Fear of Missing Out and Psychological Well-Being: The Mediating Role of Compulsive Use and Social Comparison

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Abstract

The development of social media websites is constantly attracting the online users especially the young adults. Features of social media websites offer varied information that compel individuals to do social comparison with others. The goal of this study is to examine the effect of fear of missing out on the psychological well-being of young adults. Previous studies have investigated the correlations among various variables of social media websites however there exist a gap on causal relationship studies in previous literature. To bridge this gap, researcher has used hypothesized serial mediation model and for this study researcher has incorporated Fear of missing out (FoMO) as independent and psychological wellbeing (anxiety and depression) as dependent variable while considering the mediating role of compulsive use and social comparison into the model. Data was collected from a sample of 400 university students. Results indicate that there exists a direct positive relationship between each component of model. Moreover, indirect links show that there exists a mediation as well. Compulsive use and social comparison jointly mediate the relation between FoMO and psychological well-being. Increase in compulsive use will allow individuals to do more comparisons which in turn cause more anxiety and depression among young adults.

Keywords: Fear of missing out, social media websites, social comparison, psychological well-being, compulsive use, serial mediation

Introduction

Social media websites usage is proliferating all over the world. The access to these websites has become much easier due to wireless internet connections. Moreover, the induction of smartphones and other digital devices have drastically changed life patterns. Thus, the convergence of social media websites, wireless internet and handy devices has revolutionized the socialization process. Social media websites are changing the pattern of interaction and communication among the social media users (James, Lowry, Wallace, & Warkentin, 2017).

Social media websites have been continuously growing and they are attracting millions of people around the globe over the last decade (Koch & Frees, 2016). According to a new report, number of social media users around the world is 3.484 billion and it increases by 9% every year. Most commonly used social media websites are Facebook, Twitter, Instagram and WhatsApp (Chaffey, 2019). Social media websites are providing multitude opportunities for business communities (Berzin, Singer, & Chan, 2015).

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However, there is a dark side of social media such as cyberbullying, privacy abuse and addiction (Baccarella, Wagner, Kietzmann, & McCarthy, 2018). Anyhow there is a need to get a much deeper understanding of the role of social media websites in the lives of individuals.

The study has incorporated compulsive use (CU) and mediated social comparison (MSC) as mediator in the model while fear of missing out (FoMO) is added as independent variable and psychological wellbeing is integrated as dependent variable.

Przybylski, Murayama, DeHaan & Gladwell (2013) defined the fear of missing out (FoMO) as "a pervasive apprehension that others might be having rewarding experiences from which one is absent" (p. 1). In others FoMO is a desire to stay connected so that one can check what others are doing. Scholars have found that FoMO correlates with compulsive use, mediated social comparison as well as with psychological wellbeing (Classen, 2018; Oberst, Wegmann, Stodt, Brand, & Chamarro, 2017; Wegmann, Oberst, Stodt, & Brand, 2017).

Compulsive use is defined as when an individual loses their rational ability to control their routine performance (Hirschman, 1992). Scholars have studied the relationship of compulsive use with various psychological and physical problems. The overwhelming use of internet results in mental sufferings i.e. depression and anxiety (Ho, Lwin, & Lee, 2017). Further, researchers studied those heavy users of social media websites are more likely to suffer from psychological distress (Oberst et al., 2017; Pontes, 2017).

The meaning of mediated social comparison is that it is done while using technological devices as compared to face-to-face social comparison. Festinger (1954) social comparison theory argued that human beings have the urge to do self-evaluations about themselves by doing comparisons with others. The prevalent social media usage and its ability of connecting millions of people has provided a suitable environment to individuals to compare themselves with others. As social media websites provide several features to its users to maintain and manage their profiles as well as upload and share moments of their lives, it provides them the opportunity to check the moments of others' lives as well. It allows them to upload a status in the form of text, photo or a video and similarly users can view the statuses, shared by others depending upon the privacy settings. All these features of social media websites increase the prospects of social comparisons (Fox & Moreland, 2014) and it is a habitual phenomenon on social media websites (Cramer, Song & Drent, 2016). Scholars have studied the types of social comparisons as well as its correlation with social media engagement time, personality traits of individuals and psychological wellbeing of individuals (Johnson & Westerwick, 2017; Vogel, Rose, Okdie, Eckles, & Franz, 2015; Reer, Tang, & Ouandt, 2019).

