# Digital Media and Psychological Well-being among Youth

Ni Putu Adelia Kesumaningsari<sup>1</sup>, Cindy Claudia Soen<sup>1</sup>, Made Arisudana<sup>1</sup>, Zeng Xiangjun<sup>2</sup>, Jia

Zhenguo<sup>3</sup>

<sup>1</sup>Faculty of Psychology, Universitas Surabaya <sup>2</sup>Department of Psychology and Social Sciences, Zhejiang University, China <sup>3</sup>Henan Institute of Technology and Science, China

Keywords: Digital media, compulsive internet use, psychological well-being

Abstract: Most of the previous research has been noting that daily screen time has several negative consequences among youth for instance foster loneliness and displace other well-being activities, such as sports or social activities. Meanwhile, media use also gives positive influences such as fulfil the needs for autonomy, competence, and relatedness or relieving stress and daily hassles. Like the flip of a coin, media may serves both positive and negative impacts into psychological health. Recent research has documented a rapid increase in the use of new technologies such as touchscreen or tablets on mental health issues, however little of the research shown the empirical evidence about its relation to the foremost psychological well-being (PWB) concept. Using data from 147 youth, we analyse the association between digital media use and PWB in a sample of 16 to 24-year-old Indonesian. The digital media use was examined from the screen activities duration and the compulsiveness of internet use. Our analysis shows that screen-time duration and compulsive internet use does not significantly associate with low lever of PWB, respectively. However, the current research found the associations between compulsive internet use and self-acceptance, one of the PWB dimension. Additionally, the finding suggests the presence of gender differences concerning the extent of media use. To sum up, the current findings can be explained as the variation of the possible effect of media on psychological risk in Indonesian Youth.

#### SCIENCE AND TECHNOLOGY PUBLICATIONS

## **1 INTRODUCTION**

In the past decade, the Internet has proliferated vigorously as a communication medium in any age group. A global increase in internet users around the globe (We Are Social, 2018). Moreover, owning screen technologies such as smartphone or tablet are getting more accessible nowadays. Indonesia listed as the top 3 countries with the most significant smartphone sales in the Asia-Pacific region. (Indonesia Investment, 2016). The high numbers of huge sales give an overview that digital media has been an integral part of social life, moreover, since the internet is getting more accessible. Youth (age 18-24) was reported as the most significant population engaged with social media, providing compelling evidence that the group of late adolescents and early adulthood are the largest consumers of digital media (We Are Social, 2018).

Generally speaking, media have come to play an essential role in how the young generation acquire information, connect with friends and family, and enjoy entertainment (Sun and Subrahanyam, 2017). In Indonesia, the use of internet in young generation was triggered by three principal reasons, i.e. information searching (80.2 per cent), seeking friendship (78.6 per cent), and entertainment or recreation (73.3 per cent). Only around one quarter (25.6 per cent) access the Internet for escapism of self, while 17.6 per cent for educational reason, and just 12.6 per cent for self-protection (Kemkominfo, 2015).

The research field of the psychological effects of media in young generation is growing importance and was more confounded more by the concern of unintended effects instead of its positive side (Reinecke and Oliver, 2017). It has been said that media bridges the fulfilment of developmental tasks among adolescents, for instance fulfilling the needs of autonomy, competence, relatedness (Tamborini, et al., 2011). Moroever, internet use would be beneficial for enhancing social relation as it help to

#### 554

Kesumaningsari, N., Soen, C., Arisudana, M., Xiangjun, Z. and Zhenguo, J.

Digital Media and Psychological Well-being among Youth.

DOI: 10.5220/0008592005540563

Copyright © 2020 by SCITEPRESS - Science and Technology Publications, Lda. All rights reserved

In Proceedings of the 3rd International Conference on Psychology in Health, Educational, Social, and Organizational Settings (ICP-HESOS 2018) - Improving Mental Health and Harmony in Global Community, pages 554-563 ISBN: 978-989-758-435-0

create more social connections with new friends, maintain and expand social resources, and also gain social support (Trepte, Dienlin and Reinecke, 2015).

Apart from the positive effects, daily internet use also has several negative consequences. Research in adolescents suggested that the daily internet and computer use foster loneliness and displaces other well-being activities, such as sports or social activities (Vandelanotte, et al., 2009). Another research about daily internet use in 7888 Dutch adolescence in 2009 suggested that use of the internet was indirectly related to loneliness, low selfesteem, and depressive moods (Van der Aa, et al., 2009). Furthermore, a more recent study indicating that as the internet use increases it leads to low level of self-esteem and happiness, however increasing the possibility of loneliness among adolescence (Bozoglan, Demirer and Sahin, 2013; Muusses, et al., 2014). The evidence available seems to suggest that the use of internet contributes to lowering the well-being among young generation.

