relationship between application of beauty



filter, Selfies, frequency of time spent of SNS, Picture editing and increased level of narcissism among undergraduate students

**Key Words:** SNS, Undergraduate students, Snapchat, Instagram, Narcissism

### **Introduction**

The current study aims to explore the relationship between addictive use of social media and dependent variable Narcissism literature suggests that addictive exposure to Facebook correlates to a higher narcissism, higher stressed and a higher bandwagon effect (Ryan & Xenos, 2011).

Studies including a meta-analysis conducted in other parts of the world shows addiction to social media is related to higher narcissism, stress and creates a bandwagon effect (Ali & Lodhi, 2017; Andreassen et al., 2017; McCain & Campbell, 2018a; Syed et al., 2018).

Social media has played an important part in improved standards of communication in all aspects of life in Pakistan (Tariq et al., 2012). The infotech revolution made mobile applications Instagram and Snapchat easily accessible to young adults in Pakistan. Young adults are spending more and more time on social media platforms compare to the past (Z. Hussain et al., 2017). Available literature suggests that there is a knowledge void in this area of research with special reference to Pakistan. These variables are investigated separately from the perspective of Facebook



usage in western countries and Pakistan and there is a need for further investigation on Instagram and Snapchat with reference to Pakistani students to fill this gap. Current research will enable future researchers to add new knowledge in the field of mass communication, social psychology, and education.

### **Review of Literature**

To understand modern social media technologies, online internet interactions, and social media environments created by these online platforms it is imperative to understand the current body of scholarship available in this field. Even though social media is a very recent phenomenon but in 1980, social scientists like Barry Willman started studying the social structure of technologies now commonly known as computer-mediated communication. A section of researchers is of this opinion that all media is social because communication is a reciprocal process that is why new technologies that support communication between two or more humans are social media. It is also imperative to understand that in new media communications symbols are exchanged between humans and meaning are given to those symbols during the communication process. Most people assume that Facebook and Twitter are the only social media platforms, but the story goes back to 1979 when Ray Tomlinson sent the first email. Because social media is a symbolic interaction, where we give



*Pak. Journal of Media Science, Vol 3, Issue 1 (2022)* Predisposition from Instagram .....  
meaning to different symbols then all online or media use is not social media, for example writing a document in the word processor is not social interaction likewise sending an email through Gmail, chatting on a Facebook messenger and putting up streak on Snapchat is very much social. On the other hand, all networked and computer mediates communication social networking platforms, blogs emails wikis and websites are social media because they produce and share knowledge which is the result of social relations in our society (Fuchs, 2017).

21st century is the age of information where two-way connectivity and technology integrated communication has become an integral part of our daily lives. Today most of the television channels and newspapers are maintaining their websites and social media platforms in order to build a niche audience. News outlets are even promoting and welcoming the user-generated content, which is called citizen journalism and falls under the definition of term social media. In 1999, a software designer Darcy DiNucci realized that web is changing rapidly from personalized home pages to in another medium which is invisible she named it Web 2.0 with the invention iPhone by Steve Jobs and with that come the applications in 2007 DiNucci's idea got a side recognition (Hjorth & Hinton, 2019). Social media is a Web2.0 phenomenon. Web.2 is a term used for highly integrated and interactive content generated by the users connected



*Pak. Journal of Media Science, Vol 3, Issue 1 (2022)* Predisposition from Instagram .....  
to a common internet platform (Shrivastava, 2013). These platforms allow users to connect to other users in a way that is more informal to collaborate. These social media platforms provide users a free space to express themselves and are widely available all over the world unless banned by the governments. Social networking sites like Facebook, Instagram, Snapchat, YouTube, and Twitter allow users to share text, videos, photos, and graphics to express their individuality. CompuServe was the first company that started the real-time chat in 1980. AOL commonly known as America Online started in 1985 it made internet and email accessible for everyone globally. AOL did one of the best product placements through a 1998 film "You Have Got Mail" starring Tom Hanks bringing social and online culture into Hollywood romance. Hi5 was the first major interactive social media platform created by an Indian Ramu Yelamanchi. internet services like MSN and AOL gave birth to BlackBerry Messenger services which later became a reason for WhatsApp messaging service (D. Miller et al., 2016). Social media platforms taken professionals onboard by creating LinkedIn followed by Myspace introduced profile-based social media and an option of private messages. Initially, Facebook was only Harvard base social media network in 2004 but at the end of 2006 it expanded to public and till 2012 it became a worldwide phenomenon. Instagram surfaced in 2010 and within no time it became a lifestyle but right after the eighteen months of its launch



*Pak. Journal of Media Science, Vol 3, Issue 1 (2022)* Predisposition from Instagram .....  
and growing popularity Kevin Systrom and Mike Krieger sold it to Facebook (Frier, 2020). In 2012 Instagram crossed 100 million users and surprised every one of its potential Instagram is not only been used by young adults but businesses as well to grow in an innovative way (Miles, 2014). The Instagram new joining rate has surpassed Twitter, Facebook, and YouTube and it contributes almost 100 million posts in 24 hours which makes it a popular photo content sharing website (Reece & Danforth, 2017). Mostly users use it for surveillance on others, coolness and creativity (Sheldon & Bryant, 2016b). WhatsApp and Snapchat were launched in 2009 these both platforms are also bought by Facebook. Snapchat is popular among students and young adults because of its enhanced photo-sharing capabilities with filters. Snap stories and videos disappear after a certain time which makes this application different from others (Brügger & Milligan, 2018). Live streaming or live video on social media mobile applications is a new trend started in 2013 by Google Hangout and now available on many mobile applications like YouTube, Facebook, Instagram, and Twitter. In 2015 two applications were started their live stream named Meerkat and Periscope. Periscope is still working and owned by Twitter.

