Influence of Instagram use on Body Surveillance and Fear of Missing out in Young Pakistani Adults

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A B S T R A C T

The increasing use of Instagram use leads to the internalization of unrealistic standards of society that youth intend to be a part of is likely to lead to several psychological concerns. The current study investigates the relationship between Instagram usage with body surveillance and fear of missing out. The study also aimed to find a gender difference in Instagram usage, body surveillance, and fear of missing out. A correlational study design was used. A sample of 200 males and females were included between the ages of 18-25 years recruited from different universities in Lahore. Instagram addiction scale, Body Surveillance Scale, and Fear of missing out scale were used in the study. Pearson Product Moment Coefficient and Independent Sample t-test were used to test the objectives of the study using SPSS-21. The finding showed a positive association between Instagram usage with body surveillance. Among study variables, an essential gender difference was observed. Males scored higher on Instagram usage and fear of missing out whereas females scored higher on body surveillance. The findings suggest that body-related concerns and disorders have high associated when it comes to social media therefore activities and awareness can be carried out at preliminary levels to reduce the negative impact on young minds.

Introduction

Social media has become a very essential part of our lives today, and young adults are much invested in social media sites such as Facebook, Instagram, Twitter, etc. According to the report by Datarepotal (2021), there are more than 40 million people in Pakistan who use social media. The percentage has strikingly increased from 2020 to 2021 by nine million. At present 20.6% of the total population is a social media user. This goes to show that the popularity of social networking sites is growing at an explosive rate. And amongst those, the social site used at large and has unprecedented popularity is Instagram (Phua, Jin & Kim, 2017). 6% of the entire population of Pakistan has access to Instagram which means that 12,942,300 people in Pakistan are Instagram users. The largest user group lies within the age range of 18-24 (NapoleanCat, 2021).

The defining feature of Instagram is conveyed in the name itself, it is a portmanteau of 'instant camera' and a 'telegram', therefore the content that one posts on this site include photos and videos (Lang, 2018). It provides a very intimate peek into a person's life to his followers. These perfectly curated lives on Instagram are very misleading as well as detrimental to the truth. Instagram curates a steady flow of flawless physiques and endless 'happily-ever afters' with users portraying a perfect life, and if you click 'heart' for a few of these posts, Instagram will continue to feed you more of the same type of content because of its algorithm, which provides a well-tailored feed for each individual based on the user's engagement patterns.

The app has a culture of posting only the best version of yourself and the highlights of your life. The cumulative impact of these posts can be devastatingly dangerous (Graham,2021).

One major danger to self is how we look at ourselves. Increased Instagram usage is linked with dissatisfaction and body surveillance (Sherlock & Wagstaff, 2018). Research have highlighted that women encounter the objectifying gaze either in social or interpersonal encounters as well as visual media outlets including but not limited to advertisement and television programs though it can be seen in men as well. This objectifying experience leads them to internalize the third-party perspective of their physical appearance. That is, they start considering themselves as objects to be looked at and assessed based on their looks. This objectification is behaviorally expressed as body surveillance. As per the algorithm of Instagram, it will show you individuals with a perfect physique and if you engage in that content, there will be an influx of similar content on your feed which after a certain point compels you to compare yourself to what you see online. As reported in the literature there is an association among young girls' social comparison through posted pictures on Instagram; significantly influencing the need to be thin yet showing dissatisfaction with their body, utilizing social comparison theory showed that photo-based activity was positively predicting both drive for thinness and body dissatisfaction, so basically, Instagram is harmful to people who continuously engage in comparing themselves with others (Hendrickse et al., 2017). Another study conducted to check whether the internalization of ideal beauty standards and the will to compare appearances in general or to a specific group using Instagram showed a mediation between appearance concerns and Instagram usage and revealed that higher usage of Instagram was linked to higher levels of self-objectification. The relationship is mediated by internalization and comparisons to celebrities (Fardouly et. al.2017). Hussain and Basit (2021) also stated that excessive use of Instagram and the idealization of unrealistic standards can be influential in creating dissatisfaction with one's own body.

