Fear of Missing Out (FOMO), Social Comparison and Social Media Addiction among Young Adults

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Abstract

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This study was conducted to investigate the relationship between FOMO (fear of missing out), social comparison, and social media addiction among young adults. It was hypothesized that i) there is likely to be a relationship between FOMO (fear of missing out), social comparison, and social media addiction, ii) Fear of missing out and social comparison are likely to predict social media addiction in young adults, and iii) significant gender difference in fear of missing out in young adults. The sample consists of 200 participants with the age range of 18-30 years (M = 22.58, SD = 2.41) of which 92 were men and 108 were women. The purposive sampling strategy was used to assess the sample. The self-constructed Demographic sheet, Fear of Missing Out Scale - FOMOs (Przybylski et al., 2013), Social comparison - INCOM Scale (Gibbons & Buunk, 1999) and Social Media Addiction Scale Student Form - SMAS-SF (Sahin, 2018) were used to assess the sample. The results showed that FOMO (fear of missing out) had a significant positive relationship with overall social comparison, social media addiction and their subscales among young adults. The results suggested that FOMO (fear of missing out) and social comparison significantly positively predicted social media addiction. The same predictions were also seen among their subscales in young adults. The results showed significant gender difference in fear of missing out that men have higher fear of missing out than women. This study is important in the field of cyber psychology examining the relationship between fear of missing out, social comparison and social media addiction among young adults.

Keywords: *Fear of missing out, social comparison, social media addiction, young adults and anxiety.*

Introduction

Social interaction in recent years has been reshaped by the prevalence and dominance of social media. Young adults spend most of their time on social media by communicating and interacting with others. It has made social accessibility and interaction easier than it ever was in human history but on the flip side, it has also brought with itself negative consequences of the hyper-social phenomenon. FOMO, social comparison, and social media addiction are the most prevalent ones among young adults of the media generation. The modular designs of social media networks like Facebook, Instagram, Twitter, and Snapchat etc. are designed to

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engage and attract the maximum number of users while keeping them hooked and this leads to further negative consequences. Social media addiction is defined as "being concerned about the social networking sites overly, to be driven by a strong motivation to log on to or use social network sites, and to spend too much time and effort to social network sites that it impairs other social activities, studies /jobs, interpersonal relationships and psychological health and well-being" (Andreassen & Pallesen, 2014). Sometimes Individuals who are addicted to social media, make frequent social comparisons. The process in which individuals examine their own feelings, abilities, attitudes, physical features, opinions, accomplishments, and any other aspect regarding themselves which relates to others is called social comparison (Festinger, 1954; Gibbons & Buunk 1999; Lyubomirsky & Ross, 1997).

Social networking sites provide an ideal platform for social comparison because it provides people with the opportunity to browse and scroll through others' lives without having to initiate social interactions (Joinson, 2008; Pempek et al., 2009). They compare themselves to others who are superior or inferior to them in different characteristics. Users are allowed to convey the activities to others and can see others that what are they doing by the applications of social media. Therefore, these kinds of platforms can cause distress to some individuals. This distress can take the form of FOMO. The concept of the FOMO is that "the desire to know what others are doing by stay connected continually" and feeling or worried about others that without them they are having a good time (Przybylski et al., 2013).

Previous researches have studied these variables in either isolation or combined with other variables. It is concluded from the literature that participants showed greater exposure to upward comparison who had poor self-esteem and use Facebook mostly had (Vogel et al., 2014) and higher social comparison orientation had poor self-perception, poor self-esteem, and heavier use of Facebook (Vogel et al., 2015). Excessive social media usage cause higher fear of missing out (Blackwell et al., 2017; Franchina et al., 2018). An individual with the major depressive disorder had negative behavior of social media like social media addiction increased social comparison (Robinson et al., 2019). Cargill (2019) concluded the positive relationship between social media addiction, anxiety, fear of missing out, and interpersonal problems among adults. Reer et al. (2019) concluded that well-being decreasing indicators were positively related to increases in social media engagement, fear of missing out, and social comparison orientation. Rozgonjuk et al. (2020) concluded that the severity of the disorder of social media use had a positive relationship with fear of missing out and the impact of social media on daily life and productivity at work while Fabris et al. (2020) concluded that fear of missing out is connected with the higher sensitivity of stress that is due to neglected by online peers, which cause social media addiction, and negatively impact the emotional well-being of Adolescence. Qutishat (2020) concluded that students who experienced higher levels of fear of missing out had higher emotional intelligence and academic adjustment and that males have higher fear of missing out and emotional intelligence than female's student.

