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INFLUENCE OF FACEBOOK ADDICTION ON AGGRESSION AMONG ADOLESCENT STUDENTS IN NWAFOR ORIZU COLLEGE OF EDUCATION, NSUGBE

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ABSTRACT

This study investigated the influence of Facebook addiction on aggression among adolescent students in NwaforOrizu College of Education, Nsugbe (NOCEN). The study employed ex-post facto and correlation research design. The population of the study was 18,600 students. A total of 200 degree students from the 100 levels were randomly selected from the five departments in NOCEN that constituted the study. Three research questions and one hypothesis guided the study. Two research instruments titled Bergen Facebook Addiction Scale (BFAS) and Buss – Perry Aggression Questionnaire (BPAQ) were used for data collection. Experts in the field of Educational Psychology and Measurement and Evaluation validated the instrument. Cronbach Alpha method was used in estimating the internal consistency of these instruments. Range of scores was used in answering research questions one and two while Pearson Product Moment Correlation, simply referred to as Pearson r was used to answer research question three. The hypothesis was tested at a .05 significance level. The result showed that most adolescent students are addicted to Facebook. It also revealed that most NOCEN students have severe aggression as a result of their addiction to Facebook. The findings also depicted that there is a positive and significant relationship between Facebook addiction and aggression among adolescent students in NOCEN. It was recommended among others that adolescent students should be educated about social media and the ways to use it, as well as the common risks involved there to help them understand and navigate technologies.

KEY WORDS

Facebook, Facebook Addiction, Adolescent and Aggression.



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INTRODUCTION

Social networking sites (SNSs) are becoming increasingly influential. Facebook is the most popular social networking site. According to world statistics, Facebook has the highest number of users with 78%, followed by Myspace (14%) and then twitter (5%) (FastCompany, 2010). Statistics also show that 68% of the US adolescents are Facebook users (Smith & Anderson, 2018) and over 70% Facebook users log in everyday (Chaffey, 2017). Facebook was established in 2004 by Mark Zuckerberg, Eduardo Saverin, Dustin Moskovitz and Chris Hughes, all of whom were students of Harvard University. Facebook make people capable of sharing and making the world more accessible and connected within handhold devices compared to any other social networking site. Facebook has now become a top-rated social networking site, especially among university students, profoundly impacting their way of communication (Ryan, Chester, Reece & Xenos, 2014). Facebook reports already serving one billion monthly active users at the end of 2012 (Facebook, 2012a). More than 350 million people around the world are believed to meet the clinical definition of an addiction because of their Facebook habits (Gaille, 2017). Facebook services are available in 70 languages, making Facebook a worldwide platform.

Facebook is often depicted as a platform to see and to be seen (Pempek, Yermolayeva & Calvert, 2009), to express identity (Lee, 2012), and to help highlight otherwise obscure and seemingly mundane aspects of one's life (Yau & Schneider, 2019). Individuals can create Facebook account on the website Facebook.com. After providing some personal information (name, date of birth, gender, email address), the new user chooses a password and gets account access. Facebook opts for a highly standardized layout of user accounts. Regardless of whose account it is, many features appear on the same place on the screen, making it easy to recognize and find the data one is searching for. There are two important pages on Facebook account: home and profile. The profile page also often called "the wall", is where users present themselves. A small profile picture adds to a large cover photo at the top of the page, below which the name of the user is presented along with some basic information and a few buttons referring to friends, photos and "likes". Below that is the area where "status updates" appear. Users can post anything they want in their status and friends can respond to this statement by text comments or by liking it (shown directly below the status). On the home page, also often called "news feed", users are informed on the status updates and other activities (joining groups or becoming fan of something they like) from their friends. Once a profile is created, the new user can start looking for friends and send friend requests. When accepted, Facebook connects the two individuals by allowing them to see each other's profile page and by adding their activities to one another's news feed. Facebook thus function as an online application to see and to be seen (Stroud, 2008) or to "Prosume": Producing and consuming at the same time (Le & Tarafdar, 2009; Ritzer & Jurgenson, 2010).

Sledgianwoski and Kulviwat (2009) were among the first to investigate why individuals wanted to join Facebook. Their convenience sample of 289 students from one American University indicated that the perceived playfulness and the critical mass of the site were the main drivers of intentions to join, besides normative pressure, trust, usefulness and ease of use. Later research confirmed the importance of pressure. Cheung and Lee (2010), for example, studied a convenience sample of 389 students and marked the importance of social identity (being aware of group membership and attaching emotional significance to it) and subjective norms (compliance). Kwon and Wen's (2010) research on a sample of 229 Korean respondents linked these two studies by showing a positive correlation between perceived usefulness and social identity. Pressure appears to remain important also after joining the SNS, as Skagedby's (2009) document analysis showed that users are unhappy with pressure to accept friends' requests from coworkers and employers.