Thus a person spending too much time on Instagram is not just living vicariously but rather those post becomes yardsticks against which they measure their life one needs to understand that reality can't match the filtered perfection posted on Instagram. Everyone's food, clothes, vacation, or house looks better than yours (Bursztynsky & Feiner, 2021). Even if you are aware that all that glitters is not gold, the constant influx of portrayals of perfection is bound to have an impact on your perspective. This not only makes us conscious about ourselves but also eager to know what's more is happening to others or the world to fit well in the real social group else being well-equipped with the knowledge of the reel (Griffiths,2005). This concept is else known as the fear of missing out. According to Oulasvirta et al (2012), it stems from deficits in people's need for relatedness. One way to satisfy this need is through the use of social networking sites as they provide an unhindered stream of what others are up to. Instagram provides a situation where you compare your regular life to the highlights of others' lives. An individual's sense of normal becomes skewed and he thinks that he's doing worse than his peers. This uncanny attachment to social media and its consequent adverse experiences of life with the fear and experience of being left out is known as the fear of missing out (Altuwairiqi et al., 2019).

Instagram is a comparatively new social networking site and most of the research done on social networking has used Facebook as their chosen social networking platform. The technological functions of social media are rapidly evolving so mental health professionals must adapt and be in step with it, therefore, Instagram was selected to be the chosen platform. Its algorithm provides a well-tailored feed of content specific to the user's engagement patterns. This can draw vulnerable individuals to a toxic spiral of negative social comparisons and get hooked onto unreal ideals of physical appearance. On the other hand, the countless hours spent scrolling through the feed watching numerous memes or dance videos can leave a person with a false sense of pleasure, as a consequence of the unchecked use of our real-life goals, plans, and tasks put on the back burner. A person can get so lost in the virtual world that reality seems like an illusion. Even the most experienced clinicians sometimes face difficulty in understanding their young clients, as the way these young clients are connecting and establishing relations with others is ever-changing as technology is constantly advancing. This study has the potential to help clinicians understand their clients better and draw up interventions that are better suited to them. This study became the need of the hour, during the worldwide pandemic when everyone was stuck in their homes and social media usage increased tenfold, as it raises concerns about the negative impact of Instagram usage. Most prior studies on this topic are either USA or Europe based, so the current study is a step towards filling the gap in the literature by using Instagram as the chosen networking platform and by working on Pakistani university students so we can understand the problem according to our Pakistani context. Although these topics have been studied to some extent, there is little research that examines these variables together.

Hypotheses

> ➢ Instagram usage is likely to have a positive association with body surveillance and fear of missing out on university students.

> ➢ Instagram usage, fear of missing out, and body surveillance are likely to be different in males and females.

Methodology

The co-relational research design was used for this study to find the relationship between Instagram usage, body surveillance, and fear of missing out among university students. The total sample of the study was 200 participants, 100 male participants, and 100 female participants. All the participants in the study are from universities. The age bracket of participants was between 18 to 25 years. The participants were selected from different universities in Lahore. Purposive sampling was used to recruit the sample.

The inclusion criteria were

- Participants are already part of the undergraduate program.

- Participants of both genders will be selected.

- Participants who have a smartphone were selected.

- Participants who have an account on Instagram were selected

- Participants who used Instagram daily for at least 3 hours were selected.

The exclusion criteria were

- Participants who cannot access the internet were excluded.

- Participants below the age of 18 and above the age of 25 were excluded from the study.

The following measures included in the study are a self-created demographic form distributed among all the participants which were filled out by them before the research. The details obtained are filled in table 1.

