Asian Resonance

Understanding Selfie Addiction: Role of Personality Traits and Sense of Loneliness

Nitika Shah
Research Scholar,
Deptt.of AIPS,
Amity University,
Noida

Seema Singh
Assistant Professor,
Deptt.of AIPS,
Amity University,
Noida

Abstract

The goal of this study was to establish relationship between personality traits (extraversion, neuroticism, psychoticism) and selfie addiction and between loneliness and selfie addiction. Data were collected from 150 participants (Males=58, Females= 92) between the age ranges of 18-28 years (*M*=23.40; *SD*=2.38). The analysis of the data reveals that there was a significant relationship seen between neuroticism and selfie addiction and between loneliness and selfie addiction. However, no relationship was established between extraversion and selfie addiction and psychoticism and selfie addiction. Loneliness was found to be a significant predictor of selfie addiction which means that lonely people may have a higher tendency for selfie addiction.

Keywords: Selfie Addiction, Loneliness, Extraversion, Neuroticism, Psychoticism.

Introduction

We live in the age of technology. All our lives revolve around smart phones, computer/laptop screens and tablets. There has always been a never ending debate among the pros and cons of technology use. It has been found that mobile phones have many disadvantages like eye straining, finger pain, backache, neck pain, sleep disturbances (Thomée, Härenstam & Hagberg, 2011) (Gupta, Krishnamurthy, Majhi & Gupta, 2013), gaming and internet addiction, and other physiological, psychological, social and emotional problems (Lenhart, Ling, Campbell & Purcell, 2010).

Recently, a new trend of selfie taking has evolved. The term 'selfie' was coined by Steven Wrighter in September 2002 (Alblooshi, 2015). According to Merriam-Webster dictionary, "Selfie is an image of oneself taken by oneself using a digital camera especially for the purpose of posting on Social networking sites" ("Selfie". Merriam-Webster, n.d. 2017). In 2013, 'Selfie' has been named as the word of the year by the Oxford Dictionary (Word of the Year 2013, Oxford Dictionaries. n.d., 2017).

It has been found that in the age range of 18-24, every third photo clicked is a selfie (Diefenbach & Christoforakos, 2017). Taking a lot of selfies has serious implications on human body. Kela, Khan, Saraswat & Amin (2017) has found that people experience the following problems due to excessive selfies: pain in the lower back, cervical spondylitis, awkward body posture, and frozen shoulder. Recently a new complication named "Selfie Elbow" has been found among people taking a lot of selfies regularly.

Review of Literature

The American Psychiatric Association (APA) in 2014 has confirmed that selfie taking is a mental disorder and termed it as "Selfitis". It is defined as an obsessive compulsive desire of person to take photos of one self and post them on social media. According to APA, selfitis has been classified into three levels: Borderline selfitis which refers to only taking photos of one's self at least three time a day however, not posting them on social networking sites (SNS), Acute selfitis refers to taking at least three photos of one self per day and posting all of them on SNS, and Chronic selfitis includes uncontrollable urge to take photos of self at least six times per day and posting all of them on SNS (Anonymous, 2014) (Singh & Tripathi, 2016).

Excessive selfie clicking is found to have effects on mental health. Excessive increase in body image dissatisfaction (Dutta et al., 2016) and narcissism are a few major concerns of this behaviour. Excessive selfies

Asian Resonance

have been known to cause addictive and obsessive tendencies as seen in case of a teenager named Danny Bowman. He used to spend 10 hours a day and clicked 200 photos of himself and also lost 12 kgs in this process. He dropped out of the school to get a perfect shot of himself. He also attempted suicide upon failing to get a perfect selfie (Molloy, 2014). Many people have taken selfie culture so seriously that they are willing to undergo numerous reconstructive surgeries to look good on selfie (Verma, 2017). This type of selfie addiction has been termed as "selfitis" in 2014 by the Oxford Dictionary (Anonymous, 2014b). However, a proper definition of selfie addiction has yet not been formed.

