



Social media addiction and pornography craving as factors predicting psychological well-being among undergraduate students of Federal University Gashua, Nigeria

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Abstract

The goal of this study was to see if social media addiction and pornography craving can predict psychological well-being among undergraduate students of Federal University Gashua. The study used Ryff's Psychological Well-Being Scale, Bergen's Social Media Addiction Scale, Kraus Pornography Craving Scale, and a demographic questionnaire. Through simple random sample, three hundred and sixty-six undergraduate students from Federal University Gashua in Yobe State were chosen at random. Multiple regression analysis was used to examine the three hypotheses. The findings revealed that social media addiction and pornography craving, ethnicity, and gender all had a significant role in predicting psychological well-being among undergraduate students at Federal University, Yobe State. The study also recommends that academic institutions create an organized procedure and counselling centres to encourage students to report any occurrence of social media addiction and pornographic misconduct.

Keywords: Pornography craving, Psychological well-being, Social media addiction

1. Introduction

Numerous pressures arising from psychological, economic, social and educational demands have severe negative impact on an individual's psychological well-being. Psychological wellbeing is an attribute enhances good quality of life and set the path for dealing with daily pressures which is associated with positive mood where everyone's pursuit it as a higher goal of life. (İşgör & Haspolat 2016). Educational institutions such as schools and colleges are not exempted in confronting such pressure difficulties. Individuals must lessen these negative impacts through acquiring a state of psychological well-being that allows him to feel stable in his personality and to enjoy strong social relationships with others (Santos et al., 2014). Social media addiction and pornography craving tends to weaken an individual's psychological wellbeing (İşgör & Haspolat, 2016).

Psychological wellbeing is defined as the extent to which an individual need to

function optimally, realise attributes and talents unique to themselves, and focus on identity, purpose and meaning, in relations to others (İşgör & Haspolat, 2016; Andreassen et al., 2017). Social media addiction on the other hand, is defined as being so excessively concerned and highly driven by the use of social media that it affects social and daily activities as well as psychological well-being (Andeassen & Pallesen, 2015; Andreassen et al., 2016). Pornography craving could be conceptualized as a transient but intense urge or desire that waxes and wanes over time and as a relatively stable preoccupation or inclination to use pornography (Rosenberg, 2009; Tiffany & Wray, 2012). This research focuses on undergraduate students since they are at a pivotal point in their lives, as they are about to embark on a journey of career discovery According to research, social media addiction has a substantial impact on psychological well-being (Gomez et al., 2018).



2. Literature Review

The current study is guided by Carol Ryff's six factor model, Gratification and Sexual Script Theories. The Six-factor Model of psychological Well-being is a theory developed by Ryff (2014). The model determines six factors which contribute to an individual's psychological well-being, contentment, and happiness. Psychological well-being consists of positive relationships with others, personal mastery, autonomy, a feeling of purpose and meaning in life, and personal growth and development. Psychological well-being is attained by achieving a state of balance affected by both challenging and rewarding life events (Gao, & McLellan, 2018).

Uses and Gratification Theory is a study of the gratifications or advantages that attract and retain users to numerous and diverse contents that meet their psychological and social requirements (Deb Roy & Chakraborty, 2015). The goal of the theory relates to why individuals choose a particular form of medium in order to better comprehend societal and individual gratifications, as well as to explain users' motivations when interacting with media. Choi and Lim, (2016) explains why people utilize specific media as an alternative communication medium and identifies the demands that drive the user to use that medium.

Script theory (Peter & Valkenberg, 2016) was proposed by Tomkins who suggests that behavior is a sequence of 'scripts' or programs in order to attain a goal (Bojanowska, & Piotrowski, 2019). Specific behaviors are responses to goals or desires given significance by the scripts sequence. Pornography has the potential to change people's expectations about sexual activity, affecting their ability to create and maintain romantic or sexual relationships (Cabas et al., 2019).

Psychological well-being

Psychological well-being is divided into three categories: Firstly, is the subjective level, where a person's psychological well-

being and contentment with the past. Secondly is a purposeful existence and happiness in the present, and thirdly is a hope and optimism for the future. (Roothman et al., 2003; Gomez et al., 2018; Çardak, 2013; Dwiwardani et al., 2014).

Psychological wellbeing is implicated as a consequences of social media addictive and pornography usage across studies (Gao, McLellan, 2018; Ryff, 2018, 2019).

