

## BEYOND LIKES AND FOLLOWERS: INSTAGRAM ADDICTION, SOCIAL SUPPORT, AND PSYCHOLOGICAL WELL-BEING AMONG THE YOUNG ADULTS

Mehwish Amjad<sup>1</sup>, Rania Rauf<sup>2</sup>, Arwa Rizvi<sup>\*3</sup>, Qurat Ul Ain Bokhari<sup>4</sup>, Imran Khan<sup>5</sup>,  
Muhammad Zeeshan Ali Kallu<sup>6</sup>

<sup>1,2</sup>Scholar, Department of Clinical Psychology, NUR International University, Lahore, Pakistan

<sup>3,4</sup>Lecturer, Department of Clinical Psychology, NUR International University, Lahore, Pakistan

<sup>5</sup>Lecturer, Department of Psychology, Faisalabad Institute of Science and Technology (FIST) Powered by COMSATS University Islamabad, Pakistan

<sup>6</sup>Avicenna Tajik State Medical University Dushanbe Tajikistan

<sup>1</sup>mehwishamjad028@gmail.com, <sup>2</sup>raniarauf684@gmail.com, <sup>3</sup>arwalarai27@gmail.com,

<sup>4</sup>quratulain.bokhari25@gmail.com, <sup>5</sup>clinicalpsychologist.edu@gmail.com, <sup>6</sup>dralikhan0001@gmail.com

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Corresponding Author: \*

Arwa Rizv

### Abstract

Social media platforms help to connect the people each other's and to obtain social rewards, these reinforcing rewards can induce maladaptive, problematic social media use, with symptoms similar to substance use disorders (Meshi & Ellithorpe, 2021). Social Media is aggravating for the mental health problems in youth (Karim et al., 2020). So, the current study was planned to investigate the relationship between Instagram addiction, perceived social support and mental health issues among Instagram user. The data was collected from (N= 350) Instagram user (male= 91 and female= 259) with the age range of 18-26 years (Mage =20.4; SD=3.87) by using purposive sampling technique. Data was collected by using Instagram addiction scale (Sholeh & Rusdi, 2019), The multidimensional perceived social support Scale (Zimet et al., 1988) and the DASS-21 (Lovibond & Lovibond, 1995) along with the demographic information sheet. The result of the study indicated that Instagram addiction is positively associated with stress ( $r = .16^{**}$ ) and anxiety ( $r = .23^{***}$ ), whereas perceived social support, particularly family support, was negatively associated ( $r = -.24^{***}$ ) with psychological distress. Regression analysis showed that Instagram addiction is significant positive predictor of mental health and social support is significant negative predictor of mental health. The findings highlight the protective role of social support in mitigating the negative effects of social media use. The implications of the study and suggestions for future researches are given below.

### INTRODUCTION

Social media networks are expanding rapidly among young adults. It has transformed the pattern of interaction and communication. Among these platforms, Instagram is the mostly widely used image based social networking

applications that's been used globally. It has features such as photo sharing, reels, stories, the feed that's based on your algorithm and even the broadcast channels now (Akram & Kumar, 2017). Although Instagram serves as a source of connection and entertainment, various studies

have shown that its excessive and maladaptive use may result in adverse psychological outcomes, particularly depression. For instance, while social media can create a sense of community, excessive and increased use, particularly among vulnerable individuals, is correlated with depression and other mental health disorders (Shensa et al., 2022). Instagram, which prioritizes visual content and lifestyle displays, has specifically been associated with mental health issues including anxiety, depression, and stress among young users (Keyte et al., 2023). Problematic social media use is the result of the behavioral addiction. Instagram addiction is the excessive use of Instagram, loss of control, withdrawal symptoms and its interference with daily functioning (Sholeh & Rusdi, 2019). Drawing from problematic social media use also shares characteristics with other behavioral addictions like Salience, mood modification, withdrawal, relapse and tolerance (Griffiths, 2005). Due to the increased sensitivity to peer evaluation and identity exploration, young adults may be more vulnerable.

