Unveiling the social media maze: Exploring the impact of demographics on addiction, FOMO, and well-being in Pakistani youth

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♟ *ABSTRACT*. L'obiettivo di questo studio è stato determinare la connessione tra la dipendenza dai social media, la paura e l'ansia di essere esclusi (FOMO) e il benessere psicologico dei giovani adulti. Il campione era composto da 202 studenti universitari maschi e 198 femmine, ciascuno di età compresa tra i 18 e i 24 anni. Per la raccolta dei dati sono state utilizzate la *Bergen Social Media Addiction Scale*, la *Fear of Missing Out Scale* e la *Psychological Well-being Scale*. I risultati hanno rivelato una forte correlazione tra salute psicologica, FOMO e dipendenza dai social media evidenziando una capacità maggiore nel gestire lo stress nei soggetti di sesso femminile.

♟ *SUMMARY. As the world grows more digital and people use social media more frequently due to social media addiction and the fear of missing out on anything, the world and various trends change daily. These changes influence young adults' psychological well-being. The goal of this study was to determine the connection between social media addiction, FOMO, and young adults' psychological wellness. Cross-sectional research design and deliberate sampling were both used to gather data for this study. 202 male and 198 female university students, each between the ages of 18 and 24, made up the sample. The Bergen Social Media Addiction Scale, the Fear of Missing Out Scale, and the Psychological Well-being Scale ere used to collect the data. The findings revealed an overall favorable correlation between psychological health, FOMO, and social media addiction. Female young adults are better at handling stress than male counterparts, and there is a strong correlation between psychological health and FOMO among young adults.*

Keywords: *Fear of missing out, Psychological well-being, Social media addiction*

INTRODUCTION

Our daily lives now involve social media use, and it appears that teens and young adults make up most users (Kemp, 2017; Marengo, Longobardi, Fabris & Settanni, 2018; Rideout & Robb, 2018; Settanni, Marengo, Fabris & Longobardi, 2018). Teenagers can use social media to stay in touch with people, expand their network of contacts, find, and share resources, and construct their social identities in relation to their peer groups, particularly in terms of popularity and, consequently, acceptance and a sense of belonging (Badenes–Ribera, Fabris, Gastaldi, Prino & Longobardi, 2019; Barker, 2019).

Recent estimates place the global population's usage of social media at 58.4%. People used social media for an average of two hours and twenty–seven minutes every day (Chaffey, 2022). The widespread adoption of smartphone devices worldwide and the advancements in information and communication technologies may be contributing factors to the popularity of social media usage. Indeed, the smartphone penetration rate in Vietnam, a low– and middle–income nation, is predicted to be 73.5%, and it is expected to rise to 85% by the end of 2022 (Dharamraj, 2022).

Other factors contributing to the rise in social media use among people are the ease with which people can connect and establish virtual relationships that are unrestricted by distance, in addition to the ease with which people can communicate (Cheng, Lau & Luk, 2020). Information exchange is also made possible by social media. Yoon and colleagues (Yoon, Wee, Lee, Lin & Thumboo, 2021) have previously emphasized the ways in which social media has been utilized to actively involve patients and the public. Although there are undoubtedly many advantages to using social media, there have been growing worries in recent years about using social media excessively.

Social media addiction

Previous research has looked at the effects of social network addiction, such as Facebook addiction, and how that affects a person's psychosocial functioning. For instance, Busalim and colleagues (Busalim, Masrom & Zakaria, 2019) documented how Facebook addiction resulted in decreased academic performance for students who were not hooked, and how self–esteem negatively impacted Facebook addiction for those students. They have also been studied in recent years due to the growing popularity of other social media platforms like Instagram. D'Souza and Hemamalini (2018) investigated the connection between 131 Indian students, ages 12 to 23, and Instagram addiction and depression. They found a correlation between an individual's depressed scores and the intensity of their Instagram addiction. In more recent times, research has looked at the prevalence of social media addiction as well as the ways that using various platforms might lead to different degrees of addiction. Compared to more traditional platforms like WhatsApp and Tik Tok, people who used more visual social media platforms like Instagram and Tik Tok also showed greater levels of social media addiction (Marengo, Fabris, Longobardi & Settanni, 2022).

Fear of missing out

Today's young adults begin and conclude their days by checking the social networking and messaging apps on their phones. Today's kids use social media extensively to build and maintain relationships with others. FOMO, or the fear of missing out, has received a lot of attention lately. According to Przybylski and colleagues (Przybylski, Murayama, DeHaan & Gladwell, 2013), FOMO is the need to maintain social connections with friends and groups through social media, which leads to regular (and sometimes excessive) use of social media and chat apps.

FOMO was first popularized in the media in the early 2010s, and since then, the use of social networking sites has increased dramatically all around the world (Poushter, Bishop & Chwe, 2018). Numerous research investigating this phenomenon show that there is a noticeable increase in this psychological inclination. There haven't been any real initiatives to compile the body of information on FOMO, despite the growing attention from academics (Tandon, Dhir, Almugren, AlNemer & Mäntymäki, 2021). Everyone is starting to have the strong need to check social media sites on their smartphones on a regular basis.

Since almost everyone has a smartphone, it is now quite simple for people to find out about potentially fulfilling experiences – both online and offline – that they may have missed in their lives. FOMO has been portrayed in the media as an anxiety–inducing concept. According to a survey, Facebook is one of the most widely used networking apps among Indian youth, with young people in the country setting the

global standard for usage. Facebook's widespread use among young people, particularly college–bound students, raises the question of what motivates and encourages them to utilize the social media platform. One is social attachment, which is regarded as one of a person's most basic needs (Lai et al., 2013).

People are become increasingly reliant on social media platforms to satisfy their social demands. The need to connect, the need to establish and nurture meaningful relationships with people, and the desire to become well–liked in your network (Santor, 2000). Numerous scholars have attempted to investigate the connection between college–bound kids' use of social media and their involvement on social networking sites and the impact this has on their mental wellness. The phrase fear of missing out (FOMO) refers to the excessive and regular usage of social media to maintain a sense of social connection. It is characterized as the intense desire to maintain interpersonal relationships while keeping track of all events and activities on social media. Interaction with social media platforms that enable personal social media participation and provide a means of continuous monitoring and comparison with others (Przybylski et al., 2013).

Psychological well–being

According to Oberst and colleagues (Oberst, Wegmann, Stodt, Brand & Chamarro, 2017), those with a strong predisposition toward FOMO have a compulsive desire to use social media, which negatively impacts their perception and negatively impacts their cognitive states, both of which have an immediate impact on an individual's well–being (Marino et al., 2018).