Excessive use of social networking sites negatively affects the relationship between family and youth, (Ali, 2016) physical and mental health, and positive effect on academics (Khalid, 2017) and negatively affect the behavior of the students (Abbas et al., 2019). Shahbaz et al.(2017) concluded the positive relationship between body dissatisfaction and social comparison and that females showed higher body dissatisfaction and social comparison than males. Kanwal et al. (2019) concluded that addiction to social networking sites had a greater influence on online self-disclosure in the young generation. Ali et al. (2020) concluded the positive relationship between fear of missing out, psychological well-being, compulsive use, and mediated social comparison. More compulsive use allows people to do more comparison which causes more depression and anxiety among adults. Mahmood et al. (2020) concluded that student who use Facebook more than an hour, consider as intense users of Facebook. Jamil et al. (2020) concluded the negative impact of social media on the student's academic

performance and because of the purpose of relaxation teenagers were more addicted to social media.

Rationale of the study

Social media popularity has increased tenfold globally. Young adults spend their most of time on social media by communicating and interacting with others through different social media platform, update posts, status, chatting etc. 61.34 million internet users and 46.00 million social media users were stated In Pakistan in January 2021. 11 million (21%) internet users and 9.0 million (24%) social media users increased between 2020 and 2021 (Kemp, 2021) which could be a direct consequence of a global pandemic and the resultant lockdown. Because of the excessive use, young adults are addicted to social media. They also compare themselves on social media in different settings. Negative behavior of social media like social media addiction and increased social comparison can cause major depressive disorder MDD (Robinson et al., 2019). The fear and social anxiety that people might be having rewarding experiences while they lack it also can be termed FOMO and is usually associated with low self-esteem, low self-compassion, and loneliness (Barry, & Wong 2020). FOMO relates to the higher sensitivity of stress that is due to being neglected by online peers, which cause social media addiction, and negatively impact the emotional well-being of adolescence (Fabris et al., 2020). This study aims to examine these prevalent phenomena of FOMO, social comparison, and social media addiction with each other.

Objectives of Study

So, these were the objectives:
1. To find out the intensity of social media usage in young adults.
2. To find how FOMO, social comparison and social media addiction related to each other.
3. To find out whether FOMO and social comparison predict social media addiction in young adults.
4. To see the gender difference in term of FOMO, social comparison, and social media addiction in young adults.

Hypotheses of Study

H1: There is likely to be a positive relationship between FOMO (fear of missing out), Social comparison, and social media addiction in young adults.

H2: Fear of missing out and social comparison are likely to positively predict social media addiction in young adults.

H3: There is likely to be a gender difference in term of FOMO, social comparison, and social media addiction in young adults.

Material and Methods

Research Design

It was correlational with a cross-sectional research design. FOMO (fear of missing out) and social comparison were independent variables where as social media addiction was a dependent variable.

Participants

The sample consists of 200 young adults with age range 18-30 years ($M = 22.58$, $SD = 2.41$) including 108 women and 92 men. About 162 (81%) were unmarried and 122 (61%) participants were belonging to nuclear family system. 152 (76%) participants were living in urban areas. The data were collected through online Google form. The purposive sampling strategy was used to access the participants. Active users of the Internet and social media were included. Students with any form of disability i.e., deaf, blind, intellectual disability etc. were excluded. Further the information related to internet and social media usage is given below.