In this study view, the second is a person who is full of love, courage, and high morals, as well as sensitive, tolerant, spiritual, talented, and wise. The third is at the institutional level; When considering psychological well-being, consider self-acceptance, positive interpersonal relationships, autonomy, environmental control, life purpose, and personal development, taking into account the concept's relationship with emotional, mental, physical, cognitive, personal, and social processes (Roothman et al., 2003; Gomez et al., 2018).

Gender differences on psychological well-being were also documented. Roothman, Kirsten and Wissing (2003) conducted a study to find how psychological well-being varies due to gender and concluded that females and males reported differences. Similarly, in another study, men scored significantly higher on cognitive, physical and self-aspects of psychological wellbeing, whereas women scored significantly higher on somatic symptoms, expressing affect and spiritual aspects but there was no difference between men and women regarding social dimension (Twenge, & Martin, 2020).

Social media addiction

Social media addiction is an act of being overly worried and driven by one's use of social media to the point where it interferes with day-day affairs and one's psychological well-being (Andeassen & Pallesen, 2015; Andeassen, 2015). Internet and social media addiction are regarded to be a common illness in today's society. The internet is an educational and enjoyable



medium where people engage in a variety of activities that are potentially addictive (Bennet et al., 2019). It has been observed that increased use of social media is linked with mental anguish and those who use social media at a high rate and/or who can be deemed addicted to mental health concerns (Bano & Colleagues, 2019). Adamu (2015) sought to find out the level of Facebook Addiction among 1000 undergraduate students in four university in South-western Nigeria using stratified and purposive sampling techniques. The outcome revealed a low level of addiction particularly among university undergraduates in private universities mainly due to internet access in those institutions. Dau (2015) in his study on the impact of social media addiction among the students of tertiary institutions in Northern Nigeria and found out that majority of the respondents use these social media platforms mainly for social needs such as friendship and dating. While Al-Menayes (2015) reported that social media addiction was a negative predictor of academic performance as measured by a student's GPA in his study in examining the dimensions of social media addiction in university students in Kuwait.

Pornography craving

Pornography has also been implicated with psychological wellbeing across studies. Pornography is the representation of sexually related actions in a non-hidden manner, frequently with near visual recording of human genitals, oral, anal, or virginal penetration (Peter & Valkenburg, 2012). Pornography craving has been linked to high expectations; a decline in sexual partner interest; lower levels of relationship satisfaction and compulsive addictive behavior (Wilson, Fornasier, & White, 2010; Hilton, & Watts, 2011; Maurya, & Ojha, 2017; Perry, 2016; Mayordomo et al., 2016). In a study conducted by Peter & Valkenburg (2016) reported a link between psychological wellbeing and phonography. Reis et al.,

(2018) revealed that pornography is a depiction of sexual related activities in a manner that is not hidden and is a risk factor social addiction and negative psychological wellbeing. Several studies have shown that watching pornography is associated with a higher possibility of having paid a prostitute for sex, and having engaged in extramarital sex (Reis et al., 2018). The influence of pornography on shaping sexual attitudes could lead to sexual behaviors such as "hooking up" and negative psychological wellbeing (Perry, 2016).

Statement of the Problem

The rate at which undergraduate students are performing in their studies is very poor, alarming and detrimental to national development. These poor performances are attributed to social media addiction and pornography craving (Andeassen & Griffiths 2016). Social media addiction and pornography craving are regarded to be a common illness in today's society. It interferes with social, daily activities, psychological well-being and mental problems like depression, anxiety, poor impulse control, decline in sexual partner interest and addictive tendencies. (Andeassen & Pallesen, 2014; Andreassen, 2015; Andeassen & Griffiths 2017). Despite numerous literatures on psychological well-being, social media addiction and pornography there isn't much on the Nigerian students who are the common victims. Various studies have looked at various aspects of psychological well-being, such as campus climate as a predictor of depression (Brim, et al., 2019), self-esteem and psychological well-being, racial identity and socialization as predictors of depression, help-seeking efforts (Andreassen, 2017), and the relationship between religious participation and psychological well-being (Perry, 2016). Yet such studies were not extended among undergraduate students, especially in the northern-eastern part of Nigeria. Therefore, this study aimed to examine the predictive effects of social media addiction,



pornography craving on psychological well-being of undergraduate students.

Research Questions

1. Will social media addiction significantly predict psychological well-being?
2. Will pornography craving significantly predict psychological well-being?
3. Will social media addiction and pornography craving predict psychological well-being?