One way to conceptualize well–being (WB) is as an abstract, highly personalized concept whose meaning is always changing. As such, it is challenging to quantify. According to research in this field, there are two types of well–being: hedonic and eudaimonic. According to Ryan and Deci (2001), hedonistic theorists often view well–being in terms of pleasure versus unhappiness. Research on hedonic well–being employs subjective well–being (SWB), which is made up of life satisfaction and positive and negative affect, as an evaluation metric. In contrast to the hedonic definition of happiness, eudaimonic psychologists gauge work–life balance (WB) based on an individual's lifestyle and sense of fulfillment (Ryff & Keyes, 1995; Ryff & Singer, 2000).

Everyone aspires to psychological well–being, among other things. Psychological well–being, according to Ryff (1995), is the capacity of an individual to identify and grow in line with their potential. According to Ryff (1989), a person's ability to act mentally in a positive way is another indicator of their psychological well–being. Moreover, those with high psychological well–being will be more productive and have better mental and physical health than people with low psychological well–being, according to Ryff and Singer (2000). According to Huppert (2009), prosocial behavior, good health, and adaptable and creative thinking are all indicators of psychological well–being.

On the other hand, according to data from the World Health Organization (WHO), the proportion of individuals with mental illnesses rose by more than 18% between 2005 and 2015, backed up by a 2016 statement from the Republic of Indonesia's Ministry of Health asserting that mental health issues continue to rank among the major global health concerns, including those that affect Indonesia. According to data from Basic Health Research in 2013, there are around 14 million people, or 6% of Indonesia's population, who suffer from mental emotional illnesses, which are characterized by symptoms of anxiety and depression for those under the age of fifteen. This suggests that many people continue to have poor psychological well–being. The Twenge and colleagues survey (Twenge, Martin & Campbell, 2018) results provide more evidence that the proportion of young adults (18 to 25 years old) experiencing depressive symptoms rose by 63% between 2008 and 2017.

Additionally, there was a 71% rise in the proportion of young adults reporting severe psychological discomfort. Suicidal thoughts among young adults grew by 47%, according to similar trends. Fear of missing out, or FOMO, was identified by Przybylski et al. (2013) as one of the factors that contributed to the low psychological well–being. Beyens and colleagues (Beyens, Frison & Eggermont, 2016) provide evidence in favor of this claim, stating that FOMO is indicative of poor psychological health. The existence of fear, anxiety, and worry (FOMO) makes a person feel uncontrollably anxious, unable to form healthy relationships with others, and low in self–acceptance. This is why the negative indicator was present.

The usage of social media in the current digital age, when most people are undoubtedly familiar with it, was strongly linked to this phenomenon. Social media has made it possible to communicate without being constrained by time or space. People can now easily obtain fresh knowledge and engage in

active communication with others thanks to social media (Burke, Marlow & Lento, 2010). These days, people are drawn to social media because it is a convenient and crucial tool for sustaining social connections and meeting social demands (Shapiro & Margolin, 2014). As a result, social media now plays an indispensable role in many aspects of daily life (Lenhart, 2015). But social media has its own advantages and disadvantages in addition to its widespread use. When social media is used responsibly, benefits can result, including the ability to quickly obtain health information from professionals in the field, emotional support, community building, and more (Royal Society for Public Health, 2017). On the other hand, improper use of social media can have unfavorable effects.

Oberst and colleagues (Oberst, Renau, Chamarro & Carbonell, 2016) claim that children, adolescents, and early adults' psychological health and functioning may suffer because of using maladaptive social media. Twenge et al. (2018) concur, stating that social media use is probably to blame for the rise in mental health issues among young adults. Social media users come in a variety of age groups, however Sugiharto (2016) notes that young people in Indonesia who are between the ages of 20 and 24 make up most internet users. Approximately 22.3 million people in this age bracket were found to be internet users, the majority of whom use the internet to access social media.

According to data issued by the Indonesian Internet Service Providers Association (APJII), most respondents said they used the internet for more than six hours each day. Approximately 55.39% of all respondents use the internet for more than six hours each day. Some responders, however, range from two to six hours every day. Those who are between the ages of 20 and 24 are considered emerging adults. An individual is expected to not only develop and accomplish their personal goals at this stage, but also initiate a new developmental process by forming relationships with others. at this stage, individuals may encounter new activities and goals that directly include other people for the first time (Salkind, 2006). However, emerging adults are also particularly vulnerable to social media dependency, according to research by Azka and colleagues (Azka, Firdaus & Kurniadewi, 2018). This is because they are typically less stable in their ability to manage their basic needs, form interpersonal relationships, and develop both affective and cognitive aspects of their lives. Thus, people who encounter challenges in their developing process often turn to social media as a means of escape.

Social media usage is on the rise in Pakistan, especially among young adults. According to the Global Digital Report 2022 (Kemp, 2022), there were 50 million social media users in Pakistan, with a penetration rate of 23% of the population. Understanding the implications of this trend on young adults' well–being is crucial. With the increasing use of social media, there's a growing concern about social media addiction. Recent research by Marino, Gini and Vieno (2022) discusses the emergence of problematic social media use and its impact on mental health. Fear of missing out (FOMO) is a psychological construct that has become increasingly relevant in the digital age.

A study by Oberst et al. (2017) demonstrates the relationship between FOMO and problematic smartphone use, which can be extended to social media platforms. Demographic factors such as age, gender, socioeconomic status, education, and cultural background can play a moderating role in the relationship between social media use, FOMO, and psychological well–being. Recent work by Montag et al. (2022) highlights the importance of considering demographic factors in understanding social media addiction and its consequences. Young adults are particularly vulnerable to the effects of social media due to their age and life stage. Understanding how social media addiction and FOMO influence their psychological well–being is essential for promoting their mental health and academic success. Pakistan has a distinct cultural context, and social media usage can be influenced by cultural norms and values. A study by Ali, Malik and Malik (2022) explores the impact of cultural factors on social media usage and well–being in Pakistan. It is crucial given the rapid increase in social media usage in Pakistan, the emerging concerns about addiction and FOMO, the relevance of demographics and the unique cultural context of Pakistan. It has the potential to provide valuable insights into the well–being of young adults and contribute to the development of targeted interventions and policies.

Hypotheses

1. Addiction to social media will have a significant influence on young adults' psychological health.
2. Young adults' psychological health will be negatively correlated with their fear of missing out.