Table 1.
Demographic Characteristics of Sample (N=200)

Variables	f (%)	M (SD)
Internet usage time (hours)		9.01 (5.25)
Purpose of internet usage		
Entertainment	98 (49)	
Education	59 (29.5)	
Businesses	13 (6.5)	
Information	12 (6)	
Gossips on social media	18 (9)	
Time spends on social media (hours)		5.19 (4.02)
Most used social media platform		
Facebook	79 (39.5)	
Instagram	30 (15)	
Twitter	4 (2)	
Snapchat	9 (4.5)	
WhatsApp	67 (33.5)	
Others	11 (5.5)	
Source to browse social media		
Smartphone	115 (57.5)	
Smartphone and Computer	85 (42.5)	

Instruments

Following assessment measures were used for data collection:

Personal Information Sheet. It consisted of age, gender, education, relationship status, job status, family system, monthly family income, residence and information related to internet usage.

Fear of Missing Out Scale (Przybylski et al., 2013). The scale is used to measure the anxiety people experience when they are unaware or do not have the information of what their peer group is up to. It is a one-factor 10-item scale. This is a five-point Likert scale i.e., *(1= Not at all true of me, 2= Slightly true of me, 3= Moderately true of me, 4= Very true of me, 5= Extremely true of me).* Scores can be computed individually through averaging responses of all the items and reliability were form (α= .87 to .90). The range of the total scores is between 10 and 50, where the score is directly proportioned to the level of FOMO, that is, higher the scores indicating a higher level of fear of missing out (Przybylski et al., 2013).

Social Comparison Scale (INCOM) (Gibbons & Buunk 1999). It was used to measure the inclination to interconnect in social comparison and central forms of the self, the other and the psychological cooperation among the two. This scale consists of 11 items. This questionnaire has 2 dimensions of social comparison which include: (a) comparison of abilities in which 1-6 items of questions are included and (b) comparisons of opinions in which 7-11 items are included. Item 5 and 11 are reverse coded. This is a Five-point scale that is i.e. *(1= Strongly disagree, 2= Disagree, 3= Neither agree nor disagree, 4= Agree, 5= Strongly agree).* The reliability of the social comparison scale is .83 (Gibbons & Buunk,1999).

Social Media Addiction Scale Student From (SMAS- SF) (Sahin, 2018). It was used to analyze social media addiction in students. It consists of 29 items and 4 sub-dimensions, including virtual tolerance, virtual problem, virtual communication and virtual information. Virtual tolerance has 1-5 items, virtual communication has 6-14 item, the virtual problem has 15 to 23 items and virtual information has 24 to 29 items. This is a Likert type of scale with 5-point i.e., *(1= Strongly disagree, 2= Disagree, 3= Neither agree nor disagree, 4= Agree, 5=*

Strongly agree). The reliability of overall social media addiction including subscales is .93 (virtual tolerance .81, Virtual communication .81, virtual problem .86 and virtual information .82) (Sahin, 2018).

Procedure

For the present study, the young adults were taken as sample. Permission was taken from the authors of tools used in the study i.e., Fear of Missing Out Scale (FoMO), Social Comparison Scale (INCOM) and Social Media Addiction Scale (SMAS- SF). Online Google form was used to collect data. Informed consent of the participant was taken before they participate in the study. The purpose and nature of the study were briefed to them. Confidentiality for their information was ensured to them. The participants were provided with the online questionnaires form. In this way, data collection was completed. After the completion of the data collection, data were analyzed using SPSS 21 version. For the present study around 210 participants were contacted among which 200 participants were selected and 10 participants were excluded because they did not fall in the suggested age range. So, the response rate was 95%.

Ethical Considerations

After topic approval, permission from the authors of the scale was taken. Data were collected from participants who met the required criteria. The participants were guaranteed the confidentiality of the information given by them. All the participants were informed about the nature and purpose of the research. A formal consent form was signed by each participant before filling the questionnaire. The research kept up the secrecy of the participants. Results were accurately represented by the researchers.

Results

All results were analyzed using the SPSS-21 version. Reliability analysis was run to see the psychometric properties of the scales used (see Table 2).

Table 2.