Research Hypothesis

H₁: Social media addiction will significantly and independently predict psychological well-being.

H₁: Pornography craving will significantly and independently predict psychological well-being.

H₁: Social media addiction and Pornography craving will significantly, independently, and jointly predict psychological well-being.

Objective of the study

Specific objectives of the study are:

1. To determine whether social media addiction will predict psychological well-being of undergraduates.
2. To determine whether pornography craving will predict psychological well-being of undergraduates.
3. To determine whether social media addiction and pornography craving will jointly predict psychological well-being of undergraduates.

3. Methodology

The study adopted a cross-sectional descriptive survey research method, where the variables investigated were psychological well-being; social media addiction, and pornography craving. Using Taro Yamane formula, the sample size of the study was 366 sampled from the total population of 4299 undergraduate students of the Federal University Gashua in Yobe State, Nigeria. The population comprises both male and female, single and married from 18 to 33 years. Simple random sampling technique () was used to come up

with three departments from the three faculties available in the university. Another random sampling () was also used to select the participants from each level (100 level to 400 level) of these three departments and 147 (40.2%) male and 219 (59.8%) female students were obtained.

Survey questionnaires were distributed to the participants by the researcher and 10 non-teaching staff who assisted the researcher. These questionnaires comprised three different scales that measured pornography craving, psychological wellbeing and social media addiction were put together in a single questionnaire. The Pornography craving scale was designed by Shane Kraus and Harold Rosenberg (2014). It contains 12 items that measure pornography craving behavior on 1- 5 rating format with a Cronbach alpha of 0.94 and a new reliability coefficient of .862 in this study.

The **Psychological well-being** scale was developed by Carol Ryff (1989) which contains 42 items that measure dimensions of psychological well-being. It is a Likert scale which ranges from SD to SA on 1 to 6 rating formats with a reported Cronbach alpha of .63 for autonomy, .53 for environmental mastery, .78 for positive relations with others, .73 for self-acceptance, .66 for personal growth, and .74 for purpose in life. However, in this study, a total item correlation was done on the items and six items used in this study showed a new reliability coefficient of .899. The **Social media addiction** scale was designed by Bergen (2014) with 41 items that measure the six core features of social addiction, which include salience, mood, modification, tolerance, withdrawal, conflict, and relapse. It is a Likert scale that is rated on a 5-point Likert scale format, which include: 1 = Very rarely, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Very often and a Cronbach alpha of 0.88 was reported. In this study, a total item correlation was done new reliability coefficient of .962 was obtained. All these



scales were validated through face validity. The frequency and percentage distributions were used in the descriptive analysis, as well as the mean, standard deviation, and variance. Multiple Regression Analysis was used to test the hypotheses.

The descriptive results show the mean, standard deviation of social media addiction, pornography craving, psychological wellbeing, Age, Gender, Religion Affiliation, Ethnic Group and model summary of the regression analysis presented.

4. Results and Discussion

Table 1: Mean and Standard Deviation of Social media addiction, pornography craving and psychological well-being

Table with 3 columns: Variable, Mean, Standard Deviation. Rows: Social Media Addiction, Pornography Craving, Psychological well-being.

Table 1 shows the Mean and Standard Deviation of social media addiction, pornography craving, and psychological well-being. The table revealed the following mean scores of social media

addiction (M = 125.94, SD = 35.373), Pornography craving addiction (M = 29.83, SD = 14.033) and the mean score for psychological well-being was 179.70 (SD = 31.162).

Table 2: Summary of Regression Model

Table with 5 columns: R^2, F Change, df1, df2, Sig. F Change. Row: .360, 101.922, 2, 362, 0.000.

The results of the regression model summary in table 2 showed that the coefficient of determination R^2 = 0.360, F (2,362) = 101.922 (5% level of significance). This showed that the model can be held for 36% change in the level of psychological well-being among the study participants.

4.2 Inferential Results

Three hypotheses were tested with the multiple regression at the 0.05 significance level. The results are presented in table 3 below.

Table 3: Coefficients of Regression Model

Table with 5 columns: Model, Unstandardized Coefficients (B, Std. Error), Standardized Coefficients (Beta), t, Sig. Rows: 1 (Constant), Pornography craving, Social media Addiction, 2 (Constant), Pornography craving, Social media addiction, Age, Gender, Religion Affiliation, Ethnic Group.