Depression that is characterized by long term sadness, loss of pleasure, loss of interest and cognitive and functional impairment, is the most common concern among young adults (American Psychiatric Association, 2013; World Health Organization, 2023). The tripartite model of emotional disorder suggests that depression is associated with high negative affect and low positive affect (Clark and Watson, 1991). A systematic review study was conducted to investigate the relationship between Instagram use and indicators of mental health. Total 93 articles were used for the analysis of the data which were collected by using web od science, scopus. The result of study collected most of evidence has been obtained for the relationships between Instagram use and social comparison, body image, and disordered eating outcomes. Use of Instagram is indicator of mental health (Faelens et al., 2021).

According to the Empirical research there are positive associations between problematic social media use and depressive symptoms (Keles et al., 2020). A cross-sectional study was conducted in India to investigate the relationship among the

Instagram usage and mental health such as depression, anxiety and stress among the young adults. 300 participants were investigated by using purposive sampling technique. The result of the study indicated that the higher usage of Instagram increase the level of depression anxiety and stress among the young adults (Nimbalkar et al., 2024).

However, all the social media users do not experience depression because of moderation. In mental health research one of the most extensively studied protective variable is perceived social support (Zimet et al., 1988). It refers to the emotional and instrumental support from friends, family and significant others (Zimet et al., 1988). It's seen that High levels of perceived social support lowers the sign of depression.

A study was conducted to examine the relationship between Instagram addiction, perceived social support and depression among young adults. A group of 350 young adults including 91 males and 259 females participated in the study. The results showed that there is a strong relationship between the depression, Instagram addiction and perceived social support.

### **Rationale of the Study**

The widespread adoption of social media platforms has transformed the way young adults communicate, socialize, and seek social validation. Among various social networking sites, Instagram has emerged as one of the most popular image-based platforms, particularly among young adults. While Instagram facilitates social connection and self-expression, excessive use may lead to problematic behaviors commonly referred to as Instagram addiction. Previous research has linked excessive social media use to adverse psychological outcomes, including depression, anxiety, loneliness, and reduced well-being. However, the mechanisms underlying the relationship between Instagram addiction and depression remain insufficiently understood, particularly in developing countries such as Pakistan.

Perceived social support has been identified as an important protective factor against psychological distress. Individuals who perceive greater emotional and social support from family, friends,

and significant others tend to experience lower levels of depression and psychological difficulties. Despite growing evidence regarding the independent associations of Instagram addiction, social support, and depression, limited research has examined whether perceived social support explains or buffers the relationship between Instagram addiction and depression among young adults. Therefore, the present study aims to investigate the direct and indirect relationships among Instagram addiction, perceived social support, and depression in young adults, contributing to the growing literature on social media use and mental health.

### Objectives of the Study

The objectives of the current study are as follow

- To examine the relationship between Instagram addiction and mental health among young adults.
- To investigate the relationship between Instagram addiction and perceived social support.
- To assess the relationship between perceived social support and depression among young adults.
- To explore differences in Instagram addiction and depression across educational levels.

### Hypotheses of the Study

It was hypothesized that

1. Instagram addiction will be positively associated with depression among young adults.
2. Instagram addiction will be negatively associated with perceived social support among young adults.
3. Perceived social support will be negatively associated with depression among young adults.
4. Perceived social support will mediate the relationship between Instagram addiction and depression among young adults.
5. Instagram addiction and depression will significantly differ across educational levels.

### Methodology

#### *Participants*

For the current study the data was collected from (N=350) young adults including 91 males and 259 females with the age range of 18 to 26. The participants having different educational levels were recruited for the study. For the current study the correlational research design was implemented. The data was collected by using purposive sampling technique by using online data collection method (google form).

#### **Inclusion and Exclusion criteria:**

The data was collected from those participants having the Instagram account and active user of the Instagram from previous six months rest of the participants were excluded from the study. Only the young adults with the age range of 18 to 26 were investigated and rest of the participants were excluded from the study. The only Instagram users were included in the study Facebook, TikTok and other social media users were excluded from the study. Those participants were included those use the Instagram for the story, reel and feed and participants were excluded those use the Instagram for their business purpose and social media influencer. Minimum level of the education for the participants was matric uneducated participants were excluded from the study. Individuals already diagnosed with severe mental disorders or taking heavy mood-altering medications were also excluded.