Reliabilities and Descriptive Statistics of the Measures (N=200)

Scales	K	α	M (SD)	Range
Fear of Missing Out Scale	10	**.80**	24.35 (7.26)	10-49
Social Comparison Scale	11	**.80**	35.26 (7.05)	16-55
Ability	6	.78	17.70 (4.90)	6-30
Opinion	5	.60	17.55 (3.07)	8-25
Social Media Addiction Scale	29	**.92**	84.21 (18.27)	30-145
Virtual Tolerance	5	.74	15.31 (4.00)	5-25
Virtual Communication	9	.80	26.55 (6.34)	9-45
Virtual Problem	9	.88	23.95 (7.26)	9-45
Virtual Information	6	.70	18.40 (4.18)	6-30

The results of the reliability analysis in Table 1 showed that all the scales used in the present study had good reliability. Fear of missing out showed .80, for social comparison .80 including the subscale ability .78, opinion .60 and for social media addiction .92 including the subscale virtual tolerance .74, virtual communication .80, virtual problem .88, virtual information .70. So, it is shown that the reliability of all scales is sufficient to conduct further studies.

Table 3.

Relationship between FOMO, Social Comparison, and Social Media Addiction among Young Adults (N= 200)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Age	-	-.04	.24**	.01	-.01	-.06	.01	.01	.08	.06	.09	-.12	-.09	-.09	-.18*	.02
2. Gender		-	-.09	.01	.12	.04	.03	-.14*	.00	-.05	.08	-.02	.01	-.07	.03	-.02
3. Family System			-	-.08	-.20**	.03	-.06	.19**	.04	.02	.07	.02	-.10	.07	.01	.05
4. Family Mon. Inc.				-	.07	-.04	-.05	-.07	.02	.00	.05	.00	-.00	-.00	-.02	.05
5. Residence					-	.08	.02	-.19**	.03	.00	.06	-.03	-.01	-.03	-.02	-.03
6. Internet Usage						-	.53**	.22**	.11	.06	.15*	.27**	.26**	.19**	.22**	.24**
7. Social Media Use							-	.40**	.13	.14*	.07	.48**	.49**	.40**	.39**	.34**
8. Fear of Missing Out								-	.34**	.36**	.22**	.44**	.39**	.37**	.36**	.38**
9. Social Comparison									-	.93**	.81**	.38**	.30**	.29**	.29**	.41**
10. Ability										-	.54**	.43**	.34**	.35**	.37**	.38**
11. Opinion											-	.17*	.15*	.10	.07	.33**
12. Social Media Add.												-	.77**	.88**	.89**	.75**
13. Virtual Tolerance													-	.58**	.55**	.54**
14. Virtual Com.														-	.72**	.54**
15. Virtual Problem															-	.54**
16. Virtual Info.																-
M	22.58	.54	.39	607057	.76	9.01	5.19	24.35	35.26	17.70	17.55	84.21	15.31	26.55	23.95	18.40
SD	2.41	.50	.49	4133272	.43	5.25	4.02	7.26	7.05	4.90	3.07	18.27	4.00	6.35	7.26	4.18

Note. Family Mon. Inc.= Family Monthly Income; Social Media Add. = Social Media Addiction; Virtual Com. = Virtual Communication; Virtual Info. = Virtual Information.
* $p < .05$. **$p < .01$.

The results suggested that fear of missing out was significantly positively related to overall social comparison and social media addiction in young adults. Results also indicated that fear of missing out positively related with ability and opinion subscales of social comparison and same positive relationship was seen with virtual tolerance, virtual communication, virtual problem, and virtual information subscale of social media addiction. Further, ability found to be positively related with all subscales of social media addiction while opinion found to be positively related with virtual tolerance, and virtual information subscale of social media addiction. Further Internet usage time and social media usage time showed significant positive relationship with fear of missing out, opinion (subscale of social comparison) and social media addiction among young adults.

Table 4

Multiple Hierarchical Regression Analysis Predicting Social Media Addiction from Fear of
Missing out and Social Comparison among Young Adults (N=200)

	Social Media Addiction	
Predictors	ΔR^2	β
Step 1	.25	
(Control variables)		
Age (years)		-.15*
Gender		-.03
Family System		.07
Residence		-.02
Internet Usage Time (Hours)		.00
Social Media Usage Time (Hours)		.48***
Step 2	.07	
FOMO		.30***
Step 3	.06	
Social Comparison		.27***
R^2	.38	
F (8,191)		14.95***

* $p < .05$. **$p < .01$. *** $p < .001$.