According to research by PEW survey young adults ages 18to 29 are in higher numbers when it comes to using social media according to this survey 90% of them are on social media. 68% of women



*Pak. Journal of Media Science, Vol 3, Issue 1 (2022)* Predisposition from Instagram .....

and 62% of men are using social media while in 2005 5% of women and 6% of men were using social media. Young adults who are studying at a college or a university are more likely to use social media compare to those who are not going to college or university (Perrin, 2015).

Ephemeral media are the social media platforms that shows content for a limited period, and they have become an important entity in social media ecology. Snapchat is a popular ephemeral social media platform which is highly adoptable and popular among youth. This phenomenon is also commonly known as burn after read. Ephemeral media is basically sending self-destructing content your friends and social media contacts. The content whether it's a picture or a message it deleted or dies automatically after certain period of time (van Nimwegen & Bergman, 2019). The content is self-destructed after the time limit set by the sender. These ephemeral social media platforms became an important entity of social media ecosystem

(Bayer et al., 2016). With every passing day social media users are taking more interest in ephemeral social media applications like Snapchat, YikYak, SlingShot, FranklyChat. Internet users are linking it because often it is linked with anonymity and privacy. Studies shows that ephemeral content facilitates users who are more interested in privacy and compare to those platforms who offer content to stay permanently (Kaun & Stiernstedt, 2014). A study proves that ephemeral content promotes the habit of using



*Pak. Journal of Media Science, Vol 3, Issue 1 (2022)* Predisposition from Instagram .....

Instagram stories (Kircova et al., 2020). Example of ephemeral content is Instagram stories these are moments of the day which users do not want to keep on their profile's stories last only for 24 hours. This why epidermal content has gained popularity in recent years (Vázquez-Herrero et al., 2019). The option of ephemerality social media platforms such as Snapchat and Instagram provide is related to self-disclosure more and less related to self-presentational aspects of edited pictures and content (Kofoed & Larsen, 2016). Since the story feature introduced in Instagram and Snapchat it has overtaken news feed enormously and approximately 500 million users are using it daily and it has created a rift between ephemeral content and archival culture of social media (McLachlan, 2022). Similarly, users are taking deep interest in stories on other platforms like Facebook. A recent study explored frequency of Facebook story updates and time reading story updates reveals that Facebook stories are more addictive and usage behavior linked to stories predicted narcissism (Yu & Chen, 2020). With special reference to brands on social media ephemeral content generates more exclusive appeal compared to archived content on social media (Lim et al., 2021). Another study shows that in advertising placement of ephemeral content placement is more viable option compared to traditional placement and effect of ephemerality is associated with an increased processing effort.



That is why ephemeral content is getting huge popularity in brands (Campbell et al., 2021).

Prior to all social media technologies, people had two conventional ways of communication one was the broadcast media like television, radio, and newspapers and they were accessible to all, and broadcasters had no control over who is their audience. The second was the telephone where one to one communication was possible, but people were unable to have group communication. After internet web-based platforms like Yahoo, MSN and Pal talk emerged. All these developments in web-based technologies revolutionized with the inception of the smartphone phenomenon. As per Merriam Webster, social media is a platform of electronic communication that helps users to be part of electronic communities to communicate and share ideas using text, pictures, audio, and videos. A study conducted by (I. Hussain, 2012) in Bahawalpur University, Pakistan to examine the trends of social media use in Pakistan. The study revealed that 90% of students were inclined to use social media. Some studies have shown positive impacts of social media, and some have shown negative impacts of social media. Users have different experiences of social media from day to day and minute to minute even. People use social media to show off their holiday pictures, make new friends or catch up with old friends and social media plays symbolically different roles during different times.



Social media sites are well known as SNS include Facebook, Twitter, MySpace, Cayworld, Bebo. There are many hundreds of other SNS with a wide range of interests and technological aspects like YouTube Vimeo and Daily Motion. Smartphones have a high rate of adoption in society, and they have become an important part of our daily life communications. Smartphones have become a symbol of modern lifestyle (J. Miller, 2014).

The mobile phone has been converted into a fully functional computer with powerful processors and memory and different kind of mobile applications (Wang et al., 2014). Mobile phone usages have been evolved during the past five years as with the help of Smartphone people are connected with the work and non-workspaces (Dery et al., 2014). A study shows that smartphone phenomenon is dominating our daily lives and especially applications like WhatsApp which is becoming addictive day by day (Montag et al., 2015)