The cause of adverse effects on internet use may also depend on the activity that adolescence spent, i.e. watching movies through internet, playing video games, using social media, searching for information, or another entertainment activity. The different purposes of Internet usage would result in a different condition of psychological well-being (Zhu, et al., 2005). For example, longitudinal research about online communication channel suggesting that virtual communication was related to the poor mental health condition in adolescences. The activities which positively associated with poor mental health was the use of instant messenger apps since it contributes to depression and loneliness in adolescences after six months intensive using (van den Eijnden, et al., 2008). Another research also finds that private information published on media social like Twitter or Facebook seemingly reach unexpected audiences, causing conflicts with family, friends, and employers (Vitak, 2012).

In many case, the use of internet is hard to control. The users become so involved with certain applications or content of the internet that they are no longer able to control their online activity. As a consequence, the inability to control the engagement on internet has turned into compulsive internet use symptom (Chou and Hsiao, 2000), which in another literature also referred to internet addiction (Young, 1998). Accordingly, a compulsive internet users will exhibit the compulsivity of behaviour characterized by (a) experiencing unpleasant emotions when Internet use is impossible, (b) fall to cut down the internet use despite having desire to do so, (c) using internet to escape from negative feelings, (d) the intention to use the internet dominates one's cognitions and behaviours, and (e) resulting conflict with others or self-conflict due to the internet use (Meerkerk, et al., 2008).

The compulsive internet use becomes so vulnerable for the young generation since screenbased media occupy a considerable portion of young peoples' discretionary leisure time. Van der Aa, et al. (2009) suggested that compulsive internet use mediated the effects of daily internet use and adolescence well-being. Therefore, the effects of the internet on well-being could be examined from two things. First is by daily internet use (time devoted to internet screen-based activity) and secondly is the compulsivity of internet usage.

From the research currently available, it seems fair to suggest the engagement on internet screenbased activities contributes to young generation personal well-being. The widespread availability, acceptance, and explosive growth of internet activities by youth make it essential to examine this topic. However, past research has used inconsistent measures of psychological well-being. Most of the research available is measuring well-being in term of subjective well-being such as happiness, loneliness, self-esteem, depression, and stress (Bozoglan, Demirer and Sahin, 2013; Muusses, et al., 2014). Therefore, very few aspects of psychological wellbeing have been assessed. As a consequence, it is hard to compare the equivalence of findings of the effects of the internet to psychological well-being since the different measurement means a different explanation of research findings of the psychological well-being among youth which affected by the internet.

Finally, despite its growing importance, the effect of media use on well-being is still robust. None of the research available has demonstrated the empirical evidence of the connection between media use and psychological well-being and also the direction of the influence, although it is clear that digital media use are related to youth well-being (Reinecke and Oliver, 2017). Hence, the current research attempts to examine the relation of internet screen-based activities and psychological well-being according to Ryff's Psychological Well-Being concept.

To sum up, this research is expected to be a source of reference for the development of psychological sciences, especially in *Cyber psychology* and to enrich the understanding of internet use with regard to psychological well-being among youth in Indonesia. The current research

addressed the adolescents aged 16-24 (in this research we use terminology "youth") to see the association between digital media and psychological well-being. The relationship direction was also examined.

## **2** LITERATURE REVIEW

### 2.1 Digital Media Use

Digital media is defined as products and services that come from many sources such as media and entertainment (World Economic Forum, 2016). It consists of a digital platform (e.g., blogs and applications), digitised (e.g., audio, video, text, and images) and services (e.g., information, entertainment, and communication). Various digital devices can be used to access all of these digital platforms.

In this research, digital media use is focused to internet-based screen-activities that are frequently done by adolescence either weekday or weekend, which in principle are the activities spent on the Internet such as : (1) Video or movie streaming (2) Playing video games, (3) Using social media, (4) Internet browsing, and (5) Leisure activities like reading online book or music streaming.

# 2.2 Compulsive Internet Use

People with excessive Internet use and lack control of it classified as Internet addiction or also known as Compulsive Internet Use (Meerkerk, Van Den Eijnden and Vermulst, 2009). Compulsive Internet use has been explained by basic criteria such as (a) one experiences undesirable feeling when Internet use is not available, (b) one continues Internet use even there is intention to stop, (c) one uses Internet to flight from negative emotions, (d) Internet use monopolizes one's cognitions and behaviours, (e) Internet use cause conflict either with others or selfconflict (Meerkerk, Van Den Eijnden and Vermulst, 2009).

## 2.3 Psychological Well-Being

Psychological well-being is a psychology concept that was born from Aristoteles writing which known as Nichomachean Ethics. In Nichomachean Ethics Aristoteles reveals that the highest of all human achievement is "eudaemonia" (Ryff and Singer, 2006). Eudaemonia is one of the paradigms that focused on functioning individual self to develop

556

and actualising individual purposes. So that individual can sense the peace and grateful for life.

eudaemonia, Based on Ryff formed Psychological well-being concept in 1989 (Ryff and Singer, 2006). Ryff divide psychological well-being into 6 dimension which is, (1) purpose in life, individual felt their lives has meaning, purpose, and direction, (2) Autonomy, individual viewed themselves to be living in accord with their personal beliefs, (3) personal growth, continued development of self, making use of their personal talents and potential, (4) environmental mastery, how good their ability to adapt to life situation, (5) positive relationships, the depth of relation they had with others, (6) self-acceptance, the knowledge and acceptance they had in themselves, including bad qualities and limitations. Merge, all of this dimensions symbolised notable contrast to extant indicators focused on feeling good, happy, confident, or satisfied with life (Ryff, 2014).