Table 4 showed that overall variance explained by the model was 38% with F (8,191)
= 14.95, p <.001. It is noted that fear of missing out (β = .30, p < .001) and social comparison
(β = .27, p < .001) significantly positively predicted social media addiction in young adults.
Further results showed that age negatively (β = -.15, p < .05), and social media usage time (β
=.48, p < .001) positively predicted social media addiction in young adults.

Table 5

Multiple Hierarchical Regression Analysis Predicting Social Media Addiction (Virtual Tolerance, Virtual
Communication, Virtual Problem and Virtual Information) from Fear of Missing out and Social
Comparison (Ability and Opinion) among Young Adults (N=200)

	Social Media Addiction							
	Virtual Tolerance		Virtual Communication		Virtual Problem		Virtual Information	
Predictors	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	.25		.19		.19		.13	
(Control variables)								
Age		-.09		-.13*		-.22**		.00
Gender		-.01		-.08		-.02		-.02
Family System		-.06		.11		.08		.06
Residence		-.03		-.00		-.02		-.02
Internet Usage (Hours)		.01		-.05		-.00		.09
Social Media Usage (Hours)		.48***		.44***		.40***		.30***
Step 2	.05		.04		.05		.07	
FOMO		.27***		.23**		.25**		.29***
Step 3	.05		.06		.10		.09	
Ability		.26**		.32***		.40***		.20*
Opinion		-.05		-.11		-.19**		.16*
R^2	.35		.30		.34		.28	
F (9, 190)		11.48***		8.95***		10.87***		8.09***

* $p < .05$. **$p < .01$. *** $p < .001$.

The results showed that fear of missing out and Ability (subscale of social comparison) positively predicted all subscales of social media addiction while opinion (subscale of social comparison) negatively predicted virtual problem and positively predicted virtual information (subscales of social media addiction) in young adults.

Table 6

Independent sample t-test Comparing Men and Women Young Adults on Study Variables (N = 200)

Variables	Men (*n* = 92)		Women (*n* = 108)				Cohen's
	M	*SD*	*M*	*SD*	*t(198)*	*p*	*d*
Fear of Missing Out	25.47	8.22	23.40	6.22	1.98	.04	.28
Social Comparison	35.25	7.74	35.27	6.45	-.02	.98	-
Ability	17.96	5.33	17.49	4.51	.67	.50	-
Opinion	17.29	3.23	17.78	2.94	-1.11	.26	-
Social Media Addiction	84.53	22.10	83.94	14.33	.23	.82	-
Virtual Tolerance	15.26	4.73	15.35	3.28	-.16	.87	-
Virtual Communication	27.04	7.20	26.13	5.52	1.02	.31	-
Virtual Problem	23.75	8.50	24.13	6.05	-.37	.71	-
Virtual Information.	18.48	4.82	18.33	3.57	.24	.80	-

Results showed a significant gender difference in fear of missing out among young adults. The results indicated higher fear of missing out in men (*M* = 25.47, *SD* = 8.22) than women (*M* = 23.40, *SD* = 6.22), while non-significant gender differences were seen in term of social comparison and social media addiction.

Discussion

The purpose of the study was to examine the relationship between FOMO (fear of missing out), social comparison and social media addiction among young adults. The rise of social networking sites and internet usage has led to the new generation facing issues that were not reported in earlier times. Social media addiction and fear of missing out are the most prevalent. Therefore, it was crucial to figure out the connection or lack thereof within these variables and relate them to social comparison, since the global pandemic aided in the increase of social media usage. The results of the present study highlighted that fear of missing out has a significant positive relationship with overall social comparison and social media addiction in young adults. The results go in line with the previous research conducted by Cargill (2019) in which he examined the relationship between social media addiction, anxiety, fear of missing out, and interpersonal problems in adults' social media users. His results suggested the positive relationship between social media addiction, anxiety, fear of missing out, and interpersonal problems among adults which is well supporting the current findings. Another study conducted by Ali et al. (2020) showed a positive relationship between FOMO, Psychological well-being, Compulsive use, and mediated social comparison. Increased compulsive use allows people to increase social comparison which causes more depression and anxiety among adults. This result supports the current finding of the study.