Though psychological wellbeing has many dimensions, Habelrih and Hicks (2015) in their research article advocated that recently psychological wellbeing construct is being viewed as "opposite to negative states" (p. 26). In their opinion, a psychologically well individual does not possess negative attributes such as depression, stress, anxiety etc. For the present study researcher has viewed psychological construct in this perspective and has taken two negative attributes i.e. anxiety and depression. Various scholars have studied that social media websites have negative and damaging effects on the wellbeing of

individuals (Bevan, Gomez, & Sparks, 2014; Lup, Trub, & Rosenthal, 2015; Rosenthal, Buka, Marshall, Carey, & Clark, 2016). Viewing attractive profiles of others on social media websites associates positively with psychological wellbeing i.e. infuse depression among users (Appel, Gerlach, & Crusius, 2016). Further, the social media engagement factor also correlates with psychological wellbeing of its users as O'Keeffe and Clarke-Pearson (2011) found that "Facebook depression" develops when teens and preteens spend a lot of time on social media websites.

Best, Manktelow, and Taylorn (2014) in their reviewed article found that previous studies did not provide a clear picture of relationship between social media websites and psychological wellbeing. They suggested that there is a need to conduct studies that would explain causal relationships. Scholars across the world have been conducting researches to study the relationship among social media websites and psychological wellbeing by using hypothesized mediation models (Reer et al., 2019). This study is an attempt to add knowledge in the existing literature by exploring this specific dimension of causal relationships. This study is using serial mediation model to examine the relationship between social media websites and psychological wellbeing. It would be a substantial addition to the academic knowledge of researchers. In addition to this, the research will provide new prospects to analyze the social media websites and will support future researchers to conduct more studies related to this topic.

To study the current research, researcher has used four concepts; Fear of Missing Out (FoMO), Compulsive Use (CU), Mediated Social Comparison (MSC) and Psychological Wellbeing. With the support of literature review, a hypothesized pathway is constructed to study all these concepts; Fear of Missing Out (FoMO) compel people to spend more time on social media websites. The more they engage themselves on social media websites, the more they tend to do social comparison which ultimately affects their psychological wellbeing. To study this pathway, a serial mediation model is used which also aligns with the goal of the study. The concept and purpose of serial mediation is elaborated in the chapter of conceptual framework.

Objectives of the Study

This study is an attempt

- To measure the association between fear of missing out (FoMO) and psychological wellbeing.
- To measure mediatory role of compulsive use and mediated social comparison between independent variable and dependent variable.
- To measure the association between mediated social comparison on the psychological health of young adults.
- To measure the association between excessive use of social media and Psychological Well-Being.

Following hypothesis are constructed in the light of the literature review.

Hypotheses

H1: There is a relationship between fear of missing out and psychological wellbeing (Anxiety, Depression).

H2: There is a relationship between fear of missing out and compulsive use of social media.

H3: There is a relationship between compulsive use and mediated social comparison.

H4: There is a relationship between mediated social comparison and psychological wellbeing (Anxiety, Depression).

H5: There is a positive relationship between compulsive use and psychological wellbeing (Anxiety, Depression).

H6: Compulsive use is a mediator between the relationship of fear of missing out and psychological wellbeing (Anxiety, Depression).

H7: Social comparison is a mediator between the relationship of compulsive use and. psychological wellbeing (Anxiety, Depression).

Literature Review

Social media effects have gained importance in social discourse in the beginning of this decade. It can be argued that due to increase of social media websites apps and smartphones usage people have developed the "Checking habit" and this habit creating a sense of missing out in adults. Chotpitayasunondh and Douglas (2016) conducted a study to inspect the antecedents and consequences of "phubbing" behavior. They found that fear of missing out results in smartphone addiction. On the other hand, Elhai, Levine, Dvorak, & Hall (2016) found that problematic smartphone usage is related with FoMO as well as with need of touch. This changed cultural and social context of smartphones has infused technological led FoMO and prompted the interests of the social scientists in this phenomenon.

Social scientists embarked upon themselves in the understanding of this construct by using various methodologies such as Oberst et al. (2017) applied online survey technique and collected data from almost 1468 users of Latin Americans, Alt (2015) applied survey method to gather data from 296 undergraduates' social science students, Dhir, Yossatorn, Kaur, & Chen (2018) used stressor strain framework, Classen (2018) applied thematic analysis whereas Wegmann et al. (2017) used structural mediation model and Reer (2019) tested the hypothesized mediation model.

All these studies tried to find out how FoMO correlates with psychological well-being of individuals and how other variables such as time of social media engagement and personality traits play their role in this correlation.

Compulsive use of Social Media Websites

Hirschman (1992) reviewed and integrated the various concepts of addiction from multiple disciplines and suggested a general theory of compulsive consumption. He noted that compulsive use behavior produces an excessive and sudden urge among individuals for consumption and their rational ability to control their behavior disappears. This compulsive use behavior affects users' daily activities and can generate psychological abnormalities.