#### **Measures**

***Demographic Information Sheet:*** The self-designed Demographic information sheet was used to collect the data. Demographic information sheet was consisting of the personal information of the participants such as Name, Age, Gender, Education, Marital Status, Socioeconomic Status, History of Instagram account, purpose of using social media, average daily use of social media and symptoms of depression.

***The Instagram Addiction scale (Sholeh & Rushdi, 2019):*** The Instagram Addiction Scale is 41 items Five Point-Likert type scale having two

subscale named Instagram Feed Addiction and Instagram Story addiction. The first subscale (Instagram Feed Addiction) consisting of 20 items and 2<sup>nd</sup> subscale (Instagram Story Addiction) having 21 items. A new measurement of Instagram feed and story addiction. Instagram Addiction Scale (TIAS) psychometrically valid and reliable. The Cronbach's alpha values of this scale were .90 and .94. This shows that the scale has excellent reliability.

***The Multidimensional Perceived Social Support (Zimet et al., 1988):*** The Multidimensional Perceived social support is consisting of 12 items 7 point Likert type scale (1= Strongly Disagree; 7= Strongly Disagree). The Scale consisting of three subscales named Family support, Friends support and significant others support. Each subscale is consisting of 4 items. Family support is consisting of (3,4,8,11), friends support (6,7,9 and 12), and Significant others consisting of (1,2,5,10). The Cronbach's alpha values of this scale were .78, .81, and .69. This shows that the scale is psychometrically reliability.

***Depression, Anxiety Stress Scale (Lovibond & Lovibond, 1995):*** The DASS-

The 21-item DASS is self-report questionnaire having three subscales with a four-point scoring system: stress, anxiety, and depression. (0 = did not apply to me at all; 1 = applied to me somewhat, or occasionally; 2 = applied to me significantly, or frequently; 3 = applied to me heavily, or frequently). This scale consisting of 3

sub-scales, Depression (3,5,10,13,16,17,21), Anxiety (2,4,7,9,15,19,20) and Stress (1,6,8,11,12,14,18). The Cronbach's alpha values of this scale were .94, .86, and .82. this shows that the scale has excellent reliability.

**Procedure:**

Initially, the approval was taken from the institution to conduct this study. Following the institution approval the permission was taken from the original authors of the scales that were used in the study. After that, an online Google form was made, and it was sent to young adults (male and female) those were meeting the inclusion and exclusion criteria. The Google form contained a consent form that explained the purpose of the study, voluntary participation in the study, confidentiality of the data, and the participant's right to withdraw from the research at any point. The google form link was share by using different social media platforms such as WhatsApp, Wechat, Snapchat, Facebook and Instagram. Only those participants who met the inclusion criteria were chosen to fill out the Google form. Following the collection of the data, it was extracted from the Google Forms and transferred to Google Excel sheets. The data on the Google Excel sheets was then transferred to SPSS. Then the data was analyzed by using Statistical Package for Social Sciences (SPSS, V27).

The result of the study are discussed below.

## Results

Table 01

Means, Standard Deviations, and Pearson Moment Correlations among Study Variables (N = 350)

	1	2	3	4	5	6	7	8	9	10	11
1-Inst FA	...	.68**	.89***	.02	.15**	.07	.09	.20***	.17**	.14**	.18***
2-Insta SA		...	.94***	-.02	.11*	-.02	-.02	.21***	.14**	.12**	.17**
3-Inst Add			...	.01	.14*	.02	.02	.05	.23***	.16**	.14**
4-PSS-FM				...	.73***	.75***	.92***	-.28***	.21***	-.17***	.24***
5-PSS-FR					...	.66***	.88***	-.15**	-.09	-.11*	-.12
6-PSS-SO						...	.90***	-.16**	-.12**	-.06	-.12**
7-PSST							...	-.22***	-.15***	.13**	-.18**
8-Depression								...	.86***	.82***	.95***
9-Anxiety									...	.80***	.94***
10-Stress										...	.93***
11-DASS-T											...
M	56.34	56.00	112.34	4.42	4.41	4.48	.53.20	.99	.97	1.04	21.04
SD	13.53	17.07	28.11	1.54	1.31	1.43	15.43	.77	.77	.77	14.83

p &lt; .001; p &lt; .01; p &lt; .05

**Note.** Insta FA= Instagram Feed Addiction; Insta SA= Instagram Story Addiction; Inst Add= Instagram Addiction; PSS-FR= Perceived Social Support-Friends; PSS-FM= Perceived Social Support Family; PSS-SO= Perceived Social Support Significant others; PSS-T= Perceived Social Support Total; DASS-T= Depression Anxiety Stress Total; M=Mean; SD = Standard deviation.