### **Narcissism**

Narcissistic personality disorder has a historical contextualization and roots in Greek mythology According to Greek mythology Narcissus who was the son of river god Cephissus and the nymph Liriope he was famous for is beauty A blind Seer told his mother that he will have a long life provided he remain unaware of his beauty. One day young and proud Narcissus saw his



reflection in the water and fell in love with himself he could not stop himself gazing at his reflection in the water remained at the water side for days and month and eventually died there (Ovid, 1979). Narcissism term is an important area of study in sexual psychology and this term is derived from there and later become popular in contemporary psychology and social psychology. A widely accepted construct about narcissistic person is that someone who is obsessed with him/herself. An example can be derived from the classic fairy tale of snow white's queen and her question to Mirror, "Mirror mirror on the wall, who is fairest of them all"? Narcissistic people only admire themselves and they think other people around them are there only to admire them (Jacoby, 2016). People around them are only a mirror who reflect their charismatic personality and characteristics and they want admiration for themselves all the time. This wishful thing generates envy for other. All the available literature on narcissism points out towards two factors that it is an important area of study in human psychology and confusing too. Most of the researchers are still confused and dissatisfied that concept of Narcissism is not redefined with reference to Sigmond Freud's structural psychology (Russell, 1985). Sigmund Freud published his famous paper "On Narcissism" according to Freud's theory humans are born without ego but it evolves during our childhood and in evolution process primary narcissism plays an important role to create ideal ego in oneself. In



the development phase of ego, it is directed towards outer objects e.g., initially mother and on later stage family members, friends' relatives' siblings because in return we get love and affection by these relationships, and it deplete narcissism in return. According to Sigmund Freud the concept of "Self" transcends from three main aspects the amount of primary narcissism which never disappears completely, the gratification of our ideal ego and satisfaction of getting love in reappearance (*Freud: On Narcissism*, n.d.). Though the idea of narcissism is not originated by Sigmund Freud but it has a historical contextualization and connotations but his conceptualization of the construct has played an important role in psychoanalytic developments in the long run (Meissner, 1981)

Despite of having conceptually confusing term a milestone was achieved in the field of psychology when American Psychiatric Association considered it distinct phenomenon. Narcissism and Narcissistic personality was pronounced in DSM-III and associated with the characteristics of grandiosity, fantasies of unlimited power, beauty and success, exhibitionism, sensitivity to criticism and troubled personal relationships (Soyer et al., 1999). Literature suggests that there are two diverse streams of narcissism, and they are named often grandiose and vulnerable narcissism. Grandiose narcissism has the characters of grandiosity, aggression and dominance on the other hand vulnerable narcissism reflects



*Pak. Journal of Media Science, Vol 3, Issue 1 (2022)* Predisposition from Instagram .....  
defensive and insecure grandiosity with the feeling of incompetence, inadequacy and negative thoughts. People with vulnerable narcissism traits are shy, hypersensitive and low tolerance with reference to attention from others which make them socially passive (J. D. Miller et al., 2011). Review of the literature also suggests that researchers and scholars has been unable to make a clear distinction between vulnerable and grandiose narcissism. Empirical evidence is very limited which talks on the causation and factors involved in both types of narcissism (Lynam, 2011)

### **SNS and Its relationship to Narcissism**

Social networking sites/applications provide a sense of closeness and connectivity people want connection and they have a desire of social approval. These virtual communities provide its users a virtual space of interaction to build relationships for self-gratification. People find likeminded virtual communities and people which gives them sense of belonging and intimacy. This has produced a tech savvy generation whose identities are based on online content generation, their virtual friends and followers (Urista et al., 2009). There are two types of expression on social media active usage and passive usage. Active usage is engaging people with user generated content e.g., video, blogpost tweet or Instagram post or Facebook status while passive usage is just browsing the social media networking sites.



A study(Dumas et al., 2017) examined N=198 revealed that users on Instagram seek out for likes, shares and comments and in order to get validation and attention they use different filters and editing techniques on Instagram. Social media has become an epic ground for exhibitionists and users share their content such charismatic way that it enables them to gain attention from other social media users and it gives them immense pleasure and sense of happiness. Narcissists use social media extensively to exhibit their personality and characteristics (Jabeen et al., 2020).

Narcissist always love exaggerated and positive view of themselves and SNS provide them a suitable platform to exhibit narcissist behavior college students who scored higher on NPI-16 listed more social media friends either Facebook or Instagram. In this study results were drawn from N=460 for male and female status posting, tagging photos and commenting photos on Facebook was positively associated with their self-reported narcissism. For female sharing links and posting status was highly corelated to narcissism because Facebook provides notification for commenting and status update. Facebook profile picture also predicted higher narcissism and compare to male participants female users rated their profile picture more attractive (Alloway et al., 2014).

### **Objectives of the Study**



1. To investigate the patterns of social media usage and level of narcissism among undergraduate students.
  - a) To explore, the selfie culture among undergraduate students.
  - b) To find the motivation behind beauty filters on Instagram.
  - c) To explore relationship between age, gender and education level and its relationship with narcissism.

### **Research Question**

- R<sub>1</sub>** Does a relationship exist between beauty filter and narcissism?  
**R<sub>2</sub>** Is there any relationship between current academic rank, age, and social media addiction, Narcissism?  
**R<sub>3</sub>** Is there any relationship between time spent on social media and level of narcissism  
**R<sub>4</sub>** Does there any relationship between picture editing and narcissism  
**R<sub>5</sub>** Does there any relationship between cat and dog filters and narcissism

### **Hypothesis**

- H<sub>1</sub>** Addictive use of social media mobile applications will predict a higher level of narcissism among its users.  
**H<sub>2</sub>** Age and academic level of the undergraduate students are a predictor of higher levels of Narcissism

### **Methodology**

#### **Participants and Sample**

The final sample of current research was (N=659) students studying at the undergraduate level in universities of Pakistan. The age of the participants was between 16-31 years. Among all participants 312 were male participants and 347 were female participants. To be eligible for current study all participants must be user of smartphone who use either 3G,



4G or LTE internet connection on their mobile phones and use social media applications on their mobile phone. Among all participants 37.8% were between ages of 16-20, 57% were between 20-25 3% were between 26-30 only 1.1% were between 31 or above.