3. The psychological health of young adults will differ significantly by gender.
4. Demographic variables (education level and skipping meals due to social media use) will act as a moderator in the relationship of study variables among young adults.

METHOD

Operational definitions

– *Social media addiction.* SMA is the phenomenon that refers to the compulsive desire to use social media. The user feels forced to utilize social media to feel fulfilled despite the time and effort expended (Andreassen, Torsheim, Brunborg & Pallesen, 2012).
– *Fear of missing out.* Fear of missing out is described as the persistent concern that others might be having worthwhile experiences while one is away and is characterized by the need to always stay connected with what other people are experiencing (Przybylski et al., 2013).
– *Psychological well–being.* Psychological well–being is a sort of well–being that is based on the idea of fundamental human needs and effective functioning. It serves as an example of realizing one's potential and accepting reality (Diener et al., 2009).

Participants

Data were gathered using the method of purposeful sampling. 400 young adults (M = 202, F = 198) from a variety of universities, including University of Wah (Wah Cantt), Comsats University (Wah Cantt), Foundation University (Rawalpindi), and Bahria University (Islamabad) were included in the sample. The participants' range in age from 18 to 24 (*M* = 20.91, *SD* = 1.95).

Instruments

– *Demographic data sheet.* Age, gender, education level, family structure, father's and mother's employment status, time spent on social media, skipped meals due to social media, feelings of social isolation, disturbed sleep patterns, and daily app usage are all gathered from participants'

personal information using a demographic data sheet.
– *Bergen Social Media Addiction Scale.* The six items on the *Bergen Social Media Addiction Scale*, developed by Andreassen et al. in 2016 asses problematic social media use over a twelve–month period, rated on a 5–point Likert scale, with 1 = very seldom, 2 = rarely, 3 = occasionally, 4 = frequently, and 5 = very frequently. According to Andreassen et al. (2016), the greatest figure suggests a dependency on social media. The Cronbach's alpha coefficient for the *Bergen Social Media Addiction Scale* is .88, validated by Andreassen et al. (2016).
– *Fear of Missing Out Scale.* The most popular tool for measuring FOMO is Przybylski et al. (2013)'s 10–item scale, which rates FOMO in terms of a scale of 1 to 5 (i.e., 1 = not at all true of me, 2 = slightly true of me, 3 = moderately true of me, and 4 = very true of me). More points on the Likert scale indicate a higher level of FOMO. The Cronbach's alpha coefficient for the scale's English translation is .90 (Przybylski et al., 2013), validated by Elhai and colleagues (Elhai, Levine, Dvorak & Hall, 2016).
– *Psychological Well–being Scale.* The *Psychological Well–Being Scale* was developed by Diener et al. (2009) and consists of eight items that define important aspects of how people operate, such as having meaningful relationships, feeling competent, and having a purpose in life. From 1 (strongly disagree) to 7 (strongly agree), there are seven possible outcomes. Specifically, 1 = strong disagreement, 2 = disagreement, 3 = slight disagreement, 4 = disagreement that is neither strong nor weak, 5 = slight agreement, 6 = general agreement, and 7 = strong agreement. According to Diener et al. (2009), this scale has a Cronbach's reliability of .86. The scale has been renamed the *Flourishing Scale*, and it now measures how respondents see their own success in important domains like relationships, self–esteem, purpose, and optimism. The scale yields a single psychological well–being score.

Procedure

Respondents first provided their informed consent. Purposive sampling was utilized to gather data because it gives us access to interesting demographic traits that will best allow us to evaluate our hypothesis. We tried to choose individuals from a variety of age groups, backgrounds, and educational contexts to guarantee sample representativeness.

Furthermore, the concepts of saturation were utilized to select the sample size, guaranteeing enough participants to adequately investigate the study inquiries. Additionally, by specifying the selection criteria precisely and making sure that participants fulfilled them before being included in the study, an attempt was made to reduce bias. 450 young adults from various universities in Wah Cantt, Rawalpindi, and Islamabad provided the information. Individual questionnaires were handed to each participant, and they received instructions on how to complete them. The confidentiality of all collected data has been ensured.

Data analysis

Data analysis was performed using the Statistical Package for the Social Sciences (SPSS). The link between social media addiction, FOMO, and psychological well–being among young adults is examined using Pearson Product Moment Correlation (PPMC). Gender differences were looked at using the independent sample *t*–test.

RESULTS

Table 1 explains the frequency and percentage of demographic variables of the participants included in the study. There were both males (202) and females (198) in the study. The age range was 18–24. Mostly participants (61.5%) belonged to nuclear family system as compared to joint family system (38.5%). There were 91.8% young adults with BS (Bachelor of science) and 8.3% young adults with MS (Master of science).

The mean, range, standard deviation, skewness, kurtosis, and alpha reliability values for the subscales and scales are displayed in Table 2. The degree of skewness and kurtosis indicates that the data is normally distributed, and the adequate inter–item consistencies are supported by scale alpha reliability.

The results of the correlation analysis in Table 3 indicated a significantly positive relationship between fear of missing out and psychological well–being among young adults, indicating the fear of missing out predicts good well–being of young adults.

Table 4 shows that there are significant gender differences in psychological well–being of young adults. Female young

adults have better psychological well–being and are capable of handling stressors than the males.

Table 5 illustrates the model fit indices of the scale of SMA. Model 1 represents the fit indices for default model with $\chi^2 \, df = 9$ is with the value of CFI = .90, IFI = .90, NFI = .87 and RMSEA = .08. The validity indices of Normed Fit Index (NFI), Incremental Fit Index (IFI) and the Comparative Fit Index (CFI) are in acceptable range. Moreover, the value of Root Mean Square Error of Approximation (RMSEA) for the model is also in acceptable range.

It is indicated by the Figure 1 that all the items of social media addiction scale have adequate factor loadings. Hence no covariances were included.

Table 6 illustrates the model fit indices of the scale of FOMO. Model 1 represents the fit indices for default model with $\chi^2 \, df = 35$ is with the value of CFI = .68, IFI = .69, NFI = 65. and RMSEA = .12, except RMSEA all values of model were out of desired limit.

Model 2 exhibits the values after adding co–variances to achieve goodness of model fit. The validity indices of Normed Fit Index (NFI), Incremental Fit Index (IFI) and the Comparative Fit Index (CFI) in Model 2 are in acceptable range. Moreover, the value of Root Mean Square Error of Approximation (RMSEA) for the model is also in acceptable range, which are below .06.

It is indicated by the Figure 2 that all the items of social media addiction scale have adequate factor loadings after addition of co–variances.