The results also indicated that social media usage time significantly positively related to fear of missing out, ability (subscale of social comparison) and social media addiction in young adults. The results go in line with the study conducted by Mahmood et al. (2020) who examine the relationship between Pakistani youth and social media addiction. Their results showed that students who use Facebook for more than an hour a day, are more likely to suffer from social media addiction. Another study by Franchina et al. (2018) explored the relationship between FOMO, use of social media, problematic use of social media and phubbing behaviour. Their results suggested that teenagers who used smartphones and social media excessively had

a higher level of fear of missing out that may cause them to ignore their offline relationships which supported the findings of the present study.

Further, the findings of the present study showed that fear of missing out and social comparison significantly positively predicted social media addiction in young adults. The results of the study are consistent with the study conducted by Blackwell et al. (2017) who explored if neuroticism, extraversion, attachment style and fear of missing out were the predictors of the addiction and use of social media. The results showed that the use of social media was predicted by neuroticism, younger age, and fear of missing out. In another study Franchina et al. (2018) explored the relationship between FOMO, use of social media, problematic use of social media and phubbing behavior in Flemish teenagers. Their results showed that fear of missing out predicted problematic use of social media and related to phubbing behavior. So, the findings of the present study are supported by various researches conducted prior.

Further results of the current study showed a significant gender difference in fear of missing out among young adults. The results indicated higher fear of missing out in men than women. According to the study by Qutishat (2020) who examined the association among FOMO, AD (academic adjustment), and EI (emotional intelligence). Their results suggested the significant difference of gender among students in fear of missing out and emotional intelligence that showed a higher level of FOMO in males than the females which is well supporting the current findings.

Limitations and Suggestions

The sample was taken from young adults who were active users of internet users. For future research, different age groups and generations can be used to examine the cross-generational effects of the same issue. A comparative study could be conducted on middle and late adults, namely gerontology. The study was quantitative and conducted online through Google Forms due to the lockdown placed because of the global pandemic. Further researchers could conduct qualitative research on the very topic, to explore it in detail. The study was conducted on healthy and abled young adults, excluding differently abled or disabled people. Further research could be conducted, using these people as a specific sample to compare the results among both healthy and differently-abled people. The study provides information regarding certain interventions like self-control theory which can help alleviate experiences of FOMO and social media addiction. It is suggested that such interventions be presented in seminars or conferences held to discuss or present the variables used in the current study.

Implications of Study

This study is important in the field of cyberpsychology examining the relationship between FOMO, social comparison, and social media addiction among young adults in Pakistan. This research bridges the gap previously left in the studies conducted in Pakistan, on similar variables. The research was conducted between 2020 and 2021, during the time of a global pandemic which resulted in a physical lockdown worldwide. Due to the restraint on person-to-person communication, a rise in the use of social media applications, smartphones and internet usage was witnessed. The findings of the study prove that increased internet usage time, increases FOMO, social comparison, and social media addiction among young adults. The research showed that FOMO is prevalent more in males comparatively and the precious studies back that up. This helps break down gender stereotypes around women being more concerned about social events and connections. The study helps in understanding the types of FOMO and social comparison while also listing down factors of social media addiction. This can help active internet user's identify their symptoms and in turn, try to manipulate various listed causative factors to help themselves. The findings of the study help in understanding that social comparison is either negatively or positively perceived by the active internet user, based on their self-esteem. So, this can help the users identify the position of their self-esteem, based on

how they socially compare themselves with people on the internet. The findings in the study suggest that the core issue beneath the phenomenon of FOMO is anxiety. Specifically relating to the elements of social anxiety. Therefore, people experiencing FOMO can lead introspection and get to the root level issue of social anxiety.

Conclusion

It is concluded that FOMO (fear of missing out) had a significant positive relationship with social comparison and social media addiction in young adults. It was also concluded that social media addiction is significantly positively predicted by FOMO (fear of missing out) and social comparison in young adults. Further, a significant gender difference was found in FOMO that men had higher FOMO than women. However, the results showed a non-significant gender difference in social comparison and social media addiction.

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