There are various studies that confirm compulsive consumption of social media websites also has negative consequences among its users. The availability of social media websites has created the problematic behaviors in a society as Keeffe and Clarke-Pearson (2011) have discussed that how social media websites have changed the arena of socialization and communication among children, teens and adolescents. According to the study, the intensity of Facebook usage generate depression among adolescents. James et al. (2017) used need-to-belong theory to investigate interaction at social networks. Their results indicated that there is a positive relationship between sense of belongingness and intensive use of social media websites i.e. this need-to-belongingness compel users to do compulsive use of social networking websites. Anderson Steen and Starvopolous (2017) reviewed the 29 longitudinal studies related to the Problematic Internet Use (PIU). They found that the negative consequences of PIU influence daily activities and relationships as well as emotional health of individuals.

Mediated Social Comparison (MSC)

To compare oneself with other is a basic human behavior because it helps individuals to associate themselves with others and it also helps them to view their own self against others. Suls, Martin, and Wheeler (2002) studied about the causes and effect of social comparison. They found that to do social comparison is an unavoidable action at individual end. They said as we human beings all the time compare objects so in the same manner, we compare ourselves with other at times intentionally or other times unintentionally.

Social media websites are a new occurring in our social environment. All media websites allow us to view other people profiles, their achievements, their lifestyle and so on. In this new virtual world individuals can easily get trapped themselves into social comparisons. Fox and Moreland (2015) features of Facebook are a constant supply of social comparison and Cramer et al. (2016) in their study suggested that social comparison on Facebook is common phenomenon. Vogel et al. (2015) found that social media has "deleterious consequences" in their second study they try to build the causal relationship by using experimental approach and they found those people who possess high Social Comparison Orientation (SCO) value by using social media have low selfperception trait. Social comparison is also studied with various co-relations. As, Chae (2017) studied how selfie-editing is influenced by social comparisons on social media. He examined female smartphone users and found that females' selfie editing behavior is strongly associated with social comparison of appearance of their friends and celebrities on social media. Moreover, Fardouly and Vartanian (2014) found that women compare their body-image with their friends and peer group on Facebook. More usage of Facebook makes them more concern about their body-image.

Researchers have studied the impact of social comparison on the psychological health of individuals. On social media people build their perceptions about other people based on the content they share. As, Vries and

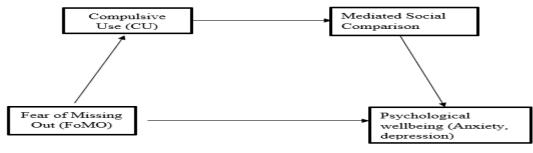
Kuhne (2015) examined the link between Facebook and social comparison by taking self-perception as a mediator. They found that the activities on social media websites and the individual's self-perception state plays an integral part in the effect of social comparison. The unhappy individuals do more social comparison. These perceptions can become a source of triggering various emotions among individuals such as Vries et al. (2018) by using experiment method try to investigate the emotional consequences of viewing posts on social media websites. The interesting factor of their research was that they did the analysis of strangers' positive posts. They found that individuals "reported lower positive affect". Appel et al. (2015) studied a correlation between depression, envy and mediated social comparison. Their study result suggests that on social media websites people are more indulged in upward comparison because these platforms provides high management standards. In another study Cramer et al (2016) in their study try to find out the motives and consequences of social comparison by using self-esteem as mediating factor. They found that there is a strong positive relationship between low self-esteem and social comparison on social media websites.

Social Media and Psychological Well Bei The scrolling of social media websites can affect mental health of individuals. The bombardment of news feed helps individuals to know about others life experiences as well as their thoughts. There are various studies that establish a link between social media websites and psychological well-being of an individual. As, Bevan et al. (2014) have suggested that variety of social media websites use is negatively related with psychological well-being. As, Fox and Moreland (2014) investigated the dark side of social media by using thematic analysis. They found that users of social media experience jealousy, anxiety and depression. Keeffe and Clarke Pearson (2011) examined the benefits and risks of these websites and coined the term "Facebook depression" and Appel et al (2015) found that there is a positive relationship between depression and envy especially when individuals view "attractive profiles". Whereas Chou and Edge (2012) found that people who spent more time on Facebook develop the perception that other individuals are spending happier life as compare to them. Satici and Uysal, (2015) investigated the link between Problematic Facebook Use (PFU) and wellbeing. Their results indicated that PFU is negatively correlated with wellbeing i.e. more usage of Facebook would lead to lower wellbeing.

Conceptual Framework

The serial mediation model for this study incorporated Fear of missing out as independent variable and Psychological wellbeing (depression) as dependent variable.

It has put Compulsive Use (CU) and social comparison as mediators (Fig.1).