Table 1
Frequency and Percentages of Demographic Variables

Variables	*f*	%
Gender		
Boys	100	50.0
Girls	100	50.0
Age Groups		
18 to 21 years	111	55.5
22 to 25 years	89	44.5
Marital Status		
Unmarried	193	96.5
Married	3	1.5
No response	4	2.0
SES		
Upper Class	4	2.0
Upper Middle	98	49.0
Middle Class	97	48.5
Lower Class	1	.5
Education		
Undergraduate	185	92.5
Post-graduate	15	7.5
University Type		
Govt.	12	6.0
Private	76	38.0
Semi-Govt.	112	56.0

Note. % = percentage, *f* = frequency. *N* = 200

Instagram Addiction Scale was used to measure the Instagram addiction on a six point likert scale and scores ranging from 0-5, never to always. The scale is composed of two factors i.e., social effect and compulsion. Another scale used is the objectified body consciousness scale. There are three sub-scales of this scale namely; body surveillance (viewing your body as an observer), Body shame (feeling shame when your body is not consistent with the cultural beauty ideals), and appearance control beliefs. Lastly, the fear of missing out on the scale was used which is a self-report inventory. It is a one-factor scale comprising 10 items. Each item is scored on a five-point Likert scale which ranges from 1= not at all true of me to

5=extremely true of me.

Procedure

Initially, permission from the university's ethical board and committee was taken to identify the research to be ethically sound. Then permission from the authors of the respective scales was taken. The data was collected online. The sample was selected via purposive sampling, only the students who fit the inclusion criteria perfectly were made a part of this research. Consent was taken from each participant and they were made aware of their rights. Once the participants read through the necessary details, they were asked to fill out the questionnaires. The data were analyzed using SPSS-21.

Ethical considerations

All the scales used in the study were used with permission from their respective authors. Moreover, individual permissions were taken from all the participants and no participant was forced to be a part of the study. Informed consent was signed by all the participants before the research could proceed. The researcher made sure that she catered to all the queries and confusions of the participants if they had any. Each participant was briefed about the aims and objectives of the study. All the participants were given the right to withdraw at any time in the study. The researcher maintained the utmost anonymity and confidentiality of the participants.

Statistical Analysis

For the analysis of the data, the Statistical Package of Social Sciences (SPSS-21) was used. Descriptive statistics was used to mean, standard deviation, and frequency. Pearson product-moment Co-relation coefficient has been employed to check the relationship between constructs. An Independent sample t-test was run to find out the gender differences.

Results

In this section, the statistical analyses, which have been utilized for the concerned hypothesis, have been discussed. First of all reliability of the study scales has been assessed, and then descriptive are computed from the data. In addition, correlations and t-tests have been explored.

Table 2

Psychometric Properties of the Study Scales (N = 200)

Variable	k	M	SD	α	Potential	Actual	Skewness	Kurtosis
Instagram addiction	5	38.24	10.91	.83	0-5	.93-4.13	-.02	-.68
Body surveillance	8	31.83	7.41	.65	1-7	2.0-6.0	.27	-.22
Fear of missing out	10	31.10	7.30	.78	1-5	1.4-4.7	-.35	-.37

Note. k = number of items, α = Cronbach's Alpha, N = 200,

Table 1 shows the mean, standard deviation, no of items, Cronbach's alpha value (reliability or internal consistency), score ranges, skewness, and kurtosis. It is found that all scales have acceptable alpha coefficient (i.e. > .50). Potential score range estimates the minimum fixed score of the scale in our sample, as well as what is the maximum fixed score of the sample (scale), whereas the actual range is expected to be in the potential range of the score as per data. The acceptable skewness values are expected in the range of ±1, and for kurtosis between ± 2.

Table 3

Correlation between Instagram Addiction, Body Surveillance and Fear of Missing Out

Variables	1	2	3	M	SD
1. Instagram usage	—	.21**	.52***	38.24	10.91
2. Body surveillance		—	.11	31.83	7.41
3. Fear of missing out			—	31.10	7.30

Note. N = 200

***p<.001, **p<.01 (two-tailed).

In Table 3, Pearson correlation has been computed. Findings suggest that there is a significant and positive correlation between Instagram usage and body surveillance ($r = .21$, $p < .01$), and fear of missing out ($r = .52$, $p < .001$). In addition, it is also found that there is no significant relationship between body surveillance and fear of missing out ($r = .11$, $p = $ ns).