Past research has focused on differences in Facebook behaviours relating to gender, personality, social status, age and race. Looking at gender, a large study by Hargittai (2007) on a heterogeneous sample of 1,060 first – year undergraduate students in the US showed that men were not most likely to use Facebook than women. This finding was confirmed by a smaller study on 116 US students by Raacke and Bonds-Racke (2008). However, a study by Lewis, Kaufman and Christakis (2008), on a sample of 1710 US students, showed that women were more likely than men to maintain a Private Profile.

Some research on Facebook deals directly with personality. For instance, a small study on 97 US students by Ross, Orr, Susic (2009) indicated that extraversion was positively related to Facebook use, which is in line with more general research by Correa, Hinsley, & De Zuniga (2010) and Wilson, Fornasier & White (2010) on the link between extraversion and the use of Facebook. Openness to experiences was also found to relate positively to Facebook use, especially for mature individuals (Correa, Hinsley, & De Zuniga, 2010). Conscientiousness (Wilson, Fornasier & White 2010) and emotional stability (Correa, Hinsley, & De Zuniga, 2010) however, related negatively with social networking site (SNS) use.

Previous research showed a link between personality and the number of friends on US students' profile. In a small sample of 103 students, Orr, Ross & Simmering (2009) found that shy individuals had less Facebook friends and Buffardi and Campbell's (2009) analysis of 156 profiles of US students showed narcissists tried to maximize their number of Facebook friends. It is reported that there are many factors directing individuals to use Facebook. Researchers (Kim & Haridakis, 2009; Oldmeadow, Quinn & Kowert, 2013; Papa Charissi & Mendelsohn, 2011) list these factors as entertainment, information search, spending time, self-presentation, socialization, meeting new friends, surfing, escapism, status update and sexual attraction. Facebook including interactive activities for the fulfillment of such needs as self-presentation, socialization, entertainment and escaping may lead to Facebook addiction.

Facebook addiction is defined as having difficulty in controlling and limiting the time spent in Facebook (Lee, Cheung & Thadani, 2012). Moreover, Andreassen & Pallesen (2013) list the symptoms of the Facebook addiction as mood modification, salience, tolerance development, withdrawal, conflict and relapse. Mood modification involves using social networking sites to create useful changes in an individual's emotional state. Salience involves one giving all his/her attention to the use of social networking sites at cognitive, emotional and behavioural levels. Tolerance development covers extremely increasing the amount of using social networking sites. Withdrawal points to experiencing unpleasant physical and emotional symptoms when one cannot access social networking sites or is restricted to enter social networking sites. Conflicts denotes living problems in home and work life, social relationship and other activities due to the use of social networking sites. Relapse points to one's not giving up using social networking sites although he/she tries to give up (Andreassen & Pallesen, 2012).

Kuss and Griffiths (2011) stated that Facebook addiction leads to psychological and social problems in an individual's life. Sagioglou and Greitemeyer (2014) reported that Facebook affected individual's emotional situations negatively. According to Sagioglou and Greitemeyer (2014), the reason for this is that they are not appreciating the value of time and thinking they are busy with useless things in Facebook (Sagioglou and Greitemeyer, 2014). Kros, Verduyn, Demiralp, Park, Lee, Lin, Shablack, Jonides & Ybarra (2013) stated that the Facebook addiction decreases individuals' feeling of living the moment and their life satisfaction. Moreover, Bevan, Gomez and Sparks (2014) indicated that the Facebook addiction decreases individual's life satisfaction. Besides this, there are also studies reporting that the Facebook addiction is associated with depression (Hong, Huang, Lin & Chiu, 2014).

The Facebook addiction affecting all dimensions of individual's lives seriously have directed researchers to investigate predictors of the Facebook addiction. In the literature, as the predictors of the Facebook addiction are emphasized personality, narcissism, low self-esteem, shyness, introvertedness and loneliness (Cao & Su, 2007; Hughes, Rowe, Batey & Lee 2012; Lavin, Yuen, Weinman & Kozak, 2004). It is observed that adolescents students use Facebook mostly for maintaining their social relationships and establishing new relationship (Hong, Huang, Lin and Chiu, 2014; Kim, Sohn & Choi, 2011; Kuss, Griffiths & Binder, 2012). In this direction, it can be stated that as adolescents need to maintain their online friendship increases the possibility of becoming a Facebook addict increases (Hong Huang, Lin & Chiu, 2014). It is also observed that the use of Facebook in achieving the fulfillment of various needs by adolescent students may reach addiction level (Andreassen, Torsheim, Brunborg & Pallasen, 2012; Kruss & Griffiths, 2011). Facebook addiction occurs more regularly among adolescents than older users (Andreassen & Pallen, 2013).