Table 7 illustrates the model fit indices of the scale of PWB. Model 1 represents the fit indices for default model with $\chi^2 \, df = 20$ is with the value of CFI = .92, IFI = .92, NFI = .90 and RMSEA = .08. the validity indices of Normed Fit Index (NFI), Incremental Fit Index (IFI) and the Comparative Fit Index (CFI) are in acceptable range. Moreover, the value of Root Mean Square Error of Approximation (RMSEA) for the model is also in acceptable range.

It is indicated by the Figure 3 that all the items of social media addiction scale have adequate factor loadings. Hence no covariances were included.

DISCUSSION

Significant changes have recently occurred because of the expansion of the internet, specifically about social networking sites and the users of these sites. According to the

Table 1 – Descriptives and frequency distribution of demographics (N = 400)

Demographics			*Min*	*Max*	*M*		*SD*
Age			18	24	20.68		1.67

Demographics	*f*	*%*	Demographics		*f*	*%*
Gender			Felt isolated from family & friends			
Male	202	50.5	Rarely		94	23.5
Female	198	49.5	Very rarely		94	23.5
Family system			Sometimes		126	31.5
Nuclear	246	61.5	Often		48	12
Joint	154	38.5	Very often		38	9.5
Education			Disturbed sleep cycle			
BS	367	91.8	Rarely		64	16
MS	33	8.3	Very rarely		55	13.8
Father employment status			Sometimes		151	37.8
Working	315	78.8	Often		70	17.5
Non−working	85	21.3	Very often		60	15
Mother employment status			Apps used on daily basis			
Working	57	14.2	Instagram		94	23.5
Non−working	343	85.8	Snapchat		23	5.8
Time spent on SM			WhatsApp		239	59.8
One hour	42	10.5	Facebook		31	7.8
Few hour	249	62.3	Twitter		13	3.3
All day	74	18.5				
All night	35	8.8				
Skip meals because of SM						
Rarely	122	30.5				
Very rarely	102	25.5				
Sometimes	112	28				
Often	32	8				
Very often	32	8				

Legenda. f = frequency; SM = Social media; BS = Bachelor of science; MS = Master of science.

Table 2 – Descriptive statistics of study variables (N = 400)

Variables	k	α	M	SD	Skewness	Kurtosis	Range Actual	Range Potential
SMA	6	.641	15.73	4.26	.263	−.125	6–30	6–30
FOMO	10	.728	27.44	6.98	.307	−.001	10–50	10–50
PWB	8	.804	38.68	9.80	−.855	.229	9–56	8–56

Legenda. SMA = Social media addiction; FOMO = Fear of missing out; PWB = Psychological well–being.

Table 3 – Correlation analysis social media addiction, fear of missing out and psychological well–being among young adults (N = 400)

Variables	1	2	3
1. SMA	—		
2. FOMO	.068	—	
3. PWB	.060	.138*	—

Legenda. SMA = Social media addiction; FOMO = Fear of missing out; PWB = Psychological well–being.
* $p<.05$

Table 4 – *t*–test of gender based comparison for social media addiction, fear of missing out and psychological well–being among young adults (N = 400)

Variable	Male (n = 202) M (SD)	Female (n = 198) M (SD)	t	p	95% CI LL	95% CI UL	Cohen's d
SMA	15.67(4.03)	15.50(4.30)	.415	.678	.647	.993	.040
FOMO	27.11(6.69)	27.88(7.29)	−1.100	.272	−2.14	.606	.110
PWB	37.51(10.02)	39.64(9.62)	−2.164	.031	−4.05	−.194	.216

Legenda. CI = confidence interval; LL = lower limit; UL = upper limit; SMA = Social media addiction; FOMO = Fear of missing out; PWB = Psychological well–being.

Table 5 – Fit indices of SMA (N = 400)

Scale	χ^2	df	CMIN/df	IFI	NFI	CFI	RMSEA
Model 1	18	9	35.27	.90	.87	.90	.08

Legenda. df = degree of freedom; IFI = Incremental Fit Index; NFI = Normed Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation.

Note. Model 1: default Model of SMA.
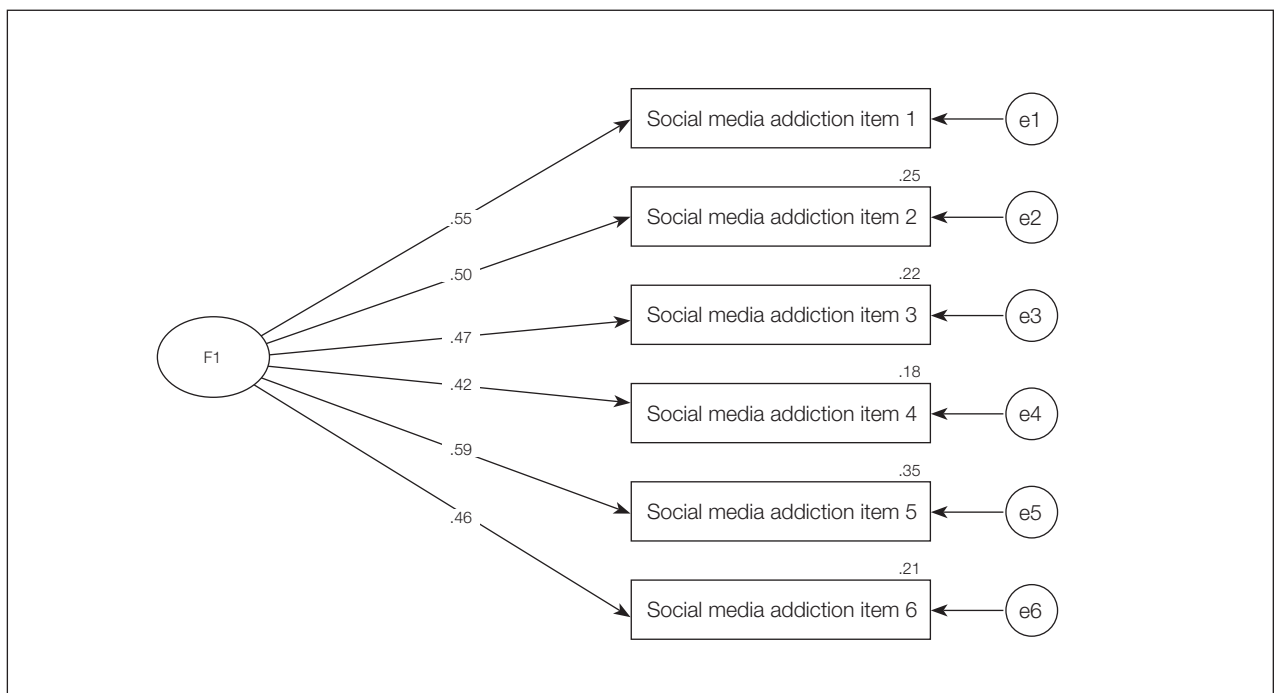
Figure 1 – Figure representing graphical summary of model

Table 6 – Fit indices of FOMO (N = 400)

Scale	χ^2	df	CMIN/df	IFI	NFI	CFI	RMSEA
Model 1	30	35	244.67	.69	.65	.68	.12
Model 2	32	33	85.24	.92	.88	.92	.06

Legenda. df = degree of freedom; IFI = Incremental Fit Index; NFI = Normed Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation.