Table 4

Independent Sample t-test Showing Gender Differences on the Study Scales (N = 200)

Variables	Female		Male					95% CI	Cohen's
	M	*SD*	*M*	*SD*	*t(198)*	*p*	*LL*	*UL*	*d*
Instagram usage	36.27	10.61	40.20	10.90	2.58	.011	.92	6.93	.36
Body surveillance	33.10	8.03	30.56	6.52	-2.45	.015	-4.58	-.49	.34
Fear of missing out	30.04	7.29	32.16	7.18	2.07	.040	.10	4.14	.29

Note. LL = lower limit, UL = upper limit, CI = confidence interval. d = effect size

In Table 4, t-test independent sample has been computed to check the significant mean differences between the gender (male and female) with respect to the study scales. Findings suggests that Levene's test assumptions are satisfactory, and significant gender differences observed on Instagram usage ($t = 2.58$, $p <.05$), body surveillance ($t = -2.45$, $p = .015$), and fear of missing out ($t = 2.07$, $p = .040$). In addition, it is found that male students scored high on Instagram usage and fear of missing out as compared to female students. However, female students scored high on body surveillance as compared to male students.

Discussion

In the present study, formulated hypothesis i.e., Instagram usage will have a significant relationship with body surveillance was accepted. The current study gives proof that Instagram usage has a significant positive relation with body surveillance among university students. Is supported by research suggesting that social media usage increased during covid-19 as a buffer to stress and a source of gratification yet noticed that social media prospects were internalized by young individuals emphasizing the focus on the high-risk population and raising awareness and design interventions to control the use (Zhao & Zhou, 2021).

Instagram usage has a direct influence on body surveillance because Instagram emphasizes very rigid standards of beauty. It not only includes a drive for thinness but to stand against the growth of obesity. These constant messages exacerbate women's focus on their bodies. Individuals are constantly overwhelmed with tricks or tips on how to control or lose weight (Mercurio & Rima,2011). Many researchers have already established that these online interactions lead to negative self-evaluation and unachievable appearance goals. It then also leads to negative moods and feeling which then cause a person to stress about their appearance (Hawes et al, 2020).

The findings were also supported by the research exhibiting that Instagram use tends to be associated with fear of missing out as certain persuasive feature to increase user interaction and retention by including timed context-sensitive and personalized feed news. Another feature is a grouping that allows two or more people to connect online privately, this produces a sense of belongingness and popularity. However, this need for belongingness can turn into the fear of being left out the individuals are unable to connect with others or do not get the desired reaction in response to their posts. 'Presence feature' which allows one to see who is currently online can also trigger FOMO when the user sees that they are present but are not reacting to his posts. On the other hand, a user might also think that if others are online, he should be too, so he does not miss anything exciting. Another important feature regarding FOMO is the 'Impression feature' which allows the user to see how many people have seen their posts. This feature might cause the user to interact more on SNS due to fear of missing the ability to retain their followers (Alutaybi et al., 2018).

According to the results produced by this research, males scored higher in Instagram usage as compared to females. Results from different fields of usage show us that men are more prone to exhibiting addictive behaviors as compared to females (Minutillo et al., 2016). This gender disparity is also extending to behavioral usages, with a lot of research evidence suggesting for example male prevalence when it comes to internet usage (Mei et al,2016).

A study conducted in Malaysia reveals the influence of culture on Instagram use among the genders. It was revealed that women were subjugated because of cultural conservatism. Parents keep a stricter eye on their daughters and monitor their time spent on SNS more as compared to their sons. These conservative cultures are less critical towards men than women and allow them more freedom in behaving and movement than females (Aziz et al, 2020).

A study trying to explain the higher prevalence of FOMO in males states that men are more willing to expand their connections and their group of acquaintances for various purposes and they try to find eligible people who have similar interests such as them, so when they form these new relations they try to keep up

with those people whereas when it comes to females, they are much more limited in who they let in, on their social media space and are more likely to keep their accounts private. Females put more emphasis on social and emotional bonding with their family and focus more on the existing relationships (Gokulsing,2014).