Adolescence is a period of rapid growth and development of human beings which occurs between ages of 12 to 18 years. The individual who belongs to this age brackets are referred to as an adolescents and many of them are in secondary schools and tertiary institutions (Onukwufor, &Ugwu, 2018). An adolescent have been described as person between the ages of 12-19 years. In some cultures, adolescence covers from ages 10-19 years while in some others; it is from 13-21 years. This simply implies that the age range of adolescence varies from culture to culture (Achumba, 2009). At adolescence period, adolescents are faced with a lot of challenges because of dramatic physiological changes they experience. The advent of these physical changes affects adolescents' life in every aspect. The way and manner these adolescents try to face these challenges have given rise to their peculiar anti-social behavioural patterns or aggression. The addiction or over use of social networking sites (SNS) such as Facebook by these adolescents may lead to aggression among adolescents' students.

Aggression is a phenomenon that can take many forms, ranging from relatively minor acts (such as name calling or pushing) to more serious act (such as hitting, kicking or punching). In social psychology, aggression is most commonly defined as a behaviour that is intended to harm another person who is motivated to avoid that harm (Bushman &Hoesmann, 2010; Dewart, Anderson &Bushman, 2012). This harm can take many forms such as physical injury, hurt feelings or damaged social relationship. According to Horan, Chory and Goodboy (2010), aggression is portrayed as an antisocial behaviour whereas Efrati-Virtzer and Margalit (2009) identify aggression as a disrupting behaviour. Buss (2005) states that aggression possesses potentiality of being led to violence and criminal activities wherein extreme cases could be closely associated with psychopathy (Coyne & Thomas, 2008). Aggression, by nature, has as its goal the damaging of social status or self-esteem of the victim (Archer & Coyne, 2005; Remillard& Lamb, 2005). According to prior studies, aggressive behaviours are triggered by the size of the individual's social network, relations with peers and efficiency in social skills. On the other hand, these are not the only reasons for individuals to be aggressive as stated by Lopez, Olaizola, Ferrer and Ochoa (2006). By all these influences, aggression can take forms such as physical, verbal, suspicion and resentment (Garcia-Leon, Reyes, Vila, Perez, Robles, & Ramos, 2002).

The sub-dimensions of student's aggression boil down to four categories. These are verbal aggression, anger with resentment, physical aggression and suspicion. Verbal aggression is defined as "hurting or harming others verbally represents the instrumental or motor component of the behaviour" (Buss & Perry, 1992). Anger with resentment (referred to as anger by Buss & Perry, 1992). Physical aggression involves physiological arousal and preparation for aggression, represents the emotional or affective component of behaviour (Buss & Perry, 1992). Suspicion (referred to as Hostility by Buss & Perry, 1992) consists of feelings of ill will and injustice that represents the cognitive component of behaviour" (Buss & Perry, 1992).

The ubiquity of social networking sites also raises the concern of addiction of social networking sites among adolescent students and the notable aggressive behaviour often manifested by these adolescents. There is a concern about overuse of Facebook and the degradation of behaviour of students. Thus, the need for this study arises.

From the researcher's observation, some adolescents are addicted to Facebook and this may be as a result of ubiquity of social networking site. Facebook addiction seems to affect all dimensions of adolescent's lives seriously and negatively too. These adolescents' preoccupation with Facebook may result to higher tendencies of aggression and impulsive behaviours leading to the intention of hurting someone physically, anger and intentional act that can be relayed verbally or by chat since electronic forms of contact like Facebook seems to present endless opportunities to do the harassment, insult, denigration, impersonation, exclusion and defaming other persons online. In the light of these observations, one then wonders if Facebook addiction affects adolescent's student's aggression level. Summarily, the problem of study put in question form is this: How does Facebook addiction affect aggression among adolescent students?

Research Questions

The following research questions guided the study:

1. What are the adolescent students' scores on Facebook addiction?
2. What are the adolescent students' scores on aggression?
3. What is the relationship between Facebook addiction and different aspects of aggression among adolescent students?

Hypothesis

There is no significant relationship between Facebook addiction and different aspects of aggression among adolescent student.

Method

The study employed mixed method type of research which consists of ex-post facto and Pearson Product Moment Correlation. The population of the study comprised of all students in NwaforOrizu College of Education, Nsugbe, given a total of eighteen thousand, six hundred students (18,600). The sample consists of first year students randomly selected from five departments in NwaforOrizu College of Education, Nsugbe (NOCEN); Political science (150), English (120), Social Studies (110), Economic (125) and Guidance & Counselling (85). The distribution was 40 students from each of the five departments giving a total of 200 respondents. A simple random sampling technique was used for the selection. Here, the researchers gave the students equal chance of being selected. Using ballot method, the researchers went to their lecture hall where the supposed samples take their lecture and with the help of their lecturers and course representative, students were asked to pick a ballot paper of yes/no. Any of the students who picked "Yes" was given the questionnaire to respond to while those that picked "No" did not participate in the real study.