## **3 METHOD**

#### 3.1 Participants

The current research had been addressed to typical adolescence aged 16-24 who engaged with digital media daily and has never been diagnosed with any disorder. The adolescence must be an internet user; hence the data collection should be done through an online questionnaire. The internet usage is not limited to electronic equipment such as a smartphone, tablet, portable computer, or even a computer with internet connection. At this time, of the 147 youth participate in the study, consisted of 87 female (59.2%) and 60 male (40.8%). The participants had an average age of 19 from age range 16 - 24 years (SD = 1.837).

#### 3.2 Procedure

All of the scales computed into the online software program, namely Google Forms, based on the original validated versions. The questionnaires compiled into one long survey and distributed to the adolescence on designated age group as an online link. The description of the study, requirement, and instruction was created. On the first page of the survey along with the confirmation button for adolescence as an agreeing to participate in the study. By clicking the survey link, adolescence will be asked to answer the entire question. Preliminary requirements before granting access to the survey were: (1) who never diagnosed with any disorder, (2) operate digital media intensively, and (3) agree to participate in the study.

#### 3.3 Instrumentation

The participants completed a demographic and history form designed for the study to provide information about the age, educational background, province origin, diagnostic information, and general information about the duration of media use. Three measurement scales will be used in this research to examine the aim of the research, Digital Media Use Survey, Compulsive Internet Use, and Psychological Well-Being.

Digital Media Use Survey. In particular, the contain of digital media use survey is adopting the media survey by Mazurek and Wenstrup (2013) which ask about the general duration spent on media based on outside school activities during weekday and weekend such as "reading for pleasure," "doing homework/studying," "spending time with friends," "playing sports/other physical activity,", "watching TV," "playing video or computer games," and "using email, Facebook, or texting.". However, researcher does a modification by only focus to ask the adolescents about their activities on digital media during both weekday and weekend, which in principle are the activities spent on the internet such as (1) Video or movie streaming (2) Playing video games, (3) Using social media, (4) Browsing internet, and (5) Leisure activities such as reading online book or music streaming. A fivepoint rating-scale will be used to indicate the frequency of use (0) I am not doing such activities, (1) less than 1 hour, (2) 1-2 hours, (3) 2-3 hours, and (4) more than 3 hours. The five-point-rating-scale adopted the rating-scale of Lohaus, et al. (2005) in their media use survey. Consistent with previous methods (Orsmond and Kuo, 2011; Mazurek and Menstrup, 2013) an average daily use variable was created for each activity by multiplying the weekday response by 5, multiplying the weekend response by 2, and divided the sum by 7.

Compulsive Internet Use Scale (CIUS). Compulsive Internet use was assessed using the Compulsive Internet Use Scale (Meerkerk, et al., 2009). Internet compulsive use scales comprises 14 items and were aimed at adolescents asks about the frequency of internet use. The answer will be given on a 5-point scale ranging from 0, never; 1, seldom; 2, sometimes; 3, often; and 4, very often. Participants answered the scale by responding to statement like "How often.... (1) Do you find it difficult to stop using the Internet when you are online? or (2) Do you continue to use the Internet despite your intention to stop?. The scale has been showing good factorial stability across time and different samples and subsamples. The internal consistency is also high ( $\alpha = 0.90$ ), and showing good validity from the concurrent and criterion variables (Meerkerk, et al., 2009). In the present study, the internal consistency was also high and acceptable ( $\alpha = 0.87$ ).

Psychological Well-Being Scale. Ryff and Keyes (1995) constructed the Psychological Well-Being Scale consists of 6 domains including self-acceptance, positive relations with others, autonomy, environmental mastery, the purpose of life, and personal growth. The Psychological Well-Being Scale measurement is a self-reported scale presents on a 6 point Likert scale ranging from strongly disagree to strongly agree.

An individual have to decide how true each statement is for them. Higher scores on each dimension on scale indicate greater well-being, while the low scores on each dimension indicate low level of well-being. Sample item on this scale include "In general, I feel confident and positive about myself" Or "I often feel lonely because I have a few close friends with whom to share my concerns." However, the current research used the modified scale of long version psychological wellbeing scale by Ryff and Keyes (1995). The modification scale was done by Rachmayani and Ramdhani (2014). In this paper, the researcher decides to use the modified scale by Rachmayani and Ramdhani (2014) since the items on the modified scale has adjusted the cultural aspect of Indonesia and have been translated to the Indonesian language.