A Pearson product-moment correlation was conducted to investigate the relationships among Instagram feed addiction, Instagram stories addiction, Instagram overall addiction, perceived social support (significant other, family, and friends), and psychological distress (stress, anxiety, and depression). The result of the study indicated that Instagram Feed addiction ( $r=.15^{**}$ ), Instagram Story Addiction ( $r=.11^{*}$ ) and overall Instagram addiction ( $r=.14^{*}$ ) are positively correlated with Friends Social support. The result of the study also indicated that Instagram Feed addiction ( $r=.20^{***}$ ), Instagram Story Addiction ( $r=.21^{***}$ ) are positively correlated with Depression. Study also indicated that Instagram Feed addiction ( $r=.17^{**}$ ), Instagram Story Addiction ( $r=.14^{**}$ ) and overall Instagram addiction ( $r=.23^{***}$ ) are positively correlated with anxiety as well as Instagram Feed addiction ( $r=.14^{**}$ ), Instagram Story Addiction ( $r=.12^{**}$ ) and overall Instagram addiction ( $r=.16^{**}$ ) is also positively correlated with Stress. Furthermore,

the study also indicated that Instagram Feed addiction ( $r=.18^{***}$ ), Instagram Story Addiction ( $r=.17^{**}$ ) and overall Instagram addiction ( $r=.14^{**}$ ) are positively correlated with mental health.

The result of the study also indicated that social support Friends ( $r=-.15^{***}$ ) Family ( $-.28^{***}$ ) significant others ( $r=-.14^{**}$ ) are negatively correlated with depression. the study also indicated that social support Family ( $-.21^{***}$ ) and significant others ( $r=-.12^{**}$ ) are negatively correlated with Anxiety, as well as Family support ( $r=-.17^{***}$ ) and friends support ( $r=-.11^{*}$ ) is significantly negatively correlated with stress.

Overall, result of the study indicates the intricate positive relationship among the Instagram addiction (Feed Addiction and Story Addiction) and Friends Social support as well as significant negative relationship among the social support and mental health. Result also indicated that the Instagram addiction is significantly negatively correlated with mental health.

**Table 02**

The linear Regression Analysis indicating the Instagram Addiction as predictor of Mental Health (N=350)

Predictors	<i>B</i>	<i>SEB</i>	$\beta$	<i>t</i>	<i>p</i>
$R^2 = .04, \Delta R^2 = .03$					
Constant	9.82	3.22		3.06	.002
Anger	.10	.03	.19	3.59	.001

$p < .01$ ;  $p < .001$

The results of table 2 indicated that the Instagram addiction is significant positive predictor of mental health which indicates that

with the increase of Instagram addiction is also likely to increase the mental health problems in young adults.

**Table 03**

The linear Regression Analysis indicating the Social Support as predictor of Social Mental Health (N=350)

Predictors	<i>B</i>	<i>SEB</i>	$\beta$	<i>t</i>	<i>p</i>
$R^2 = .03, \Delta R^2 = .03$					
Constant	30.34	2.81		10.81	.001
Anger	-.18	.05	-.18	-3.45	.001

$p < .001$

The results of table 3 indicated that social support is significant negative predictor of mental health which indicates that with the increase of

social support is also likely to decrease the mental health problems in young adults.

**Table 04**

One-Way ANOVA Results for Study Variables Across Educational Levels

Variable	Source	SS	df	MS	F	<i>p</i>	$\eta^2$
Instagram Addiction	Between Groups	7967.42	3	2655.81	3.43	.01**	.029
	Within Groups	267787.12	34	773.95			
Menatal Health	Between Groups	1252.24	3	417.41	1.91	.127	.016
	Within Groups	75524.28	34	218.28			

$p < .05$

Note. SS = Sum of Squares; MS = Mean Square;  $\eta^2$  = Eta Squared. \*.