Note. Model 1: default Model of FOMO; Model 2: Model 1 after adding covariances.

Figure 2 – Figure representing graphical summary of model
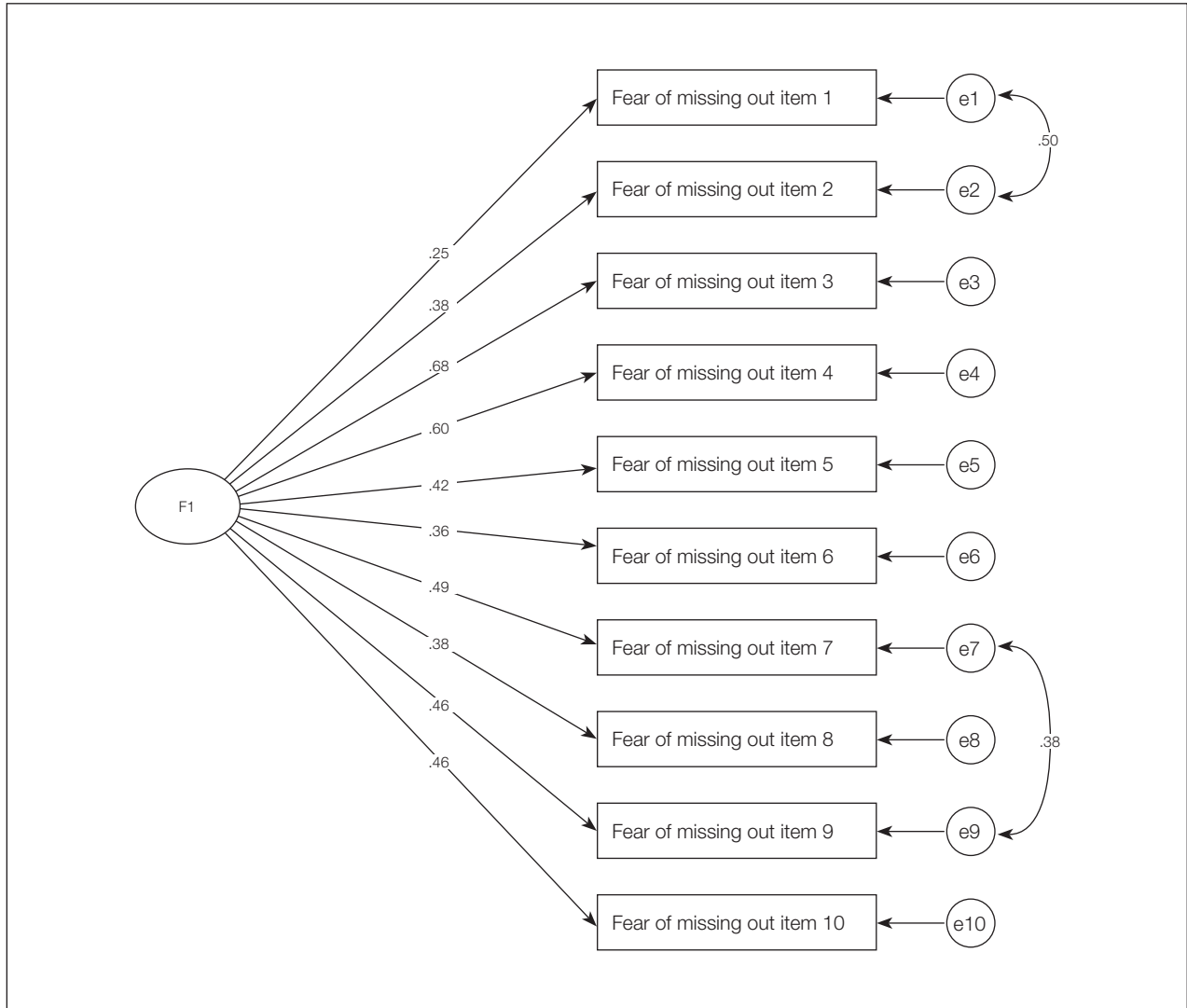
websites and applications, a wide range of users are now able to communicate globally while also sharing ideas, beliefs, content, feelings, beliefs, social, educational, and personal experiences (Alahmar, 2016). Telegram, Twitter, Instagram, Facebook, WhatsApp, and Skype are among the most used and well–liked virtual social networks (Ebrahimpour et al., 2016; Guedes et al., 2016; Moraitis & Zegeye, 2016; Turner & Lefevre, 2017). This study, which was conducted in recognition of the use and growth of social media, sought to determine the relationship between social media addiction,

FOMO, and psychological well–being among young adults as well as gender differences in psychological well–being.