Dependent Variable – Psychological well-being



Hypothesis 1:

Social media addiction will significantly and independently predict psychological well-being among undergraduate students of Federal University Gashua, Yobe State. The result of hypothesis one showed that the regression coefficient of social media addiction in the estimated regression line is .603 which indicates that 60% change in psychological well-being among undergraduate students of the University was accounted for by social media addiction. The value of the calculated statistic of social media addiction was significant, $t = 12.704, p = 0.000 (p < .05)$. The hypothesis is supported.

Hypothesis 2:

Pornography craving will significantly and independently predict psychological well-being among undergraduate students of Federal University Gashua, Yobe State. The result of hypothesis two showed that the regression coefficient of pornography craving in the estimated regression line is -.006 which indicates that 60% change in psychological well-being among undergraduate students of Federal University Gashua, Yobe state was accounted for by pornography craving. The value of the calculated statistic of social was significant, $t = -.131, p = 0.000 (p < .05)$. The hypothesis is therefore supported.

Hypothesis 3:

Social media addiction and pornography craving will significantly, independently, and jointly predict psychological well-being among undergraduate students of Federal University Gashua, Yobe State. The result of hypothesis three showed that the regression coefficients of social media addiction and pornography craving in the estimated regression line is as follows: Social media Addiction is 0.619 which indicates 62% change, and Pornography craving is -.007 which indicates 70% change in psychological well-being among undergraduate students of Federal University Gashua, Yobe state was accounted for by social media addiction and

pornography craving. The value of the calculated statistic of social media addiction and pornography craving was significant, $t = 13.066, p = 0.000, t = -.154, p = .878 (p < .05)$. Hypothesis3 is therefore supported.

Discussion of Findings

The purpose of this study is to examine social media addiction and pornography craving as predictors of psychological well-being among undergraduate students. The study included 366 participants, 40.5 percent of whom were male and 59.8 percent of whom were female.

It has been guised by this study that, social media addiction will significantly and independently predict psychological well-being, the findings showed that each component in social media addiction has a predictive impact on psychological well-being. In this investigation, the hypothesis was accepted. This confirms the statement by the previous studies that increased social media usage predicts psychological well-being (Stronge et al., 2019). Seeing as there is a substantial amount of evidence that posits that mental health issues arise when individuals use social media at a high rate and/or when one can be considered addicted to social media (Błachnio & Przepiorka, 2016; Labrague, 2014; Kross et al., 2013). Given the growing body of evidence that suggests mental health difficulties occur when people use social media excessively and/or become addicted to it (e.g., Błachnio & Przepiorka, 2016; Labrague, 2014; Kross et al., 2013). Notably, research on social media has emphasized its relation to mental health constructs. Hence, this supports the first hypotheses of this study which tested whether social media addiction will predict psychological well-being. As a result, it's not surprising that those who are addicted to social media are more likely to experience psychological problems. Dau (2015) looked into the effects of social media addiction on students in Northern Nigerian postsecondary institutions, as well as the extent to which they are addicted. This is supported by the findings of this study,



which revealed that social media addiction has a major impact on psychological well-being. Both hypotheses for predicting the effects of social media addiction and pornography seeking were found to be correct.

The third hypothesis was developed to disclose hidden discoveries using hierarchical regression analysis, which indicated the joint and independent impact of each independent variable on psychological well-being prediction. Except for age and religious affiliation, every independent variable was found to cause a change in psychological well-being. The study also demonstrated how each independent variable interacts with one another to predict psychological well-being.

As a result, it's no surprise that those who are addicted to social media are more likely to experience psychological problems. Dau (2015) looked into the effects of social media addiction on students in Northern Nigerian postsecondary institutions, as well as the extent to which they are addicted. Using the survey method, he looked at which social media sites students use the most and how often they use them. This is supported by the findings of this study, which revealed that social media addiction has a major impact on psychological well-being. Both hypotheses for predicting the effects of social media addiction and pornography seeking were found to be correct.

Summary of the Study findings

This study examined social media addiction and pornography craving as predictors of psychological well-being among undergraduate students. Social media addiction and pornography craving can independently and jointly predict psychological wellbeing. The impact of social media addiction and pornography craving on psychological well-being among undergraduate students was established. Meaning that, social media addiction predicts psychological well-being. Social

media addiction and pornography craving have impact and can predict psychological well-being among undergraduate students of the university. Gender and ethnicity have an impact on psychological well-being.