A one-way analysis of variance (ANOVA) was conducted to examine differences in Instagram addiction and mental health across educational levels. Results indicated a significant effect of educational level on Instagram addiction,  $F(3, 346) = 3.43$ ,  $p = .017$ ,  $\eta^2 = .029$ . However, educational level did not significantly influence

mental health scores,  $F(3, 346) = 1.91$ ,  $p = .127$ ,  $\eta^2 = .016$ . The effect size for Instagram addiction was small, indicating that educational level accounted for approximately 2.9% of the variance in Instagram addiction scores. Similarly, educational level explained approximately 1.6% of the variance in mental health scores.

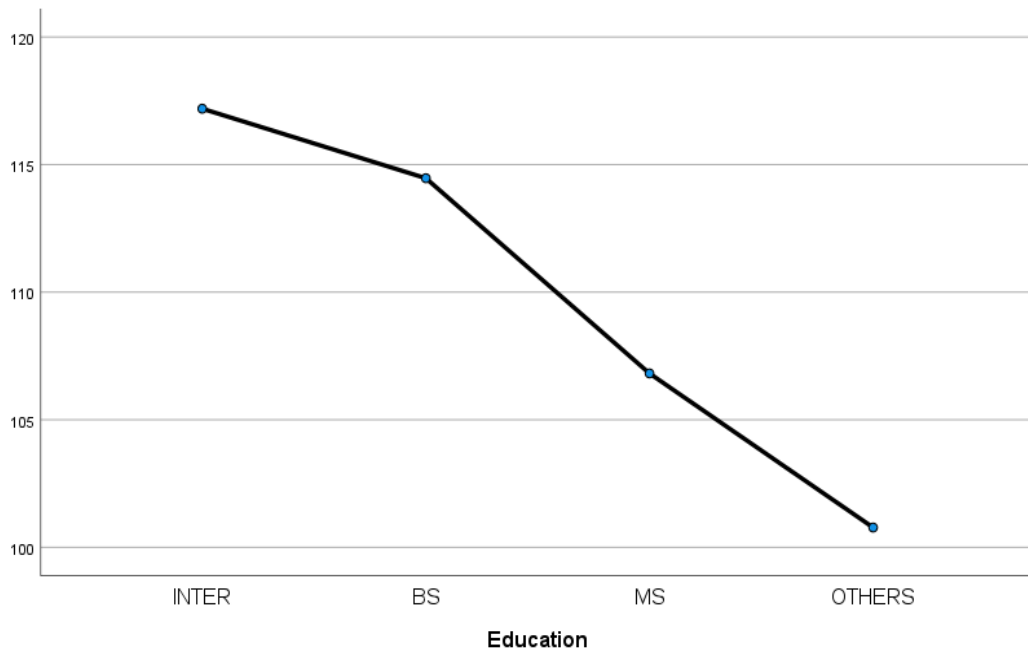


Figure 01: Mean Instagram addiction scores by educational level.