(Figure 1)

The serial mediation model suggests that there are four indirect pathways between the variables. The first pathway posits that the relationship between FoMO and depression is indirect and influenced by the mediator of compulsive use (CU). The second indirect pathway suggests that the relationship between FoMO and depression is influenced by the mediators of mediated social comparison. While third pathway posits the relationship between compulsive use and depression is influenced by the mediator social comparison and forth is that the relationship between FoMO and mediated social comparison is influenced by compulsive use (CU). For the current study researcher has selected two mediations for analysis in accordance with the hypothesis.

Moreover, while studying serial mediation model, a dependent variable become the independent variable all along the pathway. In addition to this a researcher can study the combined effect of two variables on the dependent variable.

The main reason of choosing this model is that it is used to find out the pathway of causal relationships. As mentioned in literature chapter previous studies suggest that there exists a correlation between social media usage and psychological wellbeing but these studies lack in finding out causal relationship between these two variables (Best & et al., 2014). Moreover, when a researcher studies the relationship between two variables it mostly ignores the intervening variables and assume that intervening variables effect is zero. And it is a common understanding that intervening variables should not be neglected as they can cause indirect effect on the dependent variable. So, the second purpose of selecting this model was to examine how intervening variables play their part in the causal relationship.

Methodology

Participants

For this study, researchers have selected 450 students of public and private universities as respondents. Out of 450 respondents, 50 respondents' questionnaires have been eliminated because they left few of the questions unanswered. Convenience sampling technique was being applied. The sample for this study consists of students of four different universities which include two public and two private universities.

Questionnaire consists of four parts. First part deals with Independent Variable (IV) of the study i.e. Fear of Missing Out (FoMO) consist of three questions. Second part of the questionnaire deals with mediator i.e. Social Media Usage that consists of four questions. Next part consists of eleven questions relating to the second mediator of the study Social comparison and the last part consist of

five question relating to the Dependent Variable (DV) i.e. Depression. After the collection of data from the respondents. Data was entered SPSS sheet. Female students were coded as 1 and male students were coded as 2 in SPSS sheet. Age range was between 18 to 29 (M=23.4, SD=1.89). Education levels of the respondents were undergraduate, graduate and postgraduate. Education levels were coded such as undergraduate as 1, graduate as 2 and postgraduate as 3.

Measures

Fear of Missing out

To measure the independent variable (IV) for this study researcher applied the scale of FoMO developed by Przybylski et al. (2013). This scale has developed recently to observe this new phenomenon on social media websites. Reliability of original scale is α .80. Researcher has also tested reliability of the scale by using Cronbach alpha test and found its equal to α .81. The scale is based on 5-point Likert scale from strongly disagree to strongly agree.

Mediated Social Comparison

The mediated social comparison was assessed through the Social Comparison Orientation (SCO) scale originally created by Gibbons and Buunk (1999). The scale is consists of 11 items. The Cronbach alpha of the scale is α .83 This scale includes statements reflecting the social comparison behavior. After analysis of data the researcher found that the Cronbach's alpha α .91. The scale is based on 5-point Likert scale from strongly disagree to strongly agree.

Psychological Wellbeing

For this study researcher has selected anxiety and depression as the indicator to measure the psychological well-being of young adults. Those who score more on anxiety and depression scale will be considered as they have low levels of psychological wellbeing. By assuming this the depression scale DEPS was used by the researcher. This scale was originally developed by Salokangas, Poutanen, & Stengard (1995) by taking sample of clinically declared depression patients. However, in the conclusion they claimed that this scale could be used for those groups of population who are at a risk for depression. The Cronbach alpha of DEPS was α .88. After collection of data, it was analyzed in the SPSS 23 and researcher found Cronbach's alpha as α .75. For anxiety, the scale adopted from the La Greca and Lopez (1998) study. The scale has reliability value of 0.83. The scale is based on 5-point Likert scale from strongly disagree to strongly agree.

Data Collection

A pilot study was conducted from 30 students, so that any confusing statement could be revised as well as to make sure that all the questions were properly addressed. The final questionnaire was then printed and was filled by students at their campuses. Only those participants were selected who confirmed that they are the frequent users of Social Media Websites. Consent of respondents was also considered. After confirmation and consent respondents were asked to fill the questionnaire. All the participants were briefed about the study and then they were asked to fill the questionnaire each respondent took approximately 15 to 20 minutes to fill the questionnaire.

The data was analyzed by using SPSS 23 and process. Before performing the statistical analysis, researcher check the normality of data, in addition to this researcher also checked the reliability of each scale. The serial mediation analysis was done by using Hayes' Process macro for SPSS.