### **Sampling Frame**

Census is all about gathering information about every individual in the population. It becomes difficult when we are dealing with a larger population so we select a small subset of populations' representative of the whole population (Coon et al., 2021). For this specific study, the top five universities of Pakistan were selected. Selection was made using Higher Education Commission of Pakistan's University category list. List of universities was obtained by Higher Education Commission's website.

### **Sampling Technique**

Current study used the probability sampling method by applying two step sampling technique initially universities were selected by using simple random sampling technique for the selections of the universities through the Higher Education Commission's category wise list. For the selection of students, a non-probability sampling design is applied, and the student are selected through a purposive sampling technique. There is ample evidence that tells us that nonprobability sample technique has



been adopted in previously conducted studies conducted at the graduate level (Hegarty, 2019)

### **Sample Size**

Many studies conducted on undergraduate students used sample size between 200-300 (Ghiron, 2017; Kenny, 2018). Current study aims to explore this research phenomenon on a larger scale. Depending on the nature of current study and motivation of the researcher similar studies were consulted and most of the studies used a sample size between, 500-650 (Kircaburun et al., 2019; Ma, 2019; McCain & Campbell, 2018b). Therefore, current research has used a sample size of 569 respondents.

### **Instruments**

Current study has used five scales after some minor modifications to measure social media use intensity, narcissism, stress, and the bandwagon effect. Demographic instrument was designed keeping in view the current participants, motivation behind this research and different aspects of undergraduate students.

### **Social Media Addiction Tool**

Social Media addiction tool was developed by (Sahin, 2018a) and is adopted in this study Cronbach alpha of the scale was 0.93 . This is the latest tool available to measure the frequency of social media use. Social media intensity scale has measured the extent to which participants use social media to interact with people they already know offline and the



extent to which they use it to meet new people online. This tool has 29 items having response options of strongly agree, agree, neutral, disagree and strongly disagree, which have been given values as 5,4,3,2 and 1 respectively.

### **Narcissism Measure NPI-16**

Narcissist Personality Inventory which was developed by (Raskin & Hall, 1979) has been used to measure narcissist tendencies among students. NPI was later developed to NPI 16 by (Ames et al., 2006a). Current study uses NPI-16 to measure narcissism. Narcissism measure includes questions assessing the amount of narcissism and self-likening among social media users. This tool has 16 items having response options of strongly agree, agree, moderate, disagree and strongly disagree.

### **Data Collection**

The required data has been collected through online survey with the help of Google Form by sharing the same with targeted respondents and then it was transformed into SPSS sheet in order to run the requisite tests.

### **Results**

#### **Reliability and Normality of the Variables**

Reliability and normality of the constructs was tested using computer software and statistical tests in IBM-SPSS. In order to test social media a



tool social media addiction (Sahin, 2018b) tool with 28 items was used scale is tested for its reliability and normality in the present study and was found normal and valid with Cronbach alpha of *a0.91*. To measure narcissism NPI-16 with 16 items was used originally NPI-16 was developed by (Ames et al., 2006b) and is a shorter version of o NPI-40. Reliability coefficient for current study was measured which was *a0.915*.

**Table 1: Descriptive Statistics and Reliability Coefficients for Study Variables**

<i>Scales</i>	<i>A</i>	<i>K</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	
					Potential	Actual
Social Media Addiction	.911	28	80.37	16.55	28-140	28-140
Tool						
Narcissism Scale	.915	16	43.52	11.24	16-80	16-80

Note: a= Reliability coefficient and K= no. of items in the scale

**Table 2: Distribution of respondents according to age**

Age Group of Participants	Freq	Freq (%)
16-20 Years	249	37.8%
20-25	<b>379</b>	<b>57.5%</b>
26-30	24	3.6%
30-Above	07	01.1%



**Table 3: Distribution of respondents according to gender**

Gender of Participants	Freq	Freq%
Male	312	47.3%
Female	347	52.7%
Total	659	100%

**Table 4: Distribution of respondents according to academic rank**

Academic Rank	Freq	Freq%
1 <sup>st</sup> Year	108	16.4%
2 <sup>nd</sup> Year	105	15.9%
3 <sup>rd</sup> Year	153	23.2%
4 <sup>th</sup> Year	<b>281</b>	<b>42.6%</b>
Missing Value	12	(1.8%)

**Table 5: Distribution of the respondents according to Snapchat and Instagram Habits**

Snapchat and Instagram Usage Habits	Freq	Freq%
Snapchat & Instagram use during class		
Yes	<b>355</b>	<b>(53.9%)</b>
No	<b>304</b>	46.1%
Snapchat and Instagram use at home		
Yes	616	93.5%
No	42	6.4%
Snapchat and Instagram use during meals		
Yes	<b>355</b>	<b>(53.9%)</b>
No	304	(46.1%)
Use of Snapchat and Instagram before bedtime		
Yes	<b>570</b>	<b>(86.5%)</b>
No	85	(12.9%)
Missing value	4	(.6%)