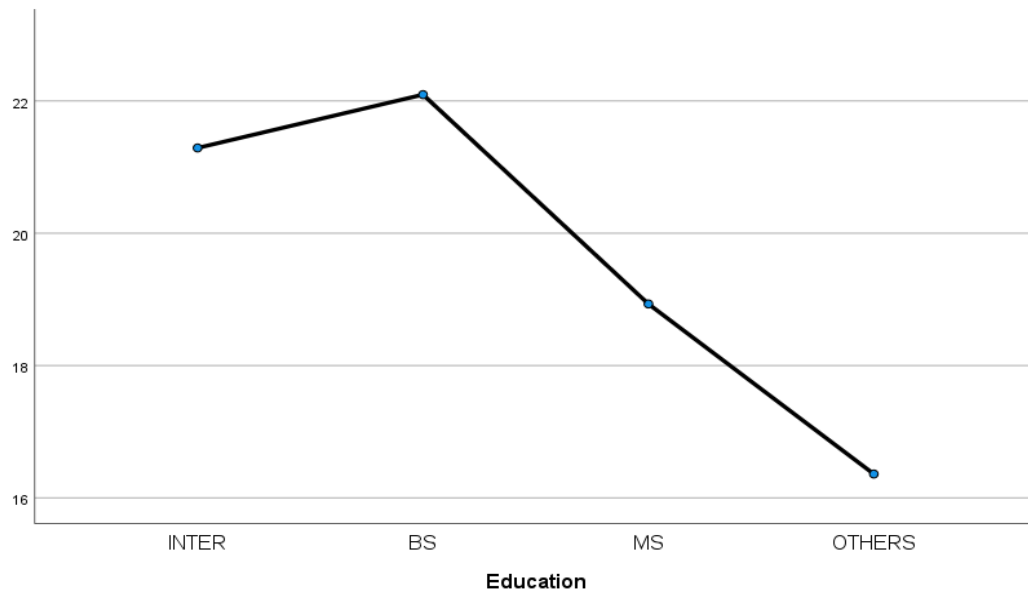


Figure 01: Mean Mental Health scores by educational level.

**Discussion:**

Social media networks have expanded rapidly among young adults over the past decade, becoming an integral part of daily communication, information sharing, and social interaction (Auxier & Anderson, 2021). Among these platforms, Instagram is one of the most widely used image-based social networking

applications worldwide, attracting millions of active users due to its visual content-sharing features and interactive functions (Statista, 2024). Although it is a source of connection and entertainment, various studies have shown that its excessive and maladaptive use may result in adverse psychological outcomes, particularly

depression. Problematic social media use also shares characteristics with other behavioral addictions like Salience, mood modification, withdrawal, relapse and tolerance (Griffiths, 2005) and young adults are more likely to suffer from this. Therefore, a study was planned to explore the relationship among Instagram addiction, perceived social support and mental health among young adults. The important findings of the study are discussed below.

Since the first objective of the study was to investigate the relationship between Instagram addiction and Mental health among the young adults, so, it was hypothesized that there would be significant positive relationship among the Instagram addiction and mental health. The result of study supported the hypothesis and indicated positive association among the Instagram addiction and mental health among the young adults and previous literature also supported the findings of the study and indicated positive association between Instagram addiction and stress, anxiety and depression (Keles et al., 2020). From a behavioral perspective, maladaptive coping mechanisms like mood regulation and avoidance which can induce psychological distress is reinforced by excessive engagement of social media platforms like Instagram (Griffiths, 2005). The second objective of the study was to investigate the relationship among the Instagram addiction and social support so, it was hypothesized that there would be significant relationship among the Instagram addiction and social support in young adults. The result of study indicated the positive relationship among Instagram addiction and only friends support but not family support and significant others support. These interesting findings indicate that friends motivate and support to use Instagram and studies indicate that Instagram use facilitates social interaction and strengthens peer relationships, which may contribute to higher perceived friend support (Frison & Eggermont, 2015; Nabi et al., 2013). Another objective of the study was to identify the predictor of mental health so, it was hypothesized that Instagram addiction and social support is predictor of the mental health. The study's findings supported the hypothesis and indicated

that Instagram addiction is a positive predictor of mental health and social support is a negative predictor of mental health that is supported by previous literature that higher levels of problematic Instagram use or Instagram addiction are associated with increased depressive symptoms and poorer psychological well-being (Sepas et al., 2024; D'Souza & Sowmya, 2019) as well as Perceived social support is negatively associated with depression, indicating that individuals with greater social support tend to report fewer depressive symptoms (Wang et al., 2014; Li et al., 2022; Chan et al., 2016).

Another objective of the study was to investigate the significant difference in Instagram addiction and mental health so it was hypothesized that there would be significant difference in Instagram addiction and mental health due to study level. The result of the study indicated that the study level varies in Instagram addiction but there was no significant difference in mental health due to study level variation. The present study is consistent with previous research suggesting that problematic social media use varies among university students according to educational and academic characteristics. Educational experiences, academic demands, and differences in self-regulation may influence the extent of social media engagement and addictive behaviors (Karayigit & Parlade, 2023; Al-Hussein et al., 2022; Pekpazar, et al., 2021).

#### **Implications of the study:**

The findings of the present study contribute to the growing body of literature concerning social media use and mental health among young adults. The positive association between Instagram addiction and depression highlights the psychological risks associated with excessive engagement with image-based social networking platforms. Furthermore, the negative association between perceived social support and depression emphasizes the protective role of supportive interpersonal relationships in promoting mental well-being. The study provides empirical evidence that educational institutions, mental health professionals, and policymakers should focus on developing interventions that promote healthy social media usage and strengthen social support

networks among young adults. These findings may also guide the development of awareness campaigns regarding responsible social media use and mental health promotion programs in universities.