This research utilized two standardized instrument as measures of addictive tendencies of Facebook use and aggression among adolescents' students. The use of standardized instrument established the reliability of the results of the study, since these were already validated by experts and have reported reliability coefficients in their usage. The Bergen Facebook Addiction Scale (BFAS) (Andreassen, et. al. 2012) comprised of 18 items, wherein three items were divided into the six core features of addiction: salience, mood modification, tolerance, withdrawal, conflict and relapse. Each item is scored on a 5-point scale using semantic pairing of 1: very rarely and 5: very often. Higher scores indicate greater Facebook addiction. Reported Cronbach's alpha values were $\alpha = 0.83$ for salience, $\alpha = 0.084$ for mood modification, $\alpha = 0.88$ for tolerance, $\alpha = 0.86$ for withdrawal, $\alpha = 0.84$ for conflict and $\alpha = 0.83$ for relapse (Lacida & Murcia, 2015). On the other hand, the Buss-Perry Aggression Questionnaire (BPAQ) was adopted from Buss and Perry (1992), which consists of 29 items, loaded into its construct: Physical aggression (9 items), verbal aggression (5 items), anger (8 items), and hostility (8 items). Each item is scored on a 7 Point scale using anchors of 1: very characteristics of me and 7: Not very characteristics of me. Higher sores indicate frequent experiences of aggression. The internal consistency coefficients were as follows: Physical aggression, $\alpha = 0.85$; verbal aggression, $\alpha = 0.72$; anger = 0.83 and hostility, $\alpha = 0.77$, with the internal consistency being $\alpha = 0.89$ (Buss & Perry, 1992). Based on the recommendation of Olayiwola (2007), a reliability estimate of 0.70 and above is high and the instrument for which it is calculated is reliable. To contextualize the use of the two questionnaires, they were validated by a group of experts who held degrees in the field of psychology and Guidance and counseling. However, since the reliability of the instruments is already established, no pilot-testing was required. Data from the questionnaire were analyzed using Frequency Percentage and Pearson Product Moment Correlation, or simply Pearson r. Frequency Percentage were used in classifying Facebook addiction. Scores ranging from 18 – 41 is regarded as no Facebook addiction class, 42 – 65 is regarded as limited symptoms and 66 – 90 class is regarded as Facebook addiction. The maximum score for Facebook addiction was 90 while the minimum score was 18. For aggression scale, scores ranging from 29 – 88 is regarded as 'no aggression class', 69 – 148 is regarded as 'limited aggression class' and 149 – 203 is regarded as 'high aggression class'.

Results

Research Question 1: What are adolescent students' scores on Facebook addiction in NOCEN?

Table1. Range of Adolescent Students' Scores on Facebook Addiction

Range of scores	N	%	Remark
18 – 41	52	26	No Facebook addiction
42 – 65	62	31	Limited symptoms
66 – 90	86	43	Facebook addicted

Table 1 shows that with scores from 66 to 90, 86 (43%) of adolescents students are addicted to Facebook, 62 (31%) of adolescents who scored between 42 to 65 have limited symptoms of Facebook addiction; while 52(26%) of adolescents who scored between 18-41 have no symptoms of Facebook addiction in NOCEN.

Research Question 2: What are Adolescent Students' Scores on Aggression in NOCEN?

Table 2 Range of Adolescent Students' Scores on Aggression

Range of scores	N	%	Remark
29 – 88	43	21.5	mild aggression
89 - 148	68	34	moderate aggression
149 - 203	89	44.5	severe aggression

Table 2 shows that with scores from 149 to 203, 89 (44.5%) of adolescents students have severe aggression, 68 (34%) of adolescents students who scored between 89 to 148 have moderate symptoms of aggression; while 43(21.5%) of adolescents students who scored between 29-88 have mild symptoms of aggression.

Research Question 3: What is the relationship between Facebook addiction and different aspect of aggression among adolescent students' in NOCEN?

Table 3: Relationship between Facebook addiction and different aspect of aggression among adolescent students

Independent variable	Dependent variable	Pearson r value	Remark
Overall Facebook addiction	Physical aggression	0.45	Moderate positive
	Verbal aggression	0.32	Low positive
	Anger	0.27	Low positive
	Hostility	0.65	High positive

Table 3 shows that the relationship between Facebook addiction and physical aspect of aggression among adolescent students is moderate positive (0.45), Facebook addiction and verbal aspect of aggression among adolescents' students is low positive (0.32). Furthermore, Facebook addiction and verbal aspect of aggression among adolescents' students is very low positive (0.27); while Facebook addiction and verbal aspect of aggression among adolescents' students is high positive (0.65).

Hypothesis

The hypothesis was tested at 0.05 probability level.