General demographic data was gathered from the participants as well as information on the significance of specific demographic characteristics pertinent to the study. Calculations were made using descriptive measurement for demographic scales and covariates. The findings demonstrated that all variable scores fall between the skewness and kurtosis range, or –2 to +2. Social media addiction, FOMO, and psychological well–being all had alpha reliability values of
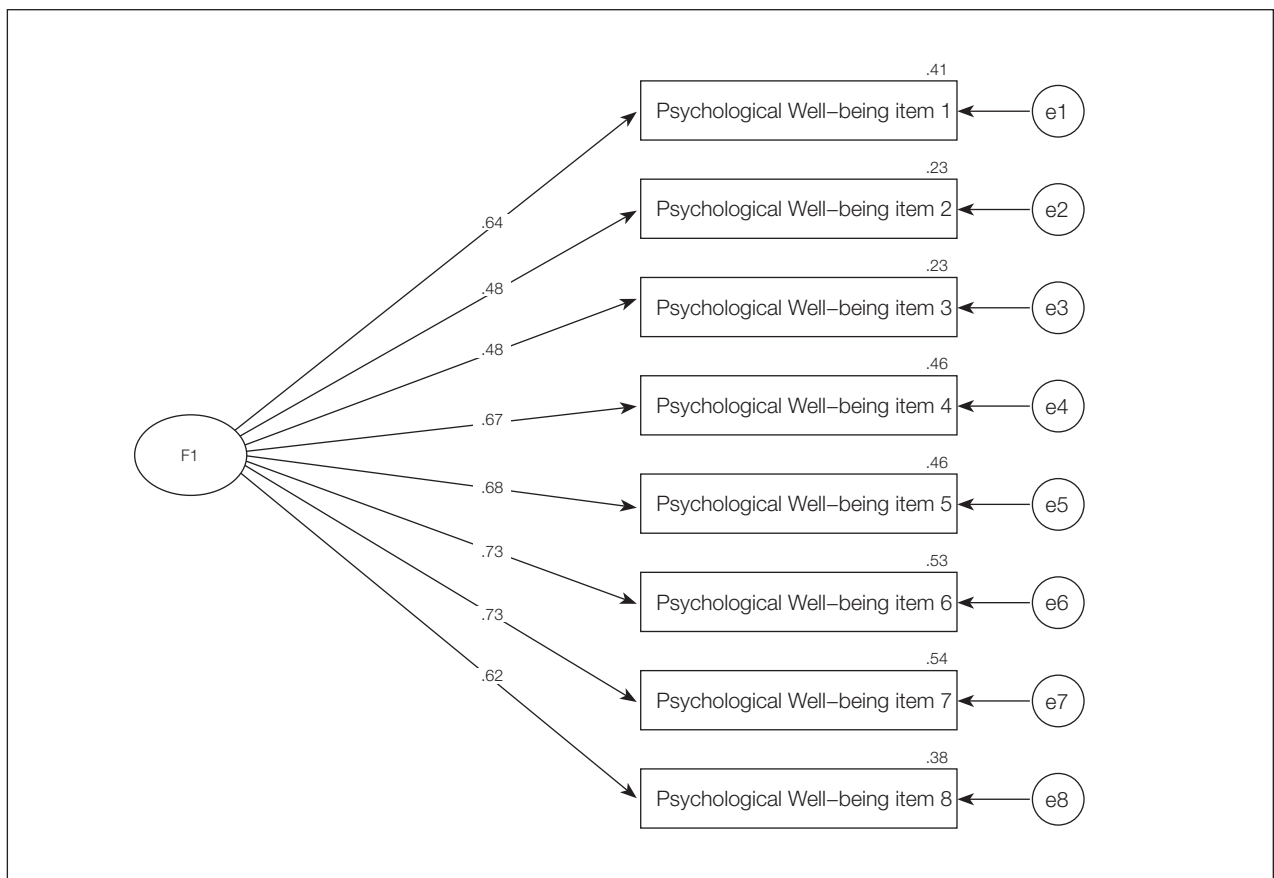
Table 7 – Fit indices of PWB (N = 400)

Scale	χ^2	*df*	CMIN/*df*	IFI	NFI	CFI	RMSEA
Model 1	24	20	96.51	.92	.90	.92	.08

Legenda. df = degree of freedom; IFI = Incremental Fit Index; NFI = Normed Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation.

Note. Model 1: default Model of PWB.

Figure 3 – Figure representing graphical summary of model

.64, .72, and .80, respectively, indicating acceptable ranges for the scales' reliability.

Our findings demonstrated a positive relationship between young adults psychological wellness, social media addiction, and FOMO. It was hypothesised that the three variables – social media addiction, FOMO, and psychological well–being – have a negative association with one another. Our study's results are consistent with previous research suggesting that social networking sites may help boost self–esteem and a sense of belongingness, which may have a positive or indirect effect on psychological well–being thus explaining that more use of social networking sites helps in enhancing psychological well–being. Much of the previous studies shows negative correlations, making our findings unique (Best, Manktelow & Taylor, 2014). The association between the studied variables has been demonstrated to exist in both positive and negative directions in prior studies. Although a significant number of studies have shown a link between social media addiction and psychological health, other studies have shown a favorable relationship between certain of the variables, including, Pang (2018) examined the use of social networking sites among Chinese students living in Germany and discovered that it had good effects on social capital, which was then positively correlated with psychological well–being. In their analysis of data from 266 participants, Bano and colleagues (Bano, Cisheng, Khan & Khan, 2019) showed that WhatsApp use had good impacts on social capital forms and that social capital had favorable effects on psychological well–being, placing particular emphasis on the function of social integration in mediating these positive effects.

Second, contrary to our second hypothesis that fear of missing out would be negatively correlated with young adults' psychological wellness, the results of this study indicate that fear of missing out is highly correlated with young adults' psychological well–being. Our second hypothesis was disproved by these observations (see Table 3). The current study's findings are supported by prior research that examined the relationship between psychological well–being and fear of missing out in young adults. This research found that there is a direct positive relationship between fear of missing out and psychological well–being. Some research suggests a positive relationship between fear of missing out and psychological well–being, while others suggest a negative relationship between online social media weariness and psychological well–being. The findings of a study on

compulsive use, FOMO, exhaustion, anxiety, and depression revealed that FOMO had a positive impact on psychological well–being (Dhir, Yossatorn, Kaur & Chen, 2018).

The *t*–test was used to assess gender differences. We predicted that there would be a sizable gender gap in young adults' psychological health. Our idea is supported by the study's findings. According to the current study's findings, there is a statistically significant difference between the psychological well–being of male and female young adults. These findings are consistent with earlier research that looked at the psychological well–being of male and female young adults (Akhter, 2015). In line with this, Shafiq and colleagues (Shafiq, Naz & Yousaf, 2015) found a substantial difference in the psychological well–being of both the male and female groups in their investigation of the gender disparities between assertiveness and psychological well–being among young adults.

Confirmatory factor analysis (CFA)

To confirm the structure of *Social Media Addiction Scale*, *Fear of Missing Out Scale*, and *Psychological Well–Being Scale* on current study's population, CFA was performed. The CFA analysis was conducted to assess the model fit of the measurement model for all scales used in the study. According to the analysis, the only scale that needed to be modified by adding covariances was the fear of missing out. The analysis for *Social Media Addiction Scale a*nd *Psychological Well–Being Scale* yielded a non–significant chi–square value indicating a good fit to the data. Additionally, the Comparative Fit Index (CFI), Normed Fit Index (NFI), Incremental Fit Index (IFI), the Root Mean Square Error of Approximation (RMSEA), all of which are indicative of a good model fit. These results confirm the validity of the measurement model for the scale used in the study.