#### Conclusion:

The study concluded that there is a positive association between Instagram addiction and psychological distress, whereas the perceived social support acts as a protective factor against depression. Interventions such as a limited Instagram usage and strengthening support system should be applied.

#### Limitations and suggestions:

The study has room for improvement in terms of limitations as follows:

The study is limited by its cross-sectional design, self-report measures, and convenience sampling. Future research should use longitudinal designs and more diverse samples.

#### References:

- Akram, W., & Kumar, R. (2017). A study on positive and negative effects of social media on society. *International Journal of Computer Sciences and Engineering*, 5(10), 351–354.
- Al-Hussein, A., et al. (2022). Problematic social media use and academic performance among university students: An evaluation from the Middle East. *The Open Public Health Journal*, 16. The study reported that problematic social media use was associated with academic-related outcomes and educational factors among university students.
- Al-Kandari, Y. Y., & Al-Sejari, M. M. (2020). Social isolation, social support and their relationship with smartphone addiction. *Information, Communication & Society*, 24(13), 1925–1943. <https://doi.org/10.1080/1369118X.2020.1804980>
- Auxier, B., & Anderson, M. (2021). *Social media use in 2021*. Pew Research Center.
- Blake, J. A., Thomas, H. J., Pelecanos, A. M., Najman, J. M., & Scott, J. G. (2025). Does attachment anxiety mediate the persistence of anxiety and depressive symptoms from adolescence to early adulthood? *Social Psychiatry and Psychiatric Epidemiology*, 60(2), 453–461. <https://doi.org/10.1007/s00127-024-02737-8> PubMed
- Clark, L. A., & Watson, D. (1991). Tripartite model of anxiety and depression: Psychometric evidence and taxonomic implications. *Journal of Abnormal Psychology*, 100(3), 316–336. <https://doi.org/10.1037/0021-843X.100.3.316>
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357. <https://doi.org/10.1037/0033-2909.98.2.310>
- Faelens, L., Hoorelbeke, K., Cambier, R., Van Put, J., Van de Putte, E., De Raedt, R., & Koster, E. H. (2021). The relationship between Instagram use and indicators of mental health: A systematic review. *Computers in Human Behavior Reports*, 4, 100121.
- Frison, E., & Eggermont, S. (2015). Exploring the relationships between different types of Facebook use, perceived online social support, and adolescents' depressed mood. *Social Science Computer Review*, 33(2), 185–200. <https://doi.org/10.1177/0894439314547578>
- Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences* (10th ed.). Cengage Learning.
- Griffiths, M. D. (2005). A "components" model of addiction within a biopsychosocial framework. *Journal of Substance Use*, 10(4), 191–197. <https://doi.org/10.1080/14659890500114359>