Results

Descriptive analysis was performed to measure the demographic variable while inferential analysis was used to test the correlation and mediation hypotheses. Below tables show demographics profile of respondents in which demographic variables consists of gender, age and education qualification. In table 1 the contribution of male participants and female participants presented as, (222) 55.5% of male and (178) 44.5% female respondents. Age group categories showed majority of the participants belongs to the 21-23 years' age group, as it is (147) 36.8% of total respondents. Education qualification category presented that undergraduates showed most interest in this research such as (187) 46.8% of total respondents.

Demographic Variables	Frequency	Percent (%)	
Gender			
Male	222	55.5	
Female	178	44.5	
Age			
18-20	57	14.3	
21-23	147	36.8	
24-26	137	34.3	
27-29	59	14.8	
Qualification			
Undergraduate	187	46.8	
Graduate	130	32.5	
Postgraduate	83	20.8	

 Table 1: Demographic Characteristics

Reliability analysis was carried out for each assessment measures using Cronbach's Alpha. Below the table 5.2 showed that Compulsive use has reliability .79, FOMO has reliability .81, Social Comparison has .91 and Depression has the reliability .75. So, all the scales have enough reliability to carry out the present study. **Table 2:** *Reliability Analysis*

	8		
Variables	k	α	
Compulsive use	04	.79	
FOMO	03	.81	
Social comparison	11	.91	
Depression Anxiety	05 05	.75 .83	

Note. k=number of items; α =Cronbach's alpha.

Table 5.3 showed Pearson product moment correlation among Fear of missing Out (FOMO), Compulsive use, social comparison, depression anxiety. From the analysis it is cleared that FOMO has positive relationship with all the variables such as FOMO has significantly positively related with social comparison (r=.36, p < .05, n=400) whereas it is moderately associated with compulsive use (r=.49, p < .05, n=400) however it is weakly associated with depression (r=.30, p < .05, n=400) and anxiety (r=.32, p < .05, n=400). Compulsive use is moderately associated with social comparison (r=.48, p < .05, n=400) and weakly related with depression (r=.14, p < .05, n=400) and anxiety (r=.17, p < .05, n=400). Social comparison has moderate positive relationship with depression (r=.44, p < .05, n=400) and anxiety (r=.42, p < .05, n=400).

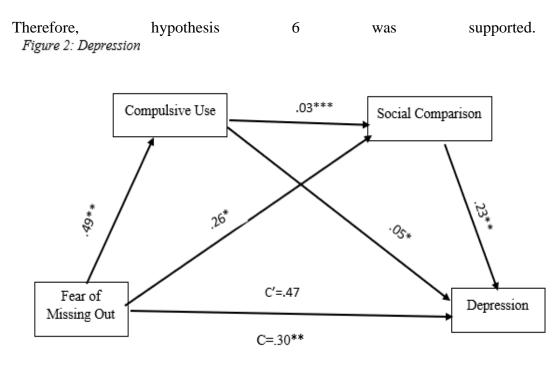
Table 3: Relationship of FoMO, Compulsive Use, Social Comparison,Depression, and Anxiety

Variable	Μ	SD	1	2	3	4	5
S							
1. FOMO	9.94	3.3	-	.49*	.36*	.30*	.32*
		6	-	**	**	*	*
			-				
2.	11.9	4.2	-		49*	14	.17
Compulsi	0	4	-		$.48^{*}$	$.14_{**}$	**
ve Use			-				
3. Social	37.1	4.6	-			.44	.42
Comparis	4	0	-			.44 **	**
on			-				
4.	18.3	4.8	-				.38*
Depressio	1	0	-				*
n			-				
5.	17.9	4.8	-				
Anxiety	4	1	-				
			-				

***Correlation is significant at the 0.001 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

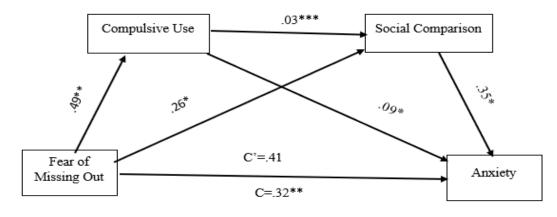
Process Macro was used to analyze the serial mediation in the model. Process Macro model 6 was used to test the serial mediation and bootstrap sample of 5000 was used to test mediation paths and significance level (Hayes, 2013). Gender, age and education was entered as control variable in model, so they could not affect the relationship between the variables. The indirect effect of fear of missing out on psychological well-being through compulsive use and social comparison was tested through this model. Paths and corresponding beta coefficients are shown in figure 2 and 3. As shown in figure 2, the total effect (c) of fear of missing out on psychological well-being (depression) was significant (β=0.30, *SE*=0.05, *t*=2.32, *p*<.01, 95% confidence interval BCI [0.0051, 0.1730]). The direct effect (C') of fear of missing out on psychological well-being (depression) in the presence of mediators was insignificant (β =.47, SE=0.02, t=1.32, p=.103, 95% BCI [-0.0117, 0.1341]). There are three specific indirect effect in the figure 2. The first specific indirect effect through compulsive use was not significant (β =0.024, 95% BCI [-0.0046, 0.0492]). The second indirect effect from social comparison was significant (B=0.023, 95% BCI [0.0231,0.0423]). The third indirect effect from compulsive use and social comparison was also significant (β =0.050, 95% BCI [0.0004, 0.0065]).