5. Conclusion and Recommendations

The use of social media and pornography has significant effect on the psychological wellbeing of students, which may directly or indirectly improve students' psychological well-being. It is through psychological well-being that students can fully actualize their talents and capabilities in line with their educational pursuit that can meet the basic goals of educational planning of the government. The government has neglected to recognize how social media addiction affects undergraduate students' psychological well-being. This has had a significant impact on the quality of graduates produced in our country as well as their productivity in society. The country's technique of dealing with persons who exhibit a lack of psychological well-being demonstrates a lack of awareness about the psychological well-being of undergraduates who use social media and crave for pornography. This study raises awareness among clinical and developmental psychologists of how social media addiction and pornography craving can predict psychological well-being. Finally, the study aids the stakeholders on the understanding and treatment of psychological issues and societal unaccepted behavior detrimental to health wellbeing. The findings of this empirical study will help professionals and academia in addressing the menace of social media addiction and pornography craving among undergraduate students so that timely and effective counselling and therapeutic interventions could be introduced in universities.

This study recommends to the Ministry of Education, the Nigerian University Commission, and university administrators to come up with policy or program that will



aids in explaining the negative effects of social media addiction and pornography craving among both undergraduate and postgraduate students' psychological well-being. The findings of this study suggest that the predictive impact of social media addiction and pornography craving on psychological well-being should be discussed with therapists and other client-centred psychologists. Based on this study results, it is recommended for the parents, teachers, and students because it will help them understand how social media addiction and pornography craving negatively impacts undergraduate students' psychological well-being and how to avoid it.

6. Limitations of the Study

The study relied on a self-report questionnaire to assess psychological well-being, which leaves the researcher with little control over the respondents' honesty. The research focused only on undergraduate students of only one university. The study solely looked at the impact of social media addiction and pornography seeking on psychological well-being on their own and in combination, without looking at how the three personality traits, when used together, can predict psychological well-being.

References

Adamu, M. (2015). Social Media Use Among Nigerian Students Abroad (Master's thesis, Eastern Mediterranean University (EMU)-Doğu Akdeniz Üniversitesi (DAÜ)).

Al-Menayes, J. (2014). The relationship between mobile social media use and academic performance in university students. *New Media and Mass Communication*, 25, 23-29.

Andreassen, C. S. (2015). Online social network site addiction: A comprehensive review. *Current Addiction Reports*, 2(2), 175–184.

Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors*, 30(2), 252–262 <https://doi.org/10.1037/adb0000160>

Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, 64, 287–293. <https://doi.org/10.1016/j.addbeh.2016.03.006>

Bano, S., Cisheng, W., Khan, A. N., and Khan, N. A. (2019). WhatsApp use and student's psychological well-being: role of social capital and social integration. *Child. Youth Serv. Rev.* 103, 200–208. doi: 10.1016/j.childyouth.2019.06.002

Bennet, Margaret; LoPesti, Brittney J.; McGloin, Rory; Denes, Amanda (2019). 'The Desire for Porn and Partner?: Investigating the Role of Scripts in Affectionate Communication, Sexual Desire, and Pornography Consumption and Guilt in Young Adults' Romantic Relationships. *Western Journal of Communication*. 83(5): 647-667.

Bojanowska, A., and Piotrowski, K. (2019). Values and psychological well-being among adolescents—are some values 'healthier' than others? *Eur. J. Dev. Psychol.* 16, 402–416. doi: 10.1080/17405629.2018.1438257

Brim, O. G., Ryff, C. D., and Kessler, R. C. (2019). *How Healthy are We?: A National Study of Well-Being at Midlife*. Chicago: University of Chicago Press.