The study results show that women scored higher in body surveillance. These results are supported by pre-existing literature and research done by experts. Mckinley (1998) studied gender differences in undergraduates' body esteem, the results showed women had higher surveillance, body shame, actual/ideal weight discrepancy, and lower body esteem as compared to men.

Conclusion

This research article thus proves with evidence that Instagram usage has a positive correlation with fear of missing out and Instagram surveillance. With the onset of the pandemic and every person, becoming a home-body, the researchers show a rise in social media usage, therefore this study was a step towards making the public aware of the adverse effects of social media use.

Limitations:

The sample of the study was collected from Lahore only, the study could be more generalizable if the participants were selected from other localities as well. The study was conducted during the onset of the worldwide pandemic, which limited the researcher's engagement with the participants. All the measures used in the study were self-report. There is always a risk of the participant responding in a socially desirable way which can skew the results of the study. The co-relational nature of the research design prohibits us from establishing causality among the current study's constructs.

Future Implications:

➢ Future researchers should carry longitudinal studies, wherein they first screen the individual who have instagram usage and then study the relationship of body surveillance and fear of missing out with it.

➢ Data should be collected from various cities of Pakistan to make the results more generalizable.

➢ The students should be taught about the negative consequences caused by excessive use of instagram so the users of this site can proceed with caution.

➢ Findings suggest that there should either be guidelines about the use of instagram or a disclaimer where the users are warned about the highly curated content.

References

Alhabash, S., & Ma, M. (2017). A Tale of four platforms: motivations and uses of Facebook, Twitter, Instagram, and Snapchat among college students? *Social Media + Society*, 3,https://doi.org/10.1177/2056305117691544.

Alutaybi, J., McAlaney, A., Stefanidis, K., Phalp, and R. Ali, (2018) Designing Social Networks to combat fear of missing out. *Human Computer Interaction Conference. DOI:10.14236/ewic/HCI2018.80*

Aziz, A., & Aziz, A., (2020) The Influence of Gender Differences on Instagram usage among higher institution students. *International Journal of Modern Trends in Social Sciences 3* (14), 78-83 *DOI 10.35631/IJMTSS.314007*

Altuwairiqi M., Jiang N., Ali R. Problematic Attachment to Social Media: Five Behavioural Archetypes. Int. J. Environ. Res. Public Heal. 2019;16:2136. doi:10.3390/ijerph16122136.

Boston Globe (2022). Retrieved 15 April 2022, from https://www.bostonglobe.com/2021/10/10/opinion/its-not-just-teenage-girls instagram-is-toxic

CNBC (2022). Retrieved 15 April 2022, from https://www.cnbc.com/2021/09/14/facebook documents-show-how-toxic-instagram-is-for-teens-wsj.html.

Digital in Pakistan: All the Statistics You Need in 2021 (2021, February 13th) *DataReportal Global Digital Insights*. Retrieved from:https://datareportal.com/reports/digital-2021pakistan .

Festinger, L. (1954). A theory of social comparison processes. *Human relations,7*(2),117-140. 10.1177/001872675400700202

Fardouly, J., Willburger, B., & Vartanian, L. (2017). Instagram use and young women's body image concerns and self-objectification: Testing mediational pathways. *New Media & Society, 20*(4), 1380-1395 https://doi.org/10.1177/1461444817694499

Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal Of Substance Use*,*10*(4), 191-197.10.1080/14659890500114359

Gokulsing., D. (2014) Gender differences in the use of social networking sites in the context of globalisation: The case of Mauritius. *The Australian academy of business and social sciences conference*

Hussain, D., Basit, A., & Shahid, H. (2021). Psychological Effects of Instagram on Females: Increase in BodyDissatisfaction & Facial Augmentation. *Journal Of Peace, Development &Amp; Communication*, *5*(1), 86-97. https://doi.org/10.36968/jpdc- v05-i01-08