*p < .05, **p < .01, ***p < .001

As shown in figure 3, the total effect (c) of fear of missing out on psychological well-being (anxiety) was significant (β =0.32, SE=0.02, t=2.45, p<.01, 95% confidence interval BCI [0.0021, 0.1270]). The direct effect (C') of fear of missing out on psychological well-being (anxiety) in the presence of mediators was insignificant (β=.41, SE=0.08, t=1.12, p=.140, 95% BCI [0.0214, 0.1304]). There are three specific indirect effect in the figure 3. The first specific indirect effect through compulsive use was significant (β =0.041, 95% BCI [.2850, 0.4188]). The second indirect effect from social comparison was significant $(\beta=0.026, 95\% \text{ BCI } [0.0111, 0.0514])$. The third indirect effect from compulsive use and social comparison was also significant (β =0.047, 95% BCI [0.0002, 0.0745]). Therefore. hypothesis 7 was supported.

Figure 3: Anxiety



*p < .05, **p < .01, ***p < .001

Discussion

9

This study was conducted to map the relationship between FoMO and psychological wellbeing (depression and anxiety) through serial mediation model. Compulsive Use (CU) and mediated Social Comparison (MSC) was incorporated as mediators in the model. Results showed that all four variables: FoMO, Compulsive use, mediated social comparison and psychological wellbeing (depression) is in positive correlation with each other. Further the results of correlation analysis showed that H1, H2, H3, H4 and H5 of the present study has approved. For H6 and H7 researcher has applied serial mediation analysis to study the mediator's role between the independent variable and dependent variable. Results showed there exists a mediation of compulsive use and mediated social comparison between the relationship of FoMO and psychological wellbeing (depression, anxiety). Results showed the effect of FoMO on psychological wellbeing is positive. These results are in consistent with the previous research (Dhir et al., 2018). On the other hand, effect of FoMO on compulsive use is also positive. This result is accordance with the previous research (Wegmann et al., 2017). Results showed the effect of compulsive use on mediated social comparison is positive. The result is also in agreement with the previous research (Classen, 2018). Results demonstrated the effect of mediated social comparison on the psychological wellbeing (depression) is positive. This result is also in agreement with the previous research (Reer et al., 2019). Results showed that the effect of compulsive use on the psychological wellbeing (depression) is positive. This result is also in agreement with the previous research (Traş & Öztemel, 2019). Results showed that mediation is existed. Hence our hypothesis is accepted, compulsive use intervenes the relationship of FoMO and psychological wellbeing (anxiety, depression). This result is also in accordance with the previous research (Oberst et al., 2017). Results demonstrated that mediation is existed. Hence our hypothesis is accepted, mediated social comparison intervene the relationship of compulsive use and psychological wellbeing. This result is also in agreement with the previous research (Vries et al., 2018).

These findings are a step forward in understanding the role of social media websites in the lives of its largest user's i.e. young adults. Both mediators' i.e. Compulsive use and mediated social comparison are partial mediators it implies that besides these two variables other variables are also intervening in the relationship of FoMO and psychological wellbeing. Future researchers should use other intervening variables to study this relationship. The present study is conducted on the specific age group and utilized the survey methodology. Future scholars should explore the role of social media websites on other age groups by using different methodologies. Moreover, this study found that people are involved in mediated social comparison on social media websites and it is affecting their psychological wellbeing. However, it is unknown to what sort of content (status text, pictures, videos, achievements etc.) people compare themselves. Future researchers can also study the impact of specific type of content on the psychological wellbeing.

Conclusion

Social media websites users are growing rapidly all around the globe as well as in Pakistan. It is beneficial to study its dark side as well. This study was conducted with the goal of exploring the impact of social media websites on the psychological wellbeing of young adults. Current thesis has examined the relationship between Fear of Missing Out (FoMO) and psychological wellbeing by using two intervening variables i.e. compulsive use and mediated social comparison.