Use of Snapchat and Instagram early in the morning		
Yes	306	(46.4%)
No	<b>346</b>	<b>(52.5%)</b>
Missing value	7	(1.1%)
Use of Snapchat and Instagram during meeting		
Yes	138	(20.9%)
No	<b>518</b>	<b>(78.6%)</b>
Missing value	3	(.5%)
Use of Instagram and snapchat during travel		
Yes	<b>530</b>	<b>(80.4%)</b>
No	129	(19.6%)
Use of Cat & Dog filters on Instagram and Snapchat		
Yes	223	(33.8%)
No	<b>436</b>	<b>(66.2%)</b>
Use of beauty filters on Instagram and Snapchat		
Yes	<b>449</b>	<b>(68.1%)</b>
No	210	(31.9%)
Pictures editing before posting on Instagram and Snapchat		
Yes	<b>429</b>	<b>(65.1%)</b>
No	230	(34.9%)

**Table 5: Relationship Between Variables Pearson Correlation**

S Variable	1	2	3	4	5	6	7	8	9	10	11
1 Age	--	.09 9*	.02 1	.41 7**	.02 7	.21 1**	- .00	.07 8*	.02 5	- .03	- .02
2 Time spent on Instagram	.09 9*	--	.26 9**	.09 4*	.00 0	.18 1**	- .09	.17 4**	- .08	.19 2**	.02 2
3 Time spent on Snapchat	.02 1	.26 9**	--	- .00	.10 9**	.13 0**	.20 5**	.14 8**	- .06	.14 9**	.10 2**



<b>4 Academic Rank</b>	.417**	.094*	-	-.009	-.058	.051	-	.015	.034	-	-
<b>5 Academic Faculty</b>	-	.000	-	.058	-.058	.108**	.011	.088*	.043	-	-
<b>6 Monthly Income</b>	.211**	.181**	.130**	.051	.108**	-.052	-	.050	-	-	-
<b>7 Cat and dog filter on Snapchat/Instagram</b>	-	-	-	-	.011	-	-.052	.351**	.100*	.131**	-
<b>8 Using beauty filters on Instagram/Snapchat</b>	.078*	.174**	-.148**	.014	.088*	.050	.351**	-.244**	.209**	.135**	-
<b>9 Editing pictures on Instagram &amp; Snapchat</b>	.025	-	-	.035	.043	-	.100*	.244**	-.166**	.231**	-
<b>10 SM Addiction Tool</b>	-	.192**	.149**	-	-	-	.131**	.209**	.166**	-.489**	-
<b>11 NPI-16</b>	-	-	.102**	-	-	-	-	.135**	.231**	.489**	-.489**

\*Relationship is significant at the level 0.05 (2-tailed) \*\*Relationship is significant at the level 0.01 (2-tailed)



**Liner Regression for Predicting Cause and Effect among Variables**

**H<sub>1</sub>** *Addictive use of social media mobile applications will predict a higher level of narcissism among its users. (Accepted)*

**Table 7: Simple linear Regression for Predicting narcissism (N=659)**

Variable	Narcissism			
	B	B	SE	P
Addictive Use of social media	.332	.489	.023	.000
R <sup>2</sup>	.239			
F	206.377			

Simple linear regression was used to analyze the interactive effect of addictive use of social media factor and Stress. Independent variable (addictive use of social media Factor) and dependent variable (Narcissism) were entered. The results indicated significant impact of addictive use of social media factor ( $\beta = .48, p < .001$ ) on narcissism by producing variance of 23 %. The overall model was significant. Addictive use of social media positively predicted narcissism, which means the addictive use of social media causes narcissism.

**H<sub>2</sub>** *Age and academic level of the undergraduate students are a predictor of higher levels of Narcissism (rejected)*



**Table 8: Simple linear Regression for Predicting Narcissism (N=659)**

Variable	Narcissism			
	B	B	SE	P
Age Level	-.451	-.024	.736	.541
R <sup>2</sup>	.001			
F	.375			

Simple linear regression was used to analyze the interactive effect of age level factor and Narcissism. Independent variable (age level Factor) and dependent variable (Narcissism) were entered. The results indicated no positive impact of age level factor ( $\beta = -.024$   $p > .005$ ) on narcissism by producing variance of 00 %. The overall model was not significant. Age level of respondents was not predictor of narcissism.

**Table 6: Simple linear Regression for Predicting Narcissism (N=659)**

Variable	Narcissism			
	B	B	SE	P
Academic Level	-.444	-.044	.393	.259
R <sup>2</sup>	.002			
F	1.275			

Simple linear regression was used to analyze the interactive effect of Academic level factor and Narcissism. Independent variable (Academic level Factor) and dependent variable (Narcissism) were entered. The results indicated no positive impact of Academic level factor ( $\beta = -.044$   $p > .005$ )



*Pak. Journal of Media Science, Vol 3, Issue 1 (2022)* Predisposition from Instagram .....  
on narcissism by producing variance of 00 %. The overall model was not significant. Academic level of respondents was not predictor of narcissism.