- Cabas, K., Cabas, M., De La Espriella, N., Germán, N., Martínez, L., Villamil, I., et al. (2019). Relación entre ansiedad y afrontamiento en estudiantes más jóvenes de una universidad del caribe colombiano. *Duazary* 16, 239–250. doi:10.21676/2389783X.2956
- Çardak, M. (2013). Psychological well-being and Internet addiction among university students. *The Turkish Online Journal of Educational Technology*, 12, 134-141.
- Choi, S. B., & Lim, M. S. (2016). Effects of social and technology overload on psychological well-being in young South Korean adults: The mediatory role of social network service addiction. *Computers in Human Behavior*, 61, 245-254.
- Dau, B. (2015). Social Computing: A Study Assessing the Impacts of Social Network Addiction among the Students in Northern Nigeria. *International Journal of Humanities and Management Sciences (IJHMS)*. Volume 3, Issue 1 ISSN 2320–4044 (Online).
- Deb Roy, S., & Chakraborty, S. (2015). Impact of social media/social networks on education and life of undergraduate level students of Karimganj town-A survey. *Int Res J Interdisc Multi Stud (IRJIMS)*, 1(2), 141-147.
- deprivation and type of home. *Child. Youth Serv. Rev.* 80, 88–95. doi: 10.1016
- Dwiwardani, C., Hill, P. C., Bollinger, R. A., Marks, L. E., Steele, J. R., Doolin, H. N., & Davis, D. E. (2014). Virtues Develop From a Secure base: Attachment and Resilience as Predictors of Humility, Gratitude, and forgiveness. *Journal of Psychology and Theology*, 42(1), 83-90.
- Gao, J., and McLellan, R. (2018). Using Ryff's scales of psychological well-being in adolescents in mainland China. *BMC Psychol.* 6:17. doi: 10.1186/s40359-018-0231-6
- Gomez-Baya, D., Lucia-Casademunt, A. M & Salinas-Perez, J. A. (2018). Gender differences in psychological well-being and health problems among European health professionals: Analysis of psychological basic needs and job satisfaction. *International journal of environmental research and public health*, 15(7), 1474. <https://doi.org/10.3390/ijerph15071474>
- Hilton, J. L., & Watts, C. (2011). Pornography addiction: A neuroscience perspective. *Surgical Neurology International*. pp. 87-90.
- Isgor, I.Y.; Haspolat, N.K. (2016). Investigating the Psychological Well-Being and Job Satisfaction Levels in Dierent Occupations. *Int. Educ. Stud.* 2016, 9, 194–205. doi:10.5539/ijer.v9n6.051
- Maurya, P. K., and Ojha, S. (2017). Gender and locale differences in psychological well-being among adolescents. *Indian J. Hum. Relat.* 51, 136–146.
- Mayordomo, T., Sales, A., Satorres, E., and Meléndez, J. C. (2016). Bienestar psicológico en función de la etapa de vida, el sexo y su interacción. *Pensamiento Psicol.* 14, 101–112. doi: 10.11144/Javerianacali.PPSI14-2.bpfe
- Peter, J. & Valkenberg, S (2016). Adolescents and pornography; a review of 20 years of research. *The Journal of Sex Research*. Vol. 1 (23)
- Perry, S. L., & Schleifer, C. (2019). Race and trends in pornography viewership 1973–2016: Examining the moderating roles of gender and religion. *Journal of Sex Research* 56(1), 62–73.
- Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., and Ryan, R. M. (2018). Daily Well-Being: The Role of



- Autonomy, Competence, and Relatedness. Relationships, Well-Being and Behaviour. London: Routledge, 317–349.
- Rosenberg, H. (2009). Clinical and laboratory assessment of subjective experience of drug craving. *Clinical Psychology Review*, 29, 519-534. Doi.10.1016/j.cpr.2009.06.002.
- Roothman, B., Kirsten, D. K. & Wissing, M. P. (2003). Gender differences in aspects of psychological well-being. *South African journal of psychology*, 33(4), 212-218. <https://doi.org/10.1177/008124630303300403>
- Ryff, C. D. (2014). Psychological well-being revisited: advances in the science and practice of eudaimonia. *Psychother. Psychos.* 83, 10–28. doi: 10.1159/000353263
- Santos, M. C. J., Magramo Jr, C. S., Oguan Jr, F. & Paat, J. J. (2014). Establishing the relationship between general self-efficacy and subjective well-being among college students. *Asian journal of management sciences & education*, 3(1), 1-12.
- Tiffany, S. T., & Wray, J. M. (2012). The clinical significance of drug craving. *Annals of the New York Academy of Science*, 1248, 1-17. Dio10.1111/j.1749-6632.2011.06298.
- Twenge, J. M., and Martin, G. N. (2020). Gender differences in associations between digital media use and psychological well-being: evidence from three large datasets. *J. Adolesc.* 79, 91–102. doi: 10.1016/j.adolescence.2019.12.018.
- Wilson, K., Fornasier, S., & White, K. M. (2010). Psychological predictors of young adults' use of social networking sites. *Cyberpsychology, behaviour, and social networking*, 13(2), 173-177.