The modified scale consists of 30 items from the psychological well-being aspects with five likerts scales ranging from 1, extremely disagree to 5, and completely agree. Cronbach's  $\alpha$  coefficients showed high coefficients for the modified scale ( $\alpha = 0.914$ ) with item-total correlation score range from r= 0,215 to r = 0,619, suggested the modified Psychological Well-Being scale is reliable. In the current study, the internal consistency was also high and acceptable ( $\alpha = 0.89$ ).

## 4 RESULT

#### 4.1 Sample Characteristics

The current study employed quantitative research design with a correlational study. As much as 147 youths (60 males, 87 females) participated in this study, whose ages ranged from 16 to 24. The relation between the average times devoted to digital media or internet-based screen activities toward psychological well-being scores was examined. Moreover, the relation between compulsive internet use (CIU) scores toward the psychological wellbeing of youth was investigated as well. We assumed that screen-time would correlate with psychological well-being. On the same line, we also expect that CIU correlates with psychological wellbeing. Further, we expect a negative correlation, means that high screen-time among youth will be related to low psychological well-being; likewise the high CIU also will be related to low psychological well-being.

Initially, a descriptive analysis was conducted to provide information with the level CIU and PWB among the samples. In regards to CIU, most of the samples are in the low and moderate level of CIU, 40.1% (*N*=59) and 52.4% (*N*=77) respectively. Only 7.5% (*N*=11) of samples which considered as having a high level of CIU. Concerning PWB, most of the sample, as much as 57.1% (*N*=84) showed a high level of PWB, whereas the rest of the samples about 42.9% (*N*=63) was categorised the moderate level of PWB. None of the samples was categorised to the low level of PWB.

Besides the descriptive statistic for PWB and CIU, a general overview of screen-based media use habits among youth was also examined, which indicates by the average time devotes on screen-activities per day. The data suggest the highest time usage on screen-activity was for social media (M=2.81, SD=1.097), whereas the lowest was for gaming (M=1.58, SD=1.291). Some descriptive information about screen activity participation is presented in Table 1.

Table 1: The average of screen-activity participation per day among youth.

	М	SD	Screen- Time Category
Watching	2.23	1.137	1-2 hours
Gaming	1.58	1.291	1-2 hours
Browsing	2.07	1.066	1-2 hours
Social Media	2.81	1.097	2-3 hours

Another	2.07	1.206	1-2 hours
Entertainment			
[otes: N = 1/17]	•		

Notes: N = 147

Further through a bivariate correlational analysis, it was found a significant positive relationship between the average screen-time per day with CIU (r=.276, p<.05). The finding has demonstrated the current trend of high CIU as the duration of screenactivities increases. Respectively, the duration of gaming and using social media platform related to CIU. The correlation magnitude was positive, suggesting the more youth spent their time in gaming or social media activities; they tend to be more compulsive while using the internet.

In terms of the differences of the total score between genders, the significant difference was found between males and females with regard to the total score of compulsive internet use. The CIU score was significantly higher in males (M=25.02, SD=12.33) than females (M=21.17, SD=6.49), t (145) = 2.458, p < .05. Besides, the difference was also found regarding the screen activities, indicating a sex preference screen activities. Male and females spent screen activities differently, a significant difference in gaming and social media activities. In particular, the time devoted in gaming activities differ between genders t (145) = 4.379, p = .000, which the mean gaming score for males was 2.11, means on average males spent 1-2 hours per day in gaming activities, 95% CI [.491, 1.298] points higher than the females. Meanwhile, the time devoted in social media was significantly higher for females (M=2.99, SD=1.05) than males (M=2.54, SD)= 1.12), t (145) = -2.481, p < .05. According to the category, females spent 2-3 hours per day on social media on average. The complete result of the comparison test among time devoted to screenactivities based on sex present in Table 2.

Table 2 : Activity participation in youth between males and females.

	Males		Females		t-
					test
	М	SD	М	SD	
CIU	25.02	12.	21.1	6.49	2.45
		33	7		8*
PWB	113.3	12.	111.	12.0	1.14
	7	40	03	4	0
Watching	2.20	1.1	2.25	1.13	-
		5			.251
Gaming	2.11	1.3	1.22	1.15	4.37
		1			9**
Browsing	2.22	1.1	1.96	1.01	1.45
		4			8

Social Media	2.54	1.1	2.99	1.05	-
		2			2.48
					1*
Another	1.96	1.3	2.15	1.14	-
Entertainmen		0			.949
t					

Notes: N = 147

#### `\*` = p < .05, `\*\*' = p < .001

## 4.2 Bivariate Correlations between Observed Variables

According to statistical analysis, correlation coefficients for the screen-time and psychological well-being were r = .81, and r = .16 for the CIU and psychological well-being (neither was significant). After that, the relation between screen-time and CIU toward the sub-dimensions of psychological well-being were explored, aim to find if there any further relation regarding the effects of the use of digital media (indicating by the average score of daily screen-time) and psychological well-being. None of the significant correlation was found between screen-time and each of psychological well-being sub-dimensions.