CFA for FOMO indicates the initial model fit (Model 1) to be below the desirable bounds for most indices, except for the RMSEA value. However, the validity indices, such as NFI, IFI, and CFI, improved and were within acceptable ranges after adding co–variances to get a better model fit (Model 2). Furthermore, Model 2's RMSEA value was below the suggested cut–off of .06, suggesting a satisfactory fit. These results imply that the updated model more accurately captures the data and validates the reliability of the FOMO scale employed in the investigation.

CONCLUSION

According to current research, social media addiction and FOMO are positively correlated with young adults' psychological well–being. Research has shown that young adults who experience more fear of missing out will have better psychological well–being. This means that young adults who experience more fear of missing out will have better well–being overall.

Limitations and suggestions

Despite how useful these results are, it's vital to remember that the current study has some restrictions. First off, the data lacks diversity because it was only gathered from three institutions of Islamabad, Rawalpindi, and Wah Cantt. As a result, the findings might vary if the data had been gathered from more universities. In the future, data should be gathered from as many regions of the nation as possible to produce outcomes that are rich and varied.

The data collection strategy employed in this investigation was quantitative. Future studies are advised to gather data in a qualitative manner as well to thoroughly explore the study variables. Additionally, the influence of social media addiction and FOMO on future psychological well–being as well as its effects on personal relationships and quality of life can be explored in this research.

Purposive sampling technique was utilized in the current study, but other sampling methods may be used in the future to ensure that the sample is more representative of the population. The study's cross–sectional design, which inhibits the drawing of causal inferences and foretells the evaluation of the directionality of the underlying link, is one of its weaknesses. To address this restriction, an experimental and longitudinal research design should be used to evaluate the causal impacts.

The current study only considers those between the ages of 18 and 24; as a result, it is unable to identify any additional age groups that have access to mobile devices and social media profiles. It is advised that future research determines the prevalence of social media addiction and its impact on various age groups.

Implications of the study

It reveals that depending on demographic parameters social media addiction and the fear of missing out (FOMO) might have a variety of effects on the psychological well–being of young adults in Pakistan. This knowledge is crucial for customizing interventions and assistance programs to meet the specific requirements of various student groups. Second, the findings may help Pakistani educational institutions and politicians understand the possible dangers of excessive social media use, highlighting the significance of encouraging young adults to develop healthy digital habits. Lastly, by providing a more thorough understanding of how these variables interact in the context of higher education in Pakistan, our research adds to the body of knowledge on the intersection of technology, mental health, and demographics.

References

AKHTER, S. (2015). Psychological well–being in student of gender difference. *International Journal of Indian Psychology*, *2* (4). doi: 10.25215/0204.040

ALAHMAR, A.T. (2016). The impact of social media on the academic performance of second year medical students at College of Medicine, University of Babylon, Iraq. *Journal of Medical & Allied Sciences*, *6* (2), 77.

ALI, A., MALIK, A.S., & MALIK, M.N. (2022). Examining the impact of cultural factors on social media usage and well–being in Pakistan. *International Journal of Environmental Research and Public Health*, *19* (3), 2141.

ANDREASSEN, C.S., BILLIEUX, J., GRIFFITHS, M.D., KUSS, D.J., DEMETROVICS, Z., & MAZZONI, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychotic disorders: A Large–scale cross–sectional study. *Psychology of Addictive behaviours*, *30* (2), 252.

ANDREASSEN, C.S, TORSHEIM, T., BRUNBORG, G.S., & PALLESEN, S. (2012). Development of a Facebook addiction scale. *Psychological Reports*, *110* (2), 501–517.

AZKA, F., FIRDAUS, D.F., & KURNIADEWI, E. (2018). Kecemasan sosial dan ketergantungan media sosial pada mahasiswa. *PSYMPATHIC*: *Jurnal Ilmiah Psikologi, 5* (2), 201–210.

BADENES–RIBERA, L., FABRIS, M.A., GASTALDI, F.G.M., PRINO, L.E., & LONGOBARDI, C. (2019). Parent and peer attachment as predictors of Facebook addiction symptoms in different developmental stages (early adolescents and adolescents). *Addictive Behaviours, 95*, 226–232.

BANO, S., CISHENG, W., KHAN, A.N., & KHAN, N.A. (2019). WhatsApp use and student's psychological well–being: Role of social capital and social integration. *Children and Youth Services Review*, *103*, 200–208.

BARKER, V. (2009). Older adolescents' motivations for social network site use: The influence of gender, group identity, and collective self–esteem. *Cyberpsychology & Behaviour*, *12* (2), 209–213.

BEST, P., MANKTELOW, R., & TAYLOR, B. (2014). Online communication, social media and adolescent well–being: A systematic narrative review. *Children and Youth Services Review*, *41*, 27–36.

BEYENS, I., FRISON, E., & EGGERMONT, S. (2016). 'I don't want to miss a thing': Adolescents' fear of missing out and its relationship to adolescents' social needs, Facebook use, and Facebook related stress. *Computers in Human behaviour*, *64*, 1–8.

BURKE, M., MARLOW, C., & LENTO, T. (2010). Social network activity and social well– being. *Postgraduate Medical Journal*, *86*, 455–459.

BUSALIM, A.H., MASROM, M., & ZAKARIA, W.N.B.W. (2019). The impact of Facebook addiction and self–esteem on students' academic performance: A multi–group analysis. *Computers & Education*, *142*, 103651.

CHAFFEY, D. (2022). *Global social media statistics research summary 2022*. Smart Insights.

CHENG, C., LAU, Y.C., & LUK, J.W. (2020). Social capital–accrual, escape–from–self, and time–displacement effects of internet use during the COVID–19 stay–at–home period: Prospective, quantitative survey study. *Journal of Medical Internet Research*, *22* (12), e22740.

DHARMARAJ, S. (2022). *Vietnam targets 85% smartphone usage by 2022–end*. OPEN GOV 2022.

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.

DIENER, E., WIRTZ, D., TOV, W., KIM–PRIETO, C., CHOI, D., OISHI, S., & BISWAS–DIENER, R. (2009). New measures of well–being: Flourishing and positive and negative feelings. *Social Indicators Research*, *39,* 247–266.

D'SOUZA, L., & HEMAMALINI, M.J. (2018). Instagram addiction and depression among college students. *The International Journal of Indian Psychology, 6* (4), 96–102.