### **Discussion**

Beauty filters are the application functionalities that enhance facial features and bodily imaging on individuals in a way that they look beautiful compared to their real self. A Pearson Correlation test was used to determine whether a relationship exists between applying beauty filters on Instagram and Snapchat and narcissism measured by NPI-16 (Ames et al., 2006b). Results showed that there is a strong relationship between beauty filters and narcissism with the value .135\*\* which a show that the relationship exists, and it is significant. Majority of the students who use beauty filters fall between age of 20-25 years of age. As narcissistic users are in need of much like and application which lead them to use beauty filters on social media platform indoor to look great (Meng & Leung, 2021). Results shows that those who use beauty filters for Instagram and Snapchat are suffering from narcissism disorder. As it is evident from variables and results of present study that researcher is trying to explore undergraduate students' social media habits and how these habits develop any relationship between the variables narcissism, social media addiction and academic rank and age. In this context it becomes imperative to explore relationship between students age and their current academic rank with social media addiction, narcissism.



*Pak. Journal of Media Science, Vol 3, Issue 1 (2022)* Predisposition from Instagram .....

To explore this relationship correlation was applied to above mentioned variables Academic rank has an inverse relationship with social media addiction, narcissism, with the value respectively -.014. This implies that there is no relationship with the progression of their academic rank and any development or progression in social media addiction, narcissism. On the second stage relationship of above stated variables with age was explored and for this purpose Pearson Correlation was applied to investigate the relationship. Results from the test shows that there is an inverse negative relationship between age, social media addiction, narcissism, with the values respectively -.033, -.017. That means that with the progression of age there is no progression in social media addiction, narcissism (Sheldon & Bryant, 2016a). Time spent of Instagram has no relationship at all with level of narcissism at the level of .22. It is also found that there is an inverse relationship between picture editing and social media use at the level of -.050 and an inverse relationship between cat and dog filters and narcissism. This study aims to explore level of narcissism among social media users and addictive use of social media. To analyze the interactive effect of addictive use of social media factor and stress simple linear regression was applied to the independent variable (Addictive use of social media) and dependent variable NPI-16 Narcissism were used. The results came up with significant impact of addictive sue of social media where  $\beta$  value was .48 which is



*Pak. Journal of Media Science, Vol 3, Issue 1 (2022)* Predisposition from Instagram .....  
significant and  $p < .001$  on narcissism by producing variance value of 23% which means addictive use of social media including Snapchat and Instagram positively predictor of narcissism. Undergraduate students who use social media for longer period and score higher on social media addiction scale will likely to be more narcissists. The results of current hypothesis are in lined with (Balushkina, 2021; Coleman et al., 2019; Kristinsdottir et al., 2021).

To explore effect of narcissism with age and academic rank in this regard two independent variables age and academic rank were taken simple liner regression as used to analyze age factor and narcissism were used to measure the impact the results of simple liner regression showed there is no positive impact of age on narcissism with the values  $\beta = -.024$   $p > .005$ . The overall model was not significant and result shows that age level was not predictor of narcissism. Simple liner regression was used to analyze interactive effect of academic level of the student's factor and narcissism. For this purpose, independent variable academic level of the undergraduate students and dependent variable narcissism was used to. The result showed no significant impact of academic level factor on levels of narcissism with values  $\beta = -.044$   $p > .005$  by producing variance of 00%. Overall model was not significant. Therefore, academic level is not a predictor of narcissism.



## **Conclusion**

Beauty filters are the application functionalities that enhance facial features and bodily imaging on individuals in a way that they look beautiful compared to their real self. There is a significant relationship between beauty filters and narcissism, whereas, majority of the students who use beauty filters fall between age of 20-25 years of age. It is also concluded that those who use beauty filters for Instagram and Snapchat are suffering from narcissism disorder. As it is evident from variables and results of present study that researcher is trying to explore undergraduate students' social media habits and how these habits develop any relationship between the variables narcissism, social media addiction and academic rank and age. The significant impact of addictive use of social media including Snapchat and Instagram positively predictor of narcissism have been found. Undergraduate students who use social media for longer period and score higher on social media addiction scale will likely to be more narcissists.

## **References**

- Ali, A., & Lodhi, R. N. (2017). How Facebook addiction affects the personal life of addict students and their family: A case study of Pakistan. *Paradigms, 11*(2), 184–189.
- Alloway, T., Runac, R., Quershi, M., & Kemp, G. (2014). Is Facebook Linked to Selfishness? Investigating the Relationships among Social Media Use, Empathy, and Narcissism. *Social Networking, 2014*.  
<https://doi.org/10.4236/sn.2014.33020>