Even though we did not find any correlation between screen-time and psychological well-being, we find the relation of CIU with the dimension of psychological well-being. In detail, the correlation test found that there was a small significant correlation between CIU and one of psychological well-being dimension, that is self-acceptance (r = -0.165, p < 0.05). The magnitude of the correlation was negative, which indicates that high compulsive internet use related to low level of self-acceptance among youth. However, the small correlation implies that the contribution of CIU might small on the psychological well-being score, but still it was meaningful. Besides, the current research did not find any significant correlation among CIU and others psychological dimension remained such as autonomy, environmental mastery, personal growth, positive relations, or purpose in life (p > 0.05). See Table 3 and 4 for the complete result of the correlation test among variables.

Table 3: Correlation between screen time and its component with PWB.

Screen time	Variable		
	r	Р	
PWB	.081	.332	
Autonomy	.087	.292	
Environmental Mastery	.107	.199	
Personal Growth	.053	.524	

Positive Relations	.073	.379
Purpose in Life	.078	.345
Self acceptance	.077	.355
Notes: $N = 1/17$		

 $\frac{14}{14}$ 

"" = p < .05, "" = p < .001

Table 4: Correlation between compulsive internet use and its component with PWB.

Commulaive Internet Lice		
Compulsive Internet Use	R	Р
PWB	.158	.057
Autonomy	010	.908
Environmental Mastery	.121	.145
Personal Growth	.078	.345
Positive Relations	.155	.061
Purpose in Life	.131	.115
Self acceptance	.165*	.045

Notes: N = 147

" p < .05, "\*" = p < .001

## 5 DISCUSSION

It is worth mentioning that there is a shortage in the literature regarding the relationship between digital media use and internet use with psychological wellbeing. The current study attempts to analyse the association between digital media use and the compulsivity of internet use to psychological wellbeing in a sample of 16 to 24-year-old Indonesian. The current study examined the relationship of the independent variable on the dependent variables measured by doing a separate correlational analysis.

The youth 16-24-year-old Indonesian in the current sample were reported to spend, on average approximately almost 2 hours on each internet screen-based activities such as watching/video streaming, playing video games, internet browsing, playing social media, or another entertainment activities (listening to the streaming music, reading e-book). Therefore, the youth might spend almost 10 hours per day on varied internet screen-based activities to date.

Research also suggests that the daily amount of internet use relates to the compulsivity of internet use. In particular, people tend to be more compulsive if they spent much time on the screen using the internet (Van der Aa, et al., 2009). Correspondingly, the time spent on the internet based screen activities in the present study were consistently presenting to have a linear relationship with compulsive internet use, supporting the findings in many research that the level of compulsive internet use will increases as the preoccupation time on internet increase. The score of CIU was different between male and female 16-24 years old Indonesian. Male youth were reported to display more compulsivity than female. According to many research, CIU was reported to be more prevalent among males than females both in Eastern or Western countries (Ciarrochi, et al., 2016).

Besides, the activities which correlate significantly with the compulsive internet use in the present study was gaming and playing social media. A longitudinal study across four years in compulsive internet use by Ciarrochi, et al. (2016) has reported that traditionally males were more likely than females to engage in gaming, whereas females were more likely to engage in internet communication activities. In similar lines, the current study also suggested the presence of typical sex screenactivities, indeed was found that gaming is the screen-activities that spent more by male samples, whereas using social media was indicated as the activity spent most by females' samples, indicating the presence of typical sex screen-activities. Another interesting finding, the CIU shows significant correlation with gaming for males and social media for females. The result indicates that CIU for males related with the use of video games, whereas for females associated with the social media engagement.

With regard to psychological well-being among youth, the present study showed neither significant correlation between the time devoted on internet screen-based activities (digital media) and psychological well-being nor compulsive internet use and psychological well-being. The available evidence seems to suggest that the whole psychological well-being among youth generation in this samples were not contributed by the internet use. It contradicted with the initial assumption that psychological well-being will negatively be affected by internet usage. The finding of this current research seems inconsistent with the findings of another research which tried to investigate the screen-time and psychological well-being issues, for example, the research of Cardak (2013) or Sharma and Sharma (2018) that suggesting a positive relation between a problematic internet use (internet addiction) and psychological well-being.

The present study did not find the expected result, however indeed replicate the findings of Chen and Persson (2002) whereby also demonstrate that the internet use (defined as average time weekly spent on the internet) does not correlate with psychological well-being. There are some possibilities why the time devoted on the internet did not relate with psychological well-being as also explained by Chen and Persson (2002) regarding the finding in their research, which also in line with the finding in current study. First, it might because the average duration participants spent for each screenactivities was not more than 2 hours. It gives a conclusion that on average participants did not spend more than 19 hours using the internet-based screen activities, suggesting a reasonable amount of time online. Secondly, research has been suggested the psychological well-being is not caused by the time spent using the internet, instead affected by how an individual feels during online activities, either guilt of enjoyment which later on affecting their wellbeing (Chen and Persson, 2002).