1. There is no significant relationship between Facebook addiction and different aspect of aggression among adolescents' students

Table 4: Test of relationship between Facebook addiction and different aspect of aggression among adolescents students

Independent variable	Dependent variable	Pearson r value	p-value	remark
Overall Facebook addiction	Physical aggression	0.45	0.031	Reject
	Verbal aggression	0.32	0.025	Reject
	Anger	0.27	0.011	Reject
	Hostility	0.65	0.036	Reject

Table 4 shows test of significant relationship between Facebook addiction and different aspect of aggression among adolescents students at 0.05 level of significance. Table 4 also shows that the relationship between Facebook addiction and physical aspect of aggression among adolescents students is significant ($r = 0.45, p < 0.05$), Facebook addiction and verbal aspect of aggression among adolescents students is also significant ($r = 0.32, p < 0.05$). Furthermore, Facebook addiction and verbal aspect of aggression among adolescents students is significant ($r = 0.32, p < 0.05$), while Facebook addiction and verbal aspect of aggression among adolescents students is also significant ($r = 0.65, p < 0.05$). Therefore, there is a significant relationship between Facebook addiction and different aspect of aggression among adolescents' students of NOCEN.

Discussion

The study investigated the influence of Facebook addiction on aggression among adolescent students in NwaforOrizu College of Education, Nsugbe. Result in table 1 indicated that most of these adolescent students are addicted to Facebook (43%). This implies that because of the ubiquity of social networking sites such as Facebook, most adolescent overuse Facebook and do not have time for other things. Some of them neglect their studies because they are always surfing the net. Some adolescents are exposed to violence, denigration, defamation and name calling on Facebook thereby making them to be very aggressive especially when they are being insulted or lampooned. This is in tandem with the research executed by Andearssen and Pallesen (2013) that revealed that addiction to social networking occurs more regularly among adolescents than older users. People who are anxious and socially insecure use Facebook because those who are anxious find it easier to communicate via social media than face- to-face.

Result in table 2 indicated that most of these adolescents have high or severe aggression (44.5%). This implies that most of these adolescents have severe aggression as a result of their addiction to Facebook. This is in line with the pronouncement of Benerje et al (2009), averted that too much Facebook use leads to exposure as well as commission of aggressive, intentional acts or behaviour that can be relayed verbally or by chat, since electronic forms of contact like Facebook seem to represent endless opportunities to do the harassment, insult, denigration, impersonation, exclusion and defaming other people online.

Result in table 3 revealed that there is a positive relationship between Facebook addiction and aggression among adolescent students in NOCEN. In other words, the more they are addicted to Facebook, the more aggressive they become. This synchronizes with the pronouncement of Arendain (2015) that averred that the ubiquity of social networking sites also raises the concern of addiction among College students and the notable aggressive behaviour being manifested by these adolescents.

Results in table 4 showed that each form of aggression, the r value for the correlation between Facebook and physical aggression was 0.45 with a p-value of 0.031, which is significant at 0.05 level. This implies that overall Facebook addiction significantly and positively related with physical aggression. This conforms to the findings of Kim et al. (2008), citing that preoccupation with the use of Facebook result to higher tendencies of aggression and impulsive behaviour leading to the intention of hurt by someone physically or do the actual commission of the action.

Moreover, the r value for the correlation between Facebook addiction and verbal aggression was 0.32 with a p – value of 0.025, which is significant at 0.05 level. This implies that overall Facebook addiction

significantly and positively related with verbal aggression. This concurs with the pronouncement of Banerjee *et al.* (2009), stated that too much Facebook use leads to exposure as well as commission of aggressive, intentional acts or behaviour that can be related verbally or by chat, since electronic forms of contact like Facebook seem to present endless opportunities to do the harassment, insult, denigration, impersonation, exclusion and defaming other persons online (Willard, 2006). Joinson (1998) coins the term 'online disinhibition' as a consequence of online anonymity, which may lead to de-individuation (Zimbardo, 1969) and can foster aggressive behaviors (Ko, *et al.*, 2009). In adolescents, verbal aggression has been associated with addiction from internet as well as its social media (Ko, *et al.*, 2009). This process may be particularly problematic for adolescents as their cognitive control capabilities may not be adequately developed (Casey, *et al.*, 2005).

In the same way, the r value for the correlation between Facebook addiction and anger was 0.27 with a p-value of 0.011, which is significant at 0.05 level. This implies that overall Facebook addiction significantly and positively related with anger. The findings can be made true with the results of the study of Weinstein and Lejoyeux (2010), who also claims that excessive access to social media can cause too much problem when it simply becomes more compulsive, the daily life activities are interfered and when a person cannot control it anymore. Withdrawal is accompanied with this type of number which includes tension, feelings of anger and depression when access is unavailable, excess usage tolerance usage (including seeking better equipment and more hours usage) and adverse consequences (arguments, poor achievement, isolation and fatigue). Anger is the most common problem when such Facebook usage is being deprived.