Hawes, T., Zimmer-Gembeck, M. J., & Campbell, S. M. (2020). Unique associations of social media use and online appearance preoccupation with depression, anxiety, and appearance rejection sensitivity. *Body image*, *33*, 66–76. https://doi.org/10.1016/j.bodyim.2020.02.010

Hamutoglu, N., Topal, M., & Gezgin, D. (2020). Investigating Direct and Indirect Effects of Social Media Addiction, Social Media Usage and Personality Traits on FOMO. *International Journal of Progressive Education, 16*(2), 248-261. 10.29329/ijpe.2020.241.17

Hendrickse, J., Arpan, L., Clayton, R., & Ridgway, J. (2017). Instagram and college women's body image: Investigating the roles of appearance-related comparisons and Intrasexual competition. *Computers In Human Behavior*, *74*(9),92-100.

Hamm, M. P., Chisholm, A., Shulhan, J., Milne, A., Scott, S. D., Given, L. M.,& Hartling, L. (2013). Social media use among patients and caregivers: A scoping review. *BMJ Open 3 (5). 10.1136/bmjopen-2013-002819*

Lang, A. (2018). Why is it called Instagram *Rewind and Capture* Retrieved December 2018, from https://www.rewindandcapture.com/why-is-it-called-instagram/

Moore, K., Craciun, G., (2020) "Fear of Missing Out and Personality as Predictors of Social Networking Sites Usage: The Instagram Case. *PubMed 124*(4) 1761-1787 10.1177/0033294120936184

Minutillo, A., Pacifici, R., Scaravelli, G., De Luca, R., Palmi, I., Mortali, C., Mastrobattista, L., & Berretta, P. (2016). Gender disparity in addiction: an Italian epidemiological sketch. *Annali dell'Istituto superiore di sanita*, *52*(2), 176–183. https://doi.org/10.4415/ANN_16_02_08

Mei, S., Yau, Y.H.C., Chai, J., Guo, J., Potenza M.N, (2016) Problematic Internet use, well-being, self-esteem and self-control: Data from a high-school survey in China *Addictive Behaviors,* 6(1), 74-79. 10.1016/j.addbeh.2016.05.009

McKinley, N. M. (1998). Gender differences in undergraduates' body esteem: The mediating effect of objectified body consciousness and actual/ideal weight discrepancy. *Sex Roles: A Journal of Research, 39*(1-2), 113–123. https://doi.org/10.1023/A:1018834001203

Oulasvirta A., Rattenbury T., Ma L., & Raita E. (2012) 'Habits make smartphone use more pervasive' *Personal Ubiquitous Computing* 16, 105–114. DOI: 10.1007/s00779-011-0412-2

Phua, J., Jin, S. V., & Kim, J. J. (2017). Gratifications of using Facebook, Twitter, Instagram,or Snapchat to follow brands: The moderating effect of social comparison, trust, tie strength, and network homophily on brand identification, brand engagement, brand commitment, and membership intention. *Telematics and Informatics, 34*(1) 412-424

Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior, 29*(4), 1841–1848. https://doi.org/10.1016/j.chb.2013.02.014

Qutishat, M. (2020). Gender Differences in Fear of Missing out Experiences among Undergraduate Students in Oman. *Emirates Medical Journal* 1 (2) 36-40 DOI: 10.2174/0250688202002022003

Rozgonjuk, D., Sindermann, C., Elhai, J., & Montag, C. (2020). Fear of Missing Out (FoMO) and social media's impact on daily-life and productivity at work: Do WhatsApp, Facebook, Instagram, and Snapchat Use Disorders mediate that association? *Addictive Behaviors, 110*, 106487. doi: 10.1016/j.addbeh.2020.106487

Social Media users in Pakistan. (2021, October 17th). *NapoleonCat* retrieved from https://napoleoncat.com/stats/social-media-users-in-pakistan/2021/10/.

Zhao, N., & Zhou, G. (2021). COVID-19 Stress and Addictive Social Media Use (SMU): Mediating Role of Active Use and Social Media Flow. *Frontiers In Psychiatry*, 12. https://doi.org/10.3389/fpsyt.2021.635546