The results of the data analysis show that the symptom of compulsive internet use for the samples is at a moderate level (M=22.74). This result means that most of the 16-24 youth in Indonesia are still able to maintain and control the usage of internet screen-based activities, hence prevent them from maladaptive internet usage. On the similar lines, the psychological well-being level of samples is at moderate to high category (M=111.99), which reflects that in general the youth in Indonesia are typically have a high level of meaning and purposes in life, and in general believe they are growing in a fully functioning person. In another words, the psychological well-being within their self is well-maintained.

Despite that, the present study did not find a significant relationship between compulsive internet use and the total score of psychological well-being. Several reasons might explain the possible reason why the expected correlation did not find. From the side of the statistical analysis, it might cause by the dispersion of the total score of CIU and PWB. In particular, the level of CIU scattered on a moderate level whereby the level of PWB also seen spread out on moderate to high level, after that affecting the tenuous correlation between variables.

Secondly, there are also research findings that should be noted to explain why in some cases psychological well-being did not determine strongly by the problematic internet use, which defined as compulsive internet use in the present study (or internet addiction in some study). For example, Nugraini and Ramdhani (2016) in their research about the excessive internet use in 206 adolescence 16-24 aged in Indonesia noted the role of individual factors to mediate the relationship between internet use and psychological well-being. Their research note that excessive Internet use predicted lower psychological well-being of individuals with low socially skilled. Therefore, it suggested that the relation of internet-based activity and psychological well-being attempted to be mediated by other variables, in this case, personal factors such as social skills.

Moreover, a study conducted by Reinaldo and Sokang (2016) about problematic internet use (PIU) among 474 college students in Jakarta, Indonesia has suggested that online activities not have negative influence on the participants' daily routines, although there is indeed an impact of internet use, that is the group of participants tend to miss social events due to internet usage. Therefore, internet use is believed not to have a negative impact on students' daily lives. The finding by Reinaldo and Sokang (2016) appears to support the current finding, suggesting that the internet use which manifesting by the screen-time and the compulsivity of internet use not linked to the negative impact on psychological well-being. Some psychological wellbeing research in Indonesia has found that the primary resources to maintain the psychological condition for Indonesian people are stable income, education, health, career, family, needs, wealth and social capital (Rahayu, 2016; Jaafar, et al., 2012), therefore it might be suggested that the compulsivity of internet use only contributes a small part of Indonesian psychological well-being. In addition, Kraut, et al. (2002) have suggested that internet does not have a harmful effect on a person's psychological well-being and even the number of one's friends can increase because of friends found in cyberspace.

Despite there is no finding of the correlation between CIU to the PWB, a specific correlation pattern between CIU and sub-dimensions of PWB was present that is self-acceptance. The reverse correlation means that the high compulsivity in using the internet relates to the lack capabilities of individuals to accept his/her attributes, both of their positive and negative attributes. The low selfacceptance also means that hard by an individual to receive negative criticism and believing one's capabilities. According to Ryff (1989), selfacceptance is the positive attitudes toward oneself, both through present experience or past. This positive attitude appears as the main characteristic of the positive psychological function of an individual. The finding is similar to the finding of the research that has previously found a negative correlation between internet use and self-acceptance (Sharma and Sharma, 2018).

Return to the data available; screen activities associated positively with CIU, specifically in

gaming and social media activities. Hence, it seems fair to suggest if both of activities might indirectly relate to the low level of self-acceptance. This argument might work stronger for social media use as much research implies the role of social media in self-representation. For instance, Chou and Edge (2012) found that heavy Facebook users were more likely to believe that their cyber friends had happier lives than them and tended to endorse a strong feeling that life was unfair. In short, a person who tends to spend a great deal time on social media platform, such as in this case Facebook tends to have perceptual distortions about the quality of other's lives compared to one's own. In other words, it reflects the shortage of how they accept their self because of the comparison one made towards others they see on the social media platform.

Arguably, people tend to feel dejected after examining others' profiles because of unflattering comparison; they do not feel measure up to others' glittering lives. Toma (2017) in her literature review about Effects of Facebook Representation on Emotional Well-Being proposed that the wrong judgment about oneself distorted by some heuristic, such as correspondence bias, whereby individuals tend to assume that others' action reflects their personality and stable dispositions, rather than situational factors. Therefore, it leads the social media users to assume that the flattering profile of appears in social media reflects the actual part of self which turn into illusions.

To sum up, the current research provides such interesting findings and also answering the needs of research regarding how people perceive the internet to the self-acceptance, concerning emotional wellbeing. However, the weak magnitude of correlation suggested that the correlation should be interpreted with caution, indicating that the use of the internet might give a small effect on psychological wellbeing. The current finding is still meaningful due the significant correlation, despite the fact that the correlation magnitude was small. Last, increasing the number of samples is being suggested; there for a replication study needs to do to confirm the findings.