- Ames, D. R., Rose, P., & Anderson, C. P. (2006a). The NPI-16 as a short measure of narcissism. *Journal of Research in Personality, 40*(4), 440–450.
- Ames, D. R., Rose, P., & Anderson, C. P. (2006b). The NPI-16 as a short measure of narcissism. *Journal of Research in Personality, 40*(4), 440–450. <https://doi.org/10.1016/j.jrp.2005.03.002>
- Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors, 64*, 287–293.
- Balushkina, T. (2021). *Narcissism and Individual-level Workplace Outcomes*.
- Bayer, J. B., Ellison, N. B., Schoenebeck, S. Y., & Falk, E. B. (2016). Sharing the small moments: Ephemeral social interaction on Snapchat. *Information, Communication & Society, 19*(7), 956–977.
- Brügger, N., & Milligan, I. (2018). *The SAGE Handbook of Web History*. SAGE.
- Campbell, C., Sands, S., Treen, E., & McFerran, B. (2021). Fleeting, But Not Forgotten: Ephemerality as a Means to Increase Recall of Advertising. *Journal of Interactive Marketing, 56*, 96–105. <https://doi.org/10.1016/j.intmar.2021.06.001>
- Coleman, S. R., Pincus, A. L., & Smyth, J. M. (2019). Narcissism and stress-reactivity: A biobehavioural health perspective. *Health Psychology Review, 13*(1), 35–72.
- Coon, D., Mitterer, J. O., & Martini, T. S. (2021). *Psychology: Modules for active learning*. Cengage Learning.
- Dery, K., Kolb, D., & MacCormick, J. (2014). Working with connective flow: How smartphone use is evolving in practice. *European Journal of Information Systems, 23*(5), 558–570.
- Dumas, T. M., Maxwell-Smith, M., Davis, J. P., & Giulietti, P. A. (2017). Lying or longing for likes? Narcissism, peer belonging, loneliness and normative versus deceptive like-seeking on Instagram in emerging



adulthood. *Computers in Human Behavior*, 71, 1–10.

<https://doi.org/10.1016/j.chb.2017.01.037>

Freud: *On Narcissism*. (n.d.). Retrieved 3 May 2021, from <http://www.english.hawaii.edu/criticallink/narc/guide8.html>

Frier, S. (2020). *No Filter: The Inside Story of Instagram*. Simon & Schuster.

Fuchs, C. (2017). *Social Media: A Critical Introduction*. SAGE.

Ghiron, M. (2017). *Internet and social media age: What is the difference in empathy across generations of therapists in the UK?* [Ph.D., City, University of London]. <https://openaccess.city.ac.uk/id/eprint/19832/>

Hegarty, A. (2019). *An Investigation into the Relationship between Implicit Narcissism and Problematic Social Media Use* [PhD Thesis]. Dublin, National College of Ireland.

Hjorth, L., & Hinton, S. (2019). *Understanding Social Media*. SAGE.

Hussain, I. (2012). A study to evaluate the social media trends among university students. *Procedia-Social and Behavioral Sciences*, 64, 639–645.

Hussain, Z., Griffiths, M. D., & Sheffield, D. (2017). An investigation into problematic smartphone use: The role of narcissism, anxiety, and personality factors. *Journal of Behavioral Addictions*, 6(3), 378–386.

Jabeen, F., Gerritsen, C., & Treur, J. (2020). Narcissism and fame: A complex network model for the adaptive interaction of digital narcissism and online popularity. *Applied Network Science*, 5(1), 1–31. <https://doi.org/10.1007/s41109-020-00319-6>

Jacoby, M. (2016). *Individuation and Narcissism: The psychology of self in Jung and Kohut*. Taylor & Francis.

Kaun, A., & Stiernstedt, F. (2014). Facebook time: Technological and institutional affordances for media memories. *New Media & Society*, 16(7), 1154–1168.



Kenny, M. (2018). *Who's following you? : Cyber violence on social media* [Ph.D., University of Huddersfield].

<http://eprints.hud.ac.uk/id/eprint/34871/>

Kircaburun, K., Demetrovics, Z., & Tosuntaş, Ş. B. (2019). Analyzing the Links Between Problematic Social Media Use, Dark Triad Traits, and Self-esteem. *International Journal of Mental Health and Addiction, 17*(6), 1496–1507. <https://doi.org/10.1007/s11469-018-9900-1>

Kircova, İ., Pinarbaşı, F., & Köse, Ş. G. (2020). UNDERSTANDING EPHEMERAL SOCIAL MEDIA THROUGH INSTAGRAM STORIES: A MARKETING PERSPECTIVE. *Business & Management Studies: An International Journal, 8*(2), 2173–2192.

<https://doi.org/10.15295/bmij.v8i2.1452>

Kofoed, J., & Larsen, M. C. (2016). A snap of intimacy: Photo-sharing practices among young people on social media. *First Monday*.

Kristinsdottir, K. H., Gylfason, H. F., & Sigurvinsdottir, R. (2021). Narcissism and social media: The role of communal narcissism. *International Journal of Environmental Research and Public Health, 18*(19), 10106.

Lim, H., Childs, M., Cuevas, L., & Lyu, J. (2021). Between you and me: The effects of content ephemerality and the role of social value orientation in luxury brands' social media communication. *Journal of Global Fashion Marketing, 12*(2), 120–132.

<https://doi.org/10.1080/20932685.2021.1881579>

Lynam, D. R. (2011). Psychopathy and Narcissism. In *The Handbook of Narcissism and Narcissistic Personality Disorder* (pp. 272–282). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118093108.ch24>

Ma, Y. (2019). *Impact of social media use on political participation: Narcissism, perceived anonymity and social norms as mediators*.

McCain, J. L., & Campbell, W. K. (2018a). Narcissism and social media use: A meta-analytic review. *Psychology of Popular Media Culture, 7*(3), 308.



*Pak. Journal of Media Science, Vol 3, Issue 1 (2022)* Predisposition from Instagram .....