EBRAHIMPOUR, A., RAJABALI, F., YAZDANFAR, F., AZARBAD, R., NODEH, M. R., SIAMIAN, H., & VAHEDI, M. (2016). Social network sites as educational factors. *Acta Informatica Medica*, *24* (2), 134.

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.

GUEDES, E., SANCASSIANI, F., CARTA, M.G., CAMPOS, C., MACHADO, S., KING, A.L.S., & NARDI, A.E. (2016). Internet addiction and excessive social networks use: What about Facebook? *Clinical Practice and Epidemiology in Mental Health, 12*, 43.

HUPPERT, F.A. (2009). Psychological wellbeing: Evidence regarding its causes and consequences. *Applied Psychology: Health and Well–Being, 1* (2), 137–164.

KEMP, S. (Ed.) (2017). *Digital in 2017: Global overview*. We are social & Hootsuite.

KEMP, S. (Ed.) (2022). *Digital 2022: Pakistan*. We are social & Hootsuite.

LAI, M.−L., TSAI, M.−J., YANG, F.−Y., HSU, C.−Y., LIU, T.−C., LEE, S.W.−Y., LEE, M.−H., CHIOU, G.−L., LIANG, J.−C., & TSAI, C.−C. (2013). A review of using eye−tracking technology in exploring learning from 2000 to 2012. *Educational Research Review*, *10*, 90−115.

LENHART, A. (2015). *Teens, social media, and technology overview*. Washington DC: Pew Internet & American Life Project.

MARENGO, D., FABRIS, M.A., LONGOBARDI, C., & SETTANNI, M. (2022). Smartphone and social media use contributed to individual tendencies towards social media addiction in Italian adolescents during the COVID−19 pandemic. *Addictive Behaviours*, *126*, 107204.

MARENGO, D., LONGOBARDI, C., FABRIS, M.A., & SETTANNI, M. (2018). Highly visual social media and internalizing symptoms in adolescence: The mediating role of body image concerns. *Computers in Human Behaviour*, *82*, 63−69.

MARINO, C., GINI, G., & VIENO, A. (2022). Problematic social media use and mental health in university students: A systematic review. *Journal of Applied Developmental Psychology*, *80*, 101176.

MONTAG, C., BAUMEISTER, H., KANNEN, C., SARIYSKA, R., MEßNER, E.M., BRAND, M., & SCHIVINSKI, B. (2022). Individual differences in problematic use of the Internet and its relationship with social media addiction and demographic factors. *Addictive Behaviours*, *123*, 107329.

MORAITIS, I., & ZEGEYE, M.I. (2016). Expanding the use of Twitter for medical education. *Medical Education Online*, *21* (1), 33010.

OBERST, U., RENAU, V., CHAMARRO, A., & CARBONELL, X. (2016). Gender stereotypes in Facebook profiles: Are women more female online? *Computers in Human Behaviour*, *60*, 559−564.

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.

PANG, H. (2018). Exploring the beneficial effects of social networking site use on Chinese students' perceptions of social capital and psychological well−being in Germany. *International Journal of Intercultural Relations*, *67*, 1−11.

POUSHTER, J., BISHOP, C., & CHWE, H. (2018). *Social media use continues to rise in developing countries but plateaus across developed ones*. Pew Global Center.

PRZYBYLSKI, A.K., MURAYAMA, K., DEHAAN, C.R., & GLADWELL, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behaviour*,

29 (4), 1841−1848.

RIDEOUT, V., & ROBB, M.B. (2018). *Social media, social life: Teens reveal their experiences*. San Francisco, CA: Common Sense Media.

ROYAL SOCIETY FOR PUBLIC HEALTH (2017). *Status of mind: Social media and young people's mental health and wellbeing*. RSPH.

RYAN, R.M., & DECI, E.L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well−being. *Annual Review of Psychology*, *52*, 141−166.

RYFF, C.D. (1989) Happiness is everything, or is it? Explorations on the meaning of psychological well−being. *Journal of Personality and Social Psychology*, *57* (6), 1069.

RYFF, C.D. (1995). Psychological well−being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics, 83*, 10−28.

RYFF, C.D., & KEYES, C.L. (1995). The structure of psychological well−being revisited. *Journal of Personality and Social Psychology, 69* (4), 719−727.

RYFF, C.D., & SINGER, B. (2000). Interpersonal flourishing: A positive health agenda for the new millennium. *Personality and Social Psychology Review, 4*, 30−44.

SANTOR, D.M. (2000). Measuring peer pressure, popularity, and conformity in adolescent boys and girls: Predicting school performance, sexual attitudes, and substance abuse. *Journal of Youth and Adolescence*, 29 (2), 163−182.

SETTANNI, M., MARENGO, D., FABRIS, M.A., & LONGOBARDI, C. (2018). The interplay between ADHD symptoms and time perspective in addictive social media use: A study on adolescent Facebook users. *Children and Youth Services Review*, *89*, 165−170.

SHAFIQ, S., NAZ, R.A., & YOUSAF, B. (2015). Gender differences between assertiveness and psychological well−being among university students. *Educational Research International*, *4* (2), 87−95.

SHAPIRO, L.A.S., & MARGOLIN, G. (2013). Growing up wired: Social networking sites and adolescent psychosocial development. *Clinical Child and Family Psychology Review*, *17* (1), 1−18.

SUGIHARTO, B.A. (2016). *Pengguna internet Indonesia didominasi anak muda*. CNN Indonesia.

TANDON, A., DHIR, A., ALMUGREN, I., ALNEMER, G.N., & MÄNTYMÄKI, M. (2021). Fear of missing out (FOMO) among social media users: A systematic literature review, synthesis and framework for future research. *Internet Research*.

TURNER, P.G., & LEFEVRE, C.E. (2017). Instagram use is linked to increased symptoms of orthorexia nervosa. *Eating and Weight*

Disorders−Studies on Anorexia, Bulimia and Obesity, *22* (2), 277−284.

TWENGE, J.M., MARTIN, G.N., & CAMPBELL, W.K. (2018). Decreases in psychological well− being among American adolescent rafter 2012 and links to screen time during the rise of smartphone technology. *Emotion*, *18* (6), 765−780.

YOON, S., WEE, S., LEE, V.S., LIN, J., & THUMBOO, J. (2021). Patterns of use and perceived value of social media for population health among population health stakeholders: A cross−sectional web−based survey. *BMC Public Health, 21* (1), 1−9.