## 6 CONCLUSIONS

This research is a preliminary study to understand the correlation between digital media use and compulsive internet use to psychological well -being in 16-24 years old Indonesian Youth. The result revealed that the correlation between digital media used and compulsive internet use to PWB is insignificant. However, there is a negative correlation between compulsive internet use and the sub-dimension of psychological well-being, which is self-acceptance. The study adds more interesting finding with regards to media use and psychological well-being and also contributes to the research finding which uses Ryff-Psychological Well-Being concept, despite the single concept of well-being like depression, loneliness, or stress. To sum up, increasing the level of self-acceptance of someone can be a preventive function to the adverse effects of compulsive internet use among youth in Indonesia.

## REFERENCES

- Bozoglan, B., Demirer, V., & Sahin, I., 2009. Loneliness, self-esteem, and life satisfaction as predictors of Internet addiction: A cross-sectional study among Turkish university study. *Scandinavian Journal of Psychology*, 54, pp.313–319.
- Cardak, M., 2013. Psychological well being and internet addiction among university students. *The Turkish Online Journal of Educational Technology*, 12 (3), pp.134-141. Available through: Institute of Education Science website <https://eric.ed.gov/> [Accessed 7 August 2018].
- Chen, Y. and Persson, A., 2002. Internet use among youth and older adults: relation to psychological well being. *Educational Gerontology*, 28, pp.731–744.
- Chou, C. and Hsiao, M. C., 2000. Internet addiction, usage, gratification, and pleasure experience: the Taiwan college students' case. *Computers & Education*, 35(1), pp.65-80.
- Chou, H. T. G. and 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, & Social Networking*, 15, pp.117–121.
- Ciarrochi, J., Parker, P., Sahdra, B., Marshall, S., Jackson, C., Gloster, A. T. and Heaven, P., 2016. The development of compulsive internet use and mental health: A four-year study of adolescence. *Developmental Psychology*, [e-journal] 52(2), pp.272– 283. https://doiorg.ezproxy.ub.unimaas.nl/10.1037/dev0000070.supp
- Indonesia Inverstment, 2016. Indonesia is the 3rd-Largest Smartphone Market in the Asia Pacific [online] Available at: <a href="https://www.indonesiainvestments.com/id/news/todays-headlines/indonesiais-the-3rd-largest-smartphone-market-in-the-asiapacific/item6777">https://www.indonesiais-the-3rd-largest-smartphone-market-in-the-asiapacific/item6777</a>> [Accessed 6 March 2018].
- Jaafar, J. L., Idris, M. A., Ismuni, J., Fei, Y., Jaafar, S., Ahmad, Z. and Sugandi, Y. S., 2012. The sources of happiness to the Malaysians and Indonesians: data from a smaller nation. *Procedia-Social and Behavioral Sciences*, 65, pp.549-556.

- Kementrian Komunikasi dan Informatika Republik Indonesia (Kemkominfo), 2015. *Digital Citizenship Safety among Children and Adolescents in Indonesia*. [pdf] Available at: < http://web.kominfo.go.id/sites/default/files/users/12/K ominfoPresentasi%20Laporan%20Hasil%20Penelitian %20%20Gati%20Gayatri.pdf> [Accesed 6 March 2018].
- Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V. and Crawford, A., 2002. Internet paradox revisited. *Journal of Social Issues*, [e-journal] 58, pp.49-74. 10.1111/1540-4560.00248.
- Mazurek, M. O. and Wenstrup, C., 2013. Television, Video Game and Social Media Use Among Children with ASD and Typically Developing Siblings. *Journal* of Autism and Developmental Disorders, 43(6), pp.1258-1271. 10.1007/s10803-012-1659-9.
- Meerkerk, G. J., Van Den Eijnden, R. J., Vermulst, A. A. and Garretsen, H. F., 2009. The Compulsive Internet Use Scale (CIUS): some psychometric properties. *Cyberpsychol Behavior*, [e-journal] 12(1), pp.1-6. 10.1089/cpb.2008.0181
- Muusses, L. D., Finkenauer, C., Kerkhof, P. and Billedo, C. J., 2014. A longitudinal study of the association between Compulsive Internet use and wellbeing. *Computers in Human Behavior*, 36, 21–28.
- Nugraini, I. and Ramdhani, N., 2016. Ketrampilan Sosial Menjaga Kesejahteraan Psikologis Pengguna Internet. Jurnal Psikologi, 43(3), 183–193.
- Orsmond, G. I. and Kuo, H. Y., 2011. The daily lives of adolescents with an autism spectrum disorder: Discretionary time use and activity partners. *Autism*, [e-journal] 15(5), pp.579-599. 10.1177/1362361310386503.
- Rahayu, T. P., 2016. The determinants of happiness in Indonesia. *Mediterranean Journal of Social Sciences*, 7(2), p.393.
- Ramdhani, N. and Rachmayani, D., 2014. Adaptasi bahasa dan budaya skala kesejahteraan psikologis. In : Proceeding Seminar Nasional Psikometri, Seminar Nasional Psikologi UMS 2014. Fakultas Psikologi Universitas Muhammadiah Surakarta., Solo. Solo: Indonesia.
- Reinaldo and Sokang, Y.A, 2006. Problematic Intenert Use pada Mahasiswa. Jurnal Psikologi, 43(2), pp.107 - 120.
- Reinecke, L. and Oliver, M.B., 2017. Media Use and Well-Being, Status Quo and Open Quetions. In Reinecke, L. and Oliver, M.B., ed. 2017. The Routledge Handbook of Media Use and Well-Being. New York: Taylor & Francis. Ch.1.
- Ryff, C. D. and Keyes, C. L., 1995. The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, [e-journal] 69(4), pp.719-727. http://dx.doi.org/10.1037/0022-3514.69.4.719.
- Ryff, C. D. and Singer, B. H., 2006. Know thyself and become what you are : A Eudaemonic approach to Psychological Well-Being. Journal of Happiness