- McCain, J. L., & Campbell, W. K. (2018b). Narcissism and social media use: A meta-analytic review. *Psychology of Popular Media Culture, 7*(3), 308–327. <https://doi.org/10.1037/ppm0000137>
- McLachlan, S. (2022, January 18). *35 Instagram Stats That Matter to Marketers in 2022*. <https://blog.hootsuite.com/instagram-statistics/>
- Meissner, W. W. (1981). A Note on Narcissism. *The Psychoanalytic Quarterly, 50*(1), 77–89. <https://doi.org/10.1080/21674086.1981.11926944>
- Meng, K. S., & Leung, L. (2021). Factors influencing TikTok engagement behaviors in China: An examination of gratifications sought, narcissism, and the Big Five personality traits. *Telecommunications Policy, 45*(7), 102172. <https://doi.org/10.1016/j.telpol.2021.102172>
- Miles, J. (2014). *Instagram power: Build your brand and reach more customers with the power of pictures*. McGraw-Hill Education.
- Miller, D., Costa, E., Haynes, N., McDonald, T., Nicolescu, R., Sinanan, J., Spyer, J., Venkatraman, S., & Wang, X. (2016). *How the World Changed Social Media*. UCL Press.
- Miller, J. (2014). The fourth screen: Mediatization and the smartphone. *Mobile Media & Communication, 2*(2), 209–226.
- Miller, J. D., Hoffman, B. J., Gaughan, E. T., Gentile, B., Maples, J., & Campbell, W. K. (2011). Grandiose and Vulnerable Narcissism: A Nomological Network Analysis. *Journal of Personality, 79*(5), 1013–1042. <https://doi.org/10.1111/j.1467-6494.2010.00711.x>
- Montag, C., Blaszkiewicz, K., Sariyska, R., Lachmann, B., Andone, I., Trendafilov, B., Eibes, M., & Markowitz, A. (2015). Smartphone usage in the 21st century: Who is active on WhatsApp? *BMC Research Notes, 8*(1), 1–6.
- Ovid. (1979). *Ovid: Metamorphoses III*. Bloomsbury Academic.
- Perrin, A. (2015). Social media usage. *Pew Research Center, 52–68*.
- Raskin, R. N., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological Reports*.



Reece, A. G., & Danforth, C. M. (2017). Instagram photos reveal predictive markers of depression. *EPJ Data Science*, 6(1), 1–12. <https://doi.org/10.1140/epjds/s13688-017-0110-z>

Russell, G. A. (1985). Narcissism and the narcissistic personality disorder: A comparison of the theories of Kernberg and Kohut. *British Journal of Medical Psychology*, 58(2), 137–148. <https://doi.org/10.1111/j.2044-8341.1985.tb02626.x>

Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in Human Behavior*, 27(5), 1658–1664.

Sahin, C. (2018a). Social Media Addiction Scale-Student Form: The Reliability and Validity Study. *Turkish Online Journal of Educational Technology-TOJET*, 17(1), 169–182.

Sahin, C. (2018b). Social Media Addiction Scale-Student Form: The Reliability and Validity Study. *Turkish Online Journal of Educational Technology - TOJET*, 17(1), 169–182.

Sheldon, P., & Bryant, K. (2016a). Instagram: Motives for its use and relationship to narcissism and contextual age. *Computers in Human Behavior*, 58, 89–97.

Sheldon, P., & Bryant, K. (2016b). Instagram: Motives for its use and relationship to narcissism and contextual age. *Computers in Human Behavior*, 58, 89–97. <https://doi.org/10.1016/j.chb.2015.12.059>

Shrivastava, K. M. (2013). *Social Media*. Sterling Publishers Pvt. Ltd.

Soyer, R. B., Rovenpor, J. L., & Kopelman, R. E. (1999). Narcissism and Achievement Motivation as Related to Three Facets of the Sales Role: Attraction, Satisfaction and Performance. *Journal of Business and Psychology*, 14(2), 285–304. <https://doi.org/10.1023/A:1022147326001>

Syed, A., Ali, S. S., & Khan, M. (2018). Frequency of depression, anxiety and stress among the undergraduate physiotherapy students. *Pakistan Journal of Medical Sciences*, 34(2), 468.



*Pak. Journal of Media Science, Vol 3, Issue 1 (2022)* Predisposition from Instagram .....

---

Tariq, W., Mehboob, M., Khan, M. A., & Ullah, F. (2012). The impact of social media and social networks on education and students of Pakistan. *International Journal of Computer Science Issues (IJCSI)*, 9(4), 407.

Urista, M. A., Dong, Q., & Day, K. D. (2009). Explaining why young adults use MySpace and Facebook through uses and gratifications theory. *Human Communication*, 12(2), 215–229.

van Nimwegen, C., & Bergman, K. (2019). Effects on cognition of the burn after reading principle in ephemeral media applications. *Behaviour & Information Technology*, 38(10), 1060–1067.  
<https://doi.org/10.1080/0144929X.2019.1659853>

Vázquez-Herrero, J., Direito-Rebollal, S., & López-García, X. (2019). Ephemeral journalism: News distribution through Instagram stories. *Social Media+ Society*, 5(4), 2056305119888657.

Wang, D., Xiang, Z., & Fesenmaier, D. R. (2014). Adapting to the mobile world: A model of smartphone use. *Annals of Tourism Research*, 48, 11–26.

Yu, S.-C., & Chen, H.-R. (2020). Ephemeral But Influential? The Correlation between Facebook Stories Usage, Addiction, Narcissism, and Positive Affect. *Healthcare*, 8(4), 435.  
<https://doi.org/10.3390/healthcare8040435>