Lastly, the r value for the correlation between Facebook addiction and anger was 0.65 with a p-value of 0.036, which is significant at 0.05 level. This implies that overall Facebook addiction significantly and positively related with anger. This finding is in agreement with the findings of Zuckerman (2007), who found out that higher risk of addiction in social media corresponds to hostility. Likewise, in a recent study conducted by Zuo (2014), greater investment in Facebook was associated with more symptoms of hostility and sensitivity.

Conclusion and Recommendations

In the overall level, college students were found to exhibit moderate or mild Facebook addiction. Moreover, college students were found to exhibit moderate level of physical aggression verbal aggression and hostility, and low level of anger. Facebook addiction significantly and positive relates with the four forms of aggression: physical aggression, verbal aggression, anger and hostility. This implies that the more addicted are college students using Facebook, the more they exhibit physical aggression, verbal aggression, anger and hostility.

Facebook has also become a source of information of college students. However, it has become a breeding ground of misunderstanding, quarrel and arguments, due to lack of personal appeal and blatant disinhibition of students in interaction with others. When these happen, college students blatantly use Facebook as a mechanism of aggressive behavior. Moreover, Facebook has also become a tool for establishing and building friendships as well as displaying things and events. This means that the college students would use Facebook to seek for information, and be updated with current and trending events by looking at their posts in the news feed.

Based on the findings of this study, the following recommendations are made:

1. Family discussions are important for adolescents and can result in less likely online impulsive behaviours.
2. Parents need to educate their adolescents about social media and the ways they may use it, as well as the common risks involved to help them understand and navigate technologies and avoid being aggressive in their usage.
3. Parents need to be enlightened on how online communication affects real world communication, relationship and developmental outcome and dissuade their wards from being addicted to it

There is need to carry out research that examines how online communication affects real world communication, relationship and developmental outcome.

References

- Andreassen, C. S & Pallensen, S. (2013). Facebook addiction: Arepley to Griffiths (2012). *Psychological reports*, 113(3), 899 – 902.
- Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S., (2012). Development of a Facebook addiction scale 1, 2. *Psychological reports*, 110(2), 501-517.
- Archer, J., & Coyne, S. M., (2005). An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review*, 9(3), 212-230.
- Arendain, J., (2015). Addictive tendencies of Facebook use and aggression: A psychosocial Influence UM Digos College Students. Unpublished thesis: Rizal Memorial College, Davao City Philippines.
- Banerjee, S. S., Greene, K., Kermar, M., & Bagasarov, Z., (2009). Who watches verbally aggressive shows? An examination of personality and other individual difference factors in predicting viewership. *Journal of Media psychology*, 21(1), 1-14.
- Bevan, J. L., Gomez, R., & Sparks, L., (2014). Disclosure about important life events on Facebook: Relationship with stress and quality of life. *Computers in Human Behaviour*, 39(1), 249 – 253.
- Buffarde, L.L. and Campbell, W. (2008). Narcissi and Social networking websites. *Personality and Social Psychology Bulletin* 34(10), 1303-1314.
- Bushman, B. J., & Huesmann, L. R., (2010). Aggression. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of Social Psychology* (5th ed., Vol. 2, pp. 833–863). Hoboken, NJ: John Wiley & Sons.
- Buss, A. H., & Perry, M., (1992). The aggression questionnaire. *Journal of Personality and Social Psychology*, 63(3), 452.
- Buss, D. M., (2005). *The murderer next door*. New York: Penguin Press.
- Cao, F., & Su, L., (2007). Internet addiction among Chinese adolescents: prevalence and psychological feature. *Child care and health and development*, 33(3), 275-281.
- Casey, B. J., Tottenham, N., Liston, C., & Durston, S. (2005). Imaging the developing brain: what have we learned about cognitive development? *Trends in Cognitive Sciences*, 9(3), 104 – 110.
- Chaffey, D., (2017). Global Social Media Research Summary, 2017. Retrieved April 27, 2017, from <http://www.smartingsights.com/social-media-marketing/social-media-strakgy/new-global-social-media-research>
- Cheung, CMK & Lee, M.K.O., (2010). A theoretical model of intentional social action in online social networks. *Decisions Support System* 49(1), 24-30.
- Correa, T. Hinsley, A & De Zuniga, H., (2010). Who interacts on the web? The intersection of users' personality and social media use. *Computers in Human Behaviour* 26(2), 247 – 253.
- Coyne, S. M & Thomas, T.J., (2008). Psychopathy, aggression and cheating behaviour. A test of the cheater – Hawk hypothesis. *Personality and Individual Differences*, 44, 1105-1115.
- DeWall, C. N., & Anderson, C. A., (2011). The general aggression model. In *Human aggression and violence: Causes, manifestations, and consequences* (pp. 15–33). Washington, DC: American Psychological Association.