- Hwang, H. S. (2018). Examining the relationships between Instagram use, perceived social support, and psychological well-being. *Journal of Internet Computing and Services*, 19(5), 75–84. <https://doi.org/10.7472/jksii.2018.19.5.75> Korea Science
- Karayigit, C., & Parlade, J. (2023). Social media use among U.S. college students attending a midwestern university. *Journal of Educational Technology and Online Learning*, 6(2), 202–219. The study found differences in social media addiction across academic majors, suggesting that educational characteristics are associated with levels of problematic social media use.
- Karim, F., Oyewande, A. A., Abdalla, L. F., Ehsanullah, R. C., & Khan, S. (2020). Social media use and its connection to mental health: a systematic review. *Cureus*, 12(6).
- Keles, B., McCrae, N., & Grealish, A. (2020). A systematic review: The influence of social media on depression, anxiety and psychological distress in adolescents. *International Journal of Adolescence and Youth*, 25(1), 79–93. <https://doi.org/10.1080/02673843.2019.1590851>
- Keyte, R., Morgan, A., & Baxter, L. (2023). Social media usage and young adult mental health: A focus on Instagram and the DASS-21. *Journal of Youth Studies*, 26(4), 455–470. <https://doi.org/10.1080/13676261.2021.2009064> PubMed
- Konan, N., Durmuş, E., Bakır, A. A., & Türkoğlu, D. (2018). The relationship between smartphone addiction and perceived social support of university students. *International Online Journal of Educational Sciences*, 10(5). <https://doi.org/10.15345/iojes.2018.05.016>
- Kovan, A., Gülbahçe, A., & Salamzade, T. (2024). Beyond the filter: Examining the psychosocial effects of Instagram addiction. *Journal of Teacher Education and Lifelong Learning*, 6(2). <https://doi.org/10.51535/tell.1446935> ResearchGate
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335–343. [https://doi.org/10.1016/0005-7967\(94\)00075-U](https://doi.org/10.1016/0005-7967(94)00075-U)
- Meshi, D., & Ellithorpe, M. E. (2021). Problematic social media use and social support received in real-life versus on social media: Associations with depression, anxiety and social isolation. *Addictive Behaviors*, 119, 106949.
- Nabi, R. L., Prestin, A., & So, J. (2013). Facebook friends with (health) benefits? Exploring social network site use and perceptions of social support, stress, and well-being. *Cyberpsychology, Behavior, and Social Networking*, 16(10), 721–727. <https://doi.org/10.1089/cyber.2012.0521>
- Nimbalkar, S., Hasan, K., Mirza, A. Z., & Adhikari, A. (2024). Instagram usage and mental health in young adults: A quantitative study using DASS-21. *Annals of Neurosciences*, 09727531251364671.
- Pekpazar, A., Aydın, G. K., Aydın, U., Beyhan, H., & Arı, E. (2021). Role of Instagram addiction on academic performance among Turkish university students: Mediating effect of procrastination. *Computers and Education: Open*, 2, 100049
- Sholeh, A., & Rusdi, A. (2019, September). A new measurement of Instagram addiction: Psychometric properties of the Instagram Addiction Scale (TIAS). Paper presented at the Conference of Indonesian Students Association in South Korea. [ResearchGate](https://www.researchgate.net/publication/348111111)

- Statista. (2024). *Instagram: Number of monthly active users worldwide*. Statista.
- Taş, F. (2022). Perceived stress, social support and social media addiction in university students during the COVID-19 pandemic. *Bağışlılık Dergisi*, 23(1), 95–104. <https://doi.org/10.51982/bagimli.983412>  
Dergipark
- Ulvi, O., Karamehic-Muratovic, A., Baghbanzadeh, M., Bashir, A., Smith, J., & Haque, U. (2022). Social media use and mental health: A global analysis. *Epidemiologia*, 3(1), 11–25. <https://doi.org/10.3390/epidemiologia3010002> nih
- Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, 3(4), 206–222. <https://doi.org/10.1037/ppm0000047>
- We Are Social, & Meltwater. (2024). *Digital 2024 global overview report*.
- Wong, D., Amon, K. L., & Keep, M. (2019). Desire to belong affects Instagram behavior and perceived social support. *Cyberpsychology, Behavior, and Social Networking*, 22(7), 465–471. <https://doi.org/10.1089/cyber.2018.0533>  
PubMed
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52(1), 30–41. [https://doi.org/10.1207/s15327752jpa5201\\_2](https://doi.org/10.1207/s15327752jpa5201_2)
- Chan, M., et al. (2016). *The effect of social networking sites on the relationship between perceived social support and depression*. *Psychiatry Research*, 246, 223–229.
- D'Souza, L., & Sowmya, H. R. (2019). Does Instagram addiction lead to depression among students pursuing pharmacy course? *International Journal of Indian Psychology*, 7(1), 798–803
- Li, X., et al. (2022). Serial multiple mediation of the correlation between internet addiction and depression by social support and sleep quality of college students during the COVID-19 epidemic. *Frontiers in Psychiatry*, 12.
- Sepas, A., Bangash, A. H., Nielsen, R. E., Yang, W., & El-Hussuna, A. (2024). *The association between problematic Instagram use, psychological distress, and well-being: A systematic review and meta-analysis*. *Cyberpsychology, Behavior, and Social Networking*.
- Wang, H., Wang, L., & colleagues. (2014). *Effect of social support on depression of internet addicts and the mediating role of loneliness*. *Psychiatry Investigation*, 11(4), 421–426.