Studies, [e-journal] 9, pp.13-39. 10.1007/s10902-006-9019-0.

- Ryff, C. D., 1989. Happiness Is Everything, or Is It? Explorations on the Meaning of Psychological Well-Being. *Journal of Personality and Social Psychology*, [e-journal] 57(6), pp.1069-1081. 10.1037%2F0022-3514.57.6.1069.
- Ryff, C. D., 2014. Psychological Well-Being Revisited: Advances in Science and Practice. *Psychother Psychosom*, [e-journal] 1. 10.1159/000353263.
- Sharma, A. and Sharma, R., 2018. Internet addiction and pyschological well being among college students: A cross sectional study from central India. *Journal of family medicine and primary care*, 7(1), 147 – 151.
- Sun, X. and Subrahanyam, K., 2017. Media Use and Youth Well-Being. In Reinecke, L. and Oliver, M.B., ed. 2017. *The Routledge Handbook of Media Use and Well-Being*. New York: Taylor & Francis. Ch. 28.
- Tamborini, R., Grizzard, M., Bowman, N. D., Reinecke, L., Lewis, R. J. and Eden, A., 2011. Media enjoyment as need satisfaction: The contribution of hedonic and nonhedonic needs. *Journal of Communication*, [ejournal] 61, pp.1025–1042. 10.1111/j.1460-2466.2011.01593.x.
- Toma, C.L.,2017. Taking the Good with The Bad. Effects of Facebook Self-Presentation on Emotional Well-Being. In Reinecke, L. and Oliver, M.B., ed. 2017. *The Routledge Handbook of Media Use and Well-Being*. New York: Taylor & Francis. Ch.13.
- Trepte, S., Dienlin, T. and Reinecke, L., 2015. The influence of social support received in online and offline contexts on satisfaction with social support and satisfaction with life: A longitudinal study. *Media Psychology*, [e-journal] 18, pp.75–105. 10.1080/15213269.2013.838904
- Van den Eijnden, R. J., Meerkerk, G. J., Vermulst, A. A., Spijkerman, R. and Engels, R. C., 2008. Online communication, compulsive Internet use, and psychosocial well-being among adolescents: a longitudinal study. *Dev Psychol*, [e-journal] 44(3), pp.655-665. 10.1037/0012-1649.44.3.655.
- Van der Aa, N., Overbeek, G., Engels, R. C., Scholte, R. H., Meerkerk, G. J. and Van den Eijnden, R. J., 2009. Daily and compulsive internet use and well-being in adolescence: a diathesis-stress model based on big five personality traits. *Journal of youth and adolescence*, 38(6), pp.765.
- Vandelanotte, C., Sugiyama, T., Gardiner, P. and Owen, N., 2009. Associations of leisure-time Internet and computer use with overweight and obesity, physical activity and sedentary behaviors: Cross-sectional study. *Journal of Medical Internet Research*, [ejournal] 11. 10.2196/jmir.1084.
- Vitak, J., 2012. The impact of context collapse and privacy on social network site disclosures. *Journal of Broadcasting & Electronic Media*, [e-journal] 56, pp.451–470. 10.1080/08838151.2012.732140
- We are Social, 2018. Digital in 2018 : World's InternetUsers Pass the 4 Billion Mark 2018 Digital Yearbook.[online]Availableat:

https://wearesocial.com/blog/2018/01/global-digitalreport-2018> [Accessed 6 March 2018].

- World Economic Forum (WEF), 2016. Digital Media and Society: Implications in a Hyperconnected Era. [pdf] Available at: <a href="http://www3.weforum.org/docs/WEFUSA\_DigitalMediaAndSociety\_Report2016.pdf">http://www3.weforum.org/docs/WEFUSA\_DigitalMediaAndSociety\_Report2016.pdf</a>> [Accessed 6 March 2018].
- Young, K. S., 1998. Internet addiction: The emergence of a new clinical disorder. *Cyberpsychology & behavior*, 1(3), pp.237-244.
- Zhu H, Zhang F, Shen M. and Xu M., 2005. Development of concept of internet-related social-psychological health for undergraduates. *Chinese Journal of Clinical Psychology*, 13, pp.4-8.