Serial mediation model was applied to study the role of intervening variables and the effect of each variable on the other. Analysis of data revealed that FoMO compel people to make excessive use of social media websites. This compulsive use of social media websites is positively associated with mediated social comparison i.e. users who spends more time on social media website are to make more self-evaluations by comparing themselves with others. The study further revealed that mediated social comparison has direct effect on the psychological wellbeing of individuals.

The study also investigated two mediations. Mediation 1 is about the combined effect of FoMO and compulsive use on the psychosocial wellbeing (anxiety, depression). Results confirmed that compulsive use of social media websites act as mediator in effecting the psychological wellbeing (anxiety, depression). Mediation 2 is about the combined effect of compulsive use and mediated social comparison on the psychological wellbeing. Study analysis demonstrated that mediated social comparison is also a partial mediator in influencing the psychological wellbeing.

References

Alt, D. (2015). College students' academic motivation, media engagement and fear of missing out. *Computers in Human Behavior*, 49, 111-119.

Anderson, E. L., Steen, E., & Stavropoulos, V. (2017). Internet use and Problematic Internet Use: A systematic review of longitudinal research trends in adolescence and emergent adulthood. *International Journal of Adolescence and Youth*, 22(4), 430-454.

Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook addiction scale. *Psychological Reports*, *110*(2), 1–17.

Appel, H., Gerlach, A. L., & Crusius, J. (2016). The interplay between Facebook use, social comparison, envy, and depression. *Current Opinion in Psychology*, *9*, 44-49.

Baccarella, C. V., Wagner, T. F., Kietzmann, J. H., & McCarthy, I. P. (2018). Social media? It's serious! Understanding the dark side of social media. *European Management Journal*, *36*(4), 431-438.

Berzin, S. C., Singer, J., & Chan, C. (2015). Practice innovation through technology in the digital age: A grand challenge for social work (Grand Challenges for Social Work Initiative Working Paper No. 12). *Columbia, SC: American Academy of Social Work and Social Welfare*.

Best, P., Manktelow, R., & Taylor, B. (2014). Online communication, social media and adolescent wellbeing: A systematic narrative review. *Children and Youth Services Review*, *41*, 27-36.

Bevan, J. L., Gomez, R., & Sparks, L. (2014). Disclosures about important life events on Facebook: Relationships with stress and quality of life. *Computers in Human Behavior*, *39*, 246-253.

Chae, J. (2017). Virtual makeover: Selfie-taking and social media use increase selfieediting frequency through social comparison. *Computers in Human Behavior*, *66*, 370-376.

Chaffey. (2019, February). *Global social media research summary 2019*. Retrieved from: https://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/

Chotpitayasunondh, V., & Douglas, K. M. (2016). How "phubbing" becomes the norm: The antecedents and consequences of snubbing via smartphone. *Computers in Human Behavior*, 63, 9-18.

Chou, H. T. G., & Edge, N. (2012). "They are happier and having better lives than I am": the impact of using Facebook on perceptions of others' lives. *Cyberpsychology, Behavior, and Social Networking*, 15(2), 117-121.

Classen, B. (2018). Social media engagement, the fear of missing out, and psychosocial correlates: A mixed methods study (master's thesis). Auckland University of Technology, Auckland, New Zealand.

Cramer, E. M., Song, H., & Drent, A. M. (2016). Social comparison on Facebook: Motivation, affective consequences, self-esteem, and Facebook fatigue. *Computers in Human Behavior*, *64*, 739-746.

De Vries, D. A., & Kühne, R. (2015). Facebook and self-perception: Individual susceptibility to negative social comparison on Facebook. *Personality and Individual Differences*, 86, 217-221.

Dhir, A., Yossatorn, Y., Kaur, P., & Chen, S. (2018). Online social media fatigue and psychological wellbeing—A study of compulsive use, fear of missing out, fatigue, anxiety and depression. *International Journal of Information Management*, 40, 141-152.

Dian A. de Vries, A. Marthe Möller, Marieke S. Wieringa, Anniek W. Eigenraam & Kirsten Hamelink (2018) Social Comparison as the Thief of Joy: Emotional Consequences of Viewing Strangers' Instagram Posts, *Media Psychology*, 21:2, 222-245, DOI: 10.1080/15213269.2016.1267647

Elhai, J. D., Levine, J. C., Dvorak, R. D., & Hall, B. J. (2016). Fear of missing out, need for touch, anxiety and depression are related to problematic smartphone use. *Computers in Human Behavior*, 63, 509-516.

Fardouly, J., & Vartanian, L. R. (2015). Negative comparisons about one's appearance mediate the relationship between Facebook usage and body image concerns. *Body image*, *12*, 82-88.

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

Fox, J., & Moreland, J. J. (2015). The dark side of social networking sites: An exploration of the relational and psychological stressors associated with Facebook use and affordances. *Computers in human behavior*, 45, 168-176.