- Efrati-Virtzer, M., &Margalit, M., (2009). Students' behavior difficulties, sense of coherence and adjustment at school: Risk and protective factors. *European Journal of Special Needs Education*, 24(1), 59-73.
- Facebook (2012a).Four degrees of separation. Available at: <http://arxiv.org/pdf/1111.4570v3.pdf> (accessed 6 April 2012).
- Facebook (2012b) Statistics. Available at: <http://www.Facebook.com/press/info.php?statistics> (accessed 6 April 2012).
- Fast Company (2010). Twitter Crushing Facebook's click-through rate: Report. Available [thhp://www.fastcompany.com/1694174/twitter](http://www.fastcompany.com/1694174/twitter)
- Gaille, B., (2017). 43 remarkable Facebook addiction statistics.Retrieved May 29, 2017 from <http://brandongaille.com/42-remakrable-Facebook-addiction-statistics>.
- Garcia-Leon, A., Reyes, G. A., Vila, J., Perez, N., Robles, H., & Ramos, M. M., (2002). The aggression questionnaire: A validation study in student samples. *The Spanish Journal of Psychology*, 5, 45-53
- Hargittai, E. (2007). Whose space? Differences among users and non-users of social networking sites.*Journal of Computer Mediated Communication* 13(1), 276 – 297
- Hong, F. Y., Huang, D. H., Lin, H. Y., & Chiu, S. L., (2014). Analysis of the psychological traits, Facebook usage and Facebook addiction model of Taiwanese University students.*Telematics and informatics*, 31, 597 – 606.<http://dx.doi.org/10.1016/j.tele.2014.001>
- Horan, S. M., Chory, R. M., &Goodboy, A. K., (2010).Understanding students' classroom justice experiences and responses.*Communication Education*, 59(4), 453-474.
- Hughes, D.J., Rewe, M., batey, M., & Lee, A., (2012). A tale of two sites: Twitter vsFacebook and the personality predictors of social media usage. *Computers in Human Behaviour*, 28 (2), 561-569. <http://dx.doi.org/10.1016/j.chb.2011.001>
- Hughes, D.J., Rowe, M., Batey, M., & Lee, A., (2012). A tale of two sites: Twitter vsFacebook and the personality predictors of social media usage. *Computer in Human Behaviour*. 28(2), 561 – 569. <http://dx.doi.orh/10.1016/j.chb.2011.11.001>
- Kim, E. J., Namkoong, K., Ku, T., & Kim, S.J., (2008).The relationship between online game addiction and aggression, self-control and narcissistic personality traits.*European Psychiatry*, 23(3), 212 – 218.
- Kim, J., &Haridakis, P.M. (2009). The role of internet user characteristics and motives in explain three dimensions of internet addiction. *Journal of Computer-Mediated Communication*, 14(4)988 – 1015. <http://dx.doi.org/10.1111/j.1083-6101.2009.01478x.s>
- Kim, Y., Sohn, D., & Choi, S. M., (2011). Cultural difference in motivations for using social network sites: A comparative study of American and Korean college students. *Computers in Human Behaviour*, 27, 365-372. <http://dx.doi.org/10.1016/j.chb.2010.05.015>
- Ko, C.H., Liu, G. C., Hsiao, S., Yen, J. Y., yang, M. J., Lin, W, C., & Chen, C.S., (2009). Brain activities associated with gaming urge of online gaming addiction. *Journal of Psychiatric Research*, 43(7), 739 – 747

- Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D.S., Lin, N., Shablack, H., Jonides, J., & Ybarra, O., (2013). Facebook use Predicts declines in subjective well – being in young adults. *Plos ONE*, 8(8), c69841.<http://dx.doi.org/10.1371/journal.pone.0069841>.
- Kuss, D. & Griffiths, M. (2011). Online Social networking and addiction. A review of the psychological literature. *International Journal of Environmental Research and Public Health*, 8, 3528 – 3552.
- Kuss, D.J., Griffiths, M.D., & Binder, J. F (2013). Internet addiction in students: Prevalence and risk factors. *Computer in Human Behaviour*, 29(3), 959-966.
<http://dx.doi.org/10.1016/j.chb.2012.12.024>.
- Kwon O. and Wen, Y., (2010) An empirical study of the factors affecting social network service use. *Computers in Human Behavior* 26(2): 254–263.
- Lavin, M.J., Yuen, C.N., Weinman, M., &Kozak, K., (2004). Internet dependence in the Collegiate Population: the role of shyness. *Cyber Psychology & Behaviour*, 7(4), 397-383.<http://dx.doi.org/10.1089/CPb.2004.7.379>.
- Le, T.T. & Tarafidar, M. (2009). Business ecosystem perspective on Value co-creation in the Web 2.0 era: Implications for entrepreneurial opportunities. *International Journal of Entrepreneurial Venturing* 1(2), 112-130.
- Lee, E., (2012) Young, black, and connected: Facebook usage among African American college students. *Journal of Black Studies*, 43(3), 336–354.
- Ler, Z.W.Y., Cheung, C.M.K., & Thadani, D.R. (2012). An investigation into the problematic use of Facebook. In 45th Hawaii International Conference on system sciences.
- Lewis, K., Kaufman, J., & Christakis, N., (2008). The task for privacy: an analysis of college student privacy settings in an online social network. *Journal of Computer-Mediated Communication* 14(1), 79-84.
- Lopez, E. E., Olaizola, J. H., Ferrer, B. M. & Ochoa, G. M., (2006). Aggressive and nonaggressive rejected students: An analysis of their differences. *Psychology in the Schools*, 43(3), 387-400.
- Macida, A. P., & Murcia, J. V., (2015). Influence of Facebook addiction on study habits of college students. Available at SRN2617158.
- Olayiwola, A. O., (2007). Procedures in educational research. Ibadan: Kaduna Hanjiam Publishers.
- Oldmeadow, J.A., Quinn, S., & Kower, R., (2013). Attachment style, social skills and Facebook use amongst adults. *Computers in Human Behaviour*, 29(3), 1142.<http://dx.doi.org/10.1016/j.chb>
- Onukwufor J. N., and Ugwu, C. J., (2018). Investigation of Principals' Attitude towards Inclusion of Special Needs Students in Public and Private Secondary Schools in Rivers State, Nigeria. *American Journal of Applied Psychology*, 6(1), 1-7. doi:10.12691/ajap-6-1-1.
- Orr, E., Ross, C., Simmering, M., (2009). The Influence of Shyness on the use of Facebook in an undergraduate sample. *Cyberpsychology & Behaviour* 12(3), 337 -340.
- Papacharissi, Z., & Mendelsohn, A., (2011). Toward a new(er) sociability: Uses, gratifications and social capital on Facebook. In S.Papathanassopoulos(Ed), communication and society: Media perspective for the 21st century. Concepts, topics and issues (pp. 212 – 230) Newyork:Routledge

- Pempek, T.A., Yermolayeva, Y.A., & Calvert, S.L., (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, 30(3), 227–238.
- Raacke, J. & Bonds–Raacke, J. (2008). Myspace and Facebook: applying the uses and gratifications theory to exploring friend networking sites. *Cyberpsychology & Behaviour* 11(2): 169 -174.
- Remillard, A. M., & Lamb, S., (2005). Adolescent girls' coping with relational aggression. *Sex Roles*, 53(3 - 4), 221-229.
- Ritzer, G. and Jurgenson, N. (2010). Production, Consumption, Prosumption – the nature of capitalism in the age of the digital 'Prosumer'. *Journal of consumer Culture* 10(1), 13 – 36.
- Ross, C., Orr, E., Sisic, M. (2019). Personality and Motivations Associated with Facebook use. *Computers in Human Behaviour*, 25(2), 578-586.
- Ryan, T., Chester, A., Reece, J., & Xenos, S., (2014). The uses and abuses of Facebook: A review of Facebook addiction. *Journal of Behavioural Addictions*, 3(3), 133-148.
Doi:10.1556/JBA.3.2014.016
- Skageby, J., (2009) Exploring qualitative sharing practices of social metadata: expanding the attention economy. *Information Society*, 25(1), 60–72.
- Sledgianowski, D., and Kulviwat, S., (2009) Using social network sites: the effects of playfulness, critical mass and trust in a hedonic context. *Journal of Computer Information Systems*, 49(4), 74-83.
- Smith, A., & Anderson, M., (2018). Social Media use in 2018. Retrieved March 1, 2018, from <http://www.pewinternet.org/2018/03/01/social-media-use-in-2018>.
- Stroud, D., (2008). Social networking: An age neutral Commodity – social networking becomes a matures web application. *Journal of Direct, Data and Digital Marketing Practice* 9(1), 278 - 292.
- Walther, J., VanDerHeide, B., & Hamel, L., (2009) Self-generated versus other-generated statements and impressions in computer-mediated communication. *Communication Research*, 36(2), 229–253.
- Weinstein, A., & Lejoyeux, M., (2010). Internet addiction of excessive internet use. *The American Journal of Drug and Alcohol Abuse*, 36(5), 277-283.
- Willard, N., (2006). Cyber bullying and cyber threats. Eugene, OR: Centre for Safe and Responsible Internet Use.
- Wilson, K., Fornasier, S., & White, K., (2010) Psychological predictors of young adults' use of social networking sites. *Cyberpsychology, Behavior, and Social Networking*, 13(2), 173–177.
- Yau, N., & Schneider, J., (2009) Self-surveillance. *Bulletin of the American Society for Information Science and Technology* 35(5): 24–30.
- Zuckerman, M., (2007). The sensation seeking scale V (sss-v): still reliable and valid. *Personality and Individual Differences*, 43(5), 1303 – 1305.
- Zuo, A., (2014). Measuring up: Social Comparisons on Facebook and contributions to self-esteem and mental Health (Doctoral Dissertation University of Michigan)