Fox, J., & Moreland, J. J. (2015). The dark side of social networking sites: An exploration of the relational and psychological stressors associated with Facebook use and affordances. *Computers in human behavior*, 45, 168-176.

Gibbons, F. X., & Buunk, B. P. (1999). Individual differences in social comparison: development of a scale of social comparison orientation. *Journal of personality and social psychology*, 76(1), 129-149.

Habelrih, E. A., & Hicks, R. E. (2015). Psychological well-being and its relationships with active and passive procrastination. *International Journal of Psychological Studies*, 7(3), 25.

Hayes, A. F. (2013). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. New York: Guilford Press.

Hirschman, E. C. (1992). The consciousness of addiction: Toward a general theory of compulsive consumption. *Journal of Consumer Research*, 19(2), 155-179.

Ho, S. S., Lwin, M. O., & Lee, E. W. J. (2017). Till logout do us part?: Comparison offactors predicting excessive social network sites use and addiction between Singaporean adolescents and adults. *Computers in Human Behavior*, 75, 632–642.

James, T. L., Lowry, P. B., Wallace, L., & Warkentin, M. (2017). The effect of belongingness on obsessive compulsive disorder in the use of online social networks. *Journal of Management Information Systems*. 34(2), 560-596.

Johnson, B. K., & Knobloch-Westerwick, S. (2017). When misery avoids company: Selective social comparisons to photographic online profiles. *Human Communication Research*, 43(1), 54-75. doi:10.1111/hcre.12095

Koch, W., & Frees, B. (2016). Dynamische Entwicklung bei mobiler Internetnutzung sowie Audios und Videos. *Media Perspektiven*, 9(2016), 418-437.

La Greca, A. M., & Lopez, N. (1998). Social anxiety among adolescents: Linkages with peer relations and friendships. *Journal of Abnormal Child Psychology*, *26*, 83–94.

Lup, K., Trub, L., & Rosenthal, L. (2015). Instagram# instasad?: exploring associations among instagram use, depressive symptoms, negative social comparison, and strangers followed. *Cyberpsychology, Behavior, and Social Networking*, *18*(5), 247-252.

Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamarro, A. (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *Journal of Adolescence*, 55, 51 –60. http://dx.doi.org/10.1016/j. adolescence.2016.12.008.

O'Keeffe, G. S., & Clarke-Pearson, K. (2011). The impact of social media on children, adolescents, and families. *Pediatrics*, *127*(4), 800-804.

Pontes, H. M. (2017). Investigating the differential effects of social networking site addiction and Internet gaming disorder on psychological health. *Journal of Behavioral Addictions*. http://dx.doi.org/10.1556/2006.6.2017.075.

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, 1841–1848. https://doi.org/10.1016/j.chb.2013.02.014

Radovic, A., Gmelin, T., Stein, B. D., & Miller, E. (2017). Depressed adolescents' positive and negative use of social media. *Journal of adolescence*, 55, 5-15.

Reer, F., Tang, W. Y., & Quandt, T. (2019). Psychosocial well-being and social media engagement: The mediating roles of social comparison orientation and fear of missing out. *New Media & Society*, 1461444818823719.

Rosenthal, S. R., Buka, S. L., Marshall, B. D., Carey, K. B., & Clark, M. A. (2016). Negative experiences on Facebook and depressive symptoms among young adults. *Journal of Adolescent Health*, *59*(5), 510-516.

Salokangas, R. K. R., Poutanen, O., & Stengård, E. (1995). Screening for depression in primary care: development and validation of the depression scale: A screening instrument for depression. *Acta Psychiatrica Scandinavica*, 92, 10–16.

Satici, S. A., & Uysal, R. (2015). Well-being and problematic Facebook use. *Computers in Human Behavior*, 49, 185-190.

Suls, J., Martin, R., & Wheeler, L. (2002). Social comparison: Why, with whom, and with what effect?. *Current directions in psychological science*, *11*(5), 159-163.

Traş, Z., & Öztemel, K. (2019). Examining the Relationships between Facebook Intensity, Fear of Missing Out, and Smartphone Addiction. *Türk Eğitim Bilimleri Dergisi*, 6(1), 91–11.

Vogel, E. A., Rose, J. P., Okdie, B. M., Eckles, K., & Franz, B. (2015). Who compares and despairs? The effect of social comparison orientation on social media use and its outcomes. *Personality and Individual Differences*, *86*, 249-256.

Wegmann, E., Oberst, U., Stodt, B., & Brand, M. (2017). Online-specific fear of missing out and Internet-use expectancies contribute to symptoms of Internet-communication disorder. *Addictive Behaviors Reports*, *5*, 33-42.