Various studies have found a relationship between personality traits and selfie clicking behaviour. Orchard, Fullwood, Galbraith & Morris (2014) suggests that people high on psychoticism, extraversion and neuroticism traits are more inclined to use social networking sites. Neuroticism is the tendency to be anxious, worrisome, and moody. Neurotics have low or depressed mood. They are tensed and are irrational most of the time. Amichai-Hamburger, Wainapel & Fox (2002) suggested that neurotic people use more internet in order to locate their real self. Qiu et al. (2015) suggested that duckface in selfie indicated neuroticism. Selfie taking has also been associated with the trait of extraversion (Kim & Chock, 2017; Krämer et al., 2017; Sorokowska et al., 2016). Extraversion is the tendency of an individual to be outward oriented and are sociable, adventurous, assertive, impulsive talkative, active, upbeat, cheerful, optimistic and dominant. It has been found that extraverted people have positive attitude towards travel selfies (Paris & Pietschnig, 2015). Presence of trait of extraversion may act as a major determinant of online networking size (Acar, 2008). There are very few studies which have linked selfie behaviour with psychoticism. Psychotic people are aggressive, cold hearted, ego-centric, antisocial, and tough-minded. They are hostile, cruel, and, lack empathy. Studies have revealed that psychopathy is a significant predictor of selfie posting behaviour (Saroshe, Banseria, Dixit & Patidar, 2016; Grabmeier, 2015).

It has also been found that selfie taking and posting behaviour has been positively linked to narcissism (Barry, Doucette, Loflin, Rivera-Hudson & Herrington, 2017; Kim & Chock, 2017; Krämer et al., 2017; Saroshe, Banseria, Dixit & Patidar, 2016; Charoensukmongkol, 2016; Singh & Tripathi, 2016).

Not only are personality factors related with selfie taking and posting behaviour. Other factors are also responsible like loneliness which may contribute towards adoption of such selfie behaviours. Loneliness according to Perlman & Peplau (1981) is the experience which results when a person is not satisfied with their present network of social relationships and feels unable to improve them. Di Sia (2017) suggests that selfies may represent a void, feeling of emptiness, loss and absence of something substantial in one's life. People who feel lonely take more selfies than others (Charoensukmongkol, 2016).

Another study suggests that selfies might imply loneliness (Carmean & Morris, 2016). It can thus be inferred that people who are lonely are more addicted to mobile phones (Wong, Tho & Sin, 2016) and internet activities (Pittman, 2017; Özdemir et al., 2014; Moody, 2001).

Thus the objective of the present study is to identify the relationship between personality traits like neuroticism, psychoticism and extraversion and selfie addiction and between loneliness and selfie addiction. This study aims to add to the scarce body of previous researches.

Methods
Hypothesis
We hypothesise that-
1. Participants scoring high on extraversion will have a higher selfie addiction score as compared to people scoring low on extraversion.
2. Participants scoring high on neuroticism will have a higher selfie addiction score as compared to people scoring low on neuroticism.
3. Participants scoring high on psychoticism will have a higher selfie addiction score as compared to people scoring low on psychoticism.
4. Loneliness will be a predictor of selfie addiction.

Sample
This study included a total of 150 participants (58 males and 92 females) (M=1.61; SD=.49). The age range of selected participants was between 18 to 28 years (M=23.40; SD=2.38). Participants were recruited either through Google Forms or through hard copy of questionnaires. The aim of the study was not disclosed in order to receive unbiased responses by the participants.

Measures
For this study, each participant completed the following three questionnaires after a demographic form which required the participants to fill in their name, Email address, age, gender, and educational qualification. The three questionnaires are as follows:

Eysenck's Personality Questionnaire Revised-Short Form (EPQR-S)
The EPQR-S is a self-reported questionnaire by (Eysenck, Eysenck, & Barrett, 1985). It consists of 48 items in total. Each dimension (Extraversion, Neuroticism, Psychoticism, and Lie scale) of the questionnaire has 12 items respectively. Each item has a binary response format, 'yes' or 'no'. Each item was scored either 1 or 0 and each dimension had a maximum possible score of 12 and minimum possible score of Zero (Francis, Lewis & Ziebertz, 2006).

Selfie Addiction Scale
The selfie addiction scale by Solanki (2017) is a self-reported questionnaire. It consists of 47 items in total. Each item can be scored as 1=strongly disagree, 2=disagree, 3=weakly disagree, 4=weakly agree, 5=agree, 6=strongly agree, with the maximum possible score of 282 and minimum possible score of 47.

UCLA Loneliness Scale (Version 3)
The UCLA loneliness scale by Russell (1996) is a self-reported questionnaire designed to

measure individual's feelings of loneliness and social isolation. This scale consists of 20 items in all. Each item can be scored on one of the four possible options Never, Rarely, Sometimes, and Often. The scoring for question number 2,3,4,7,8,11,12,13,14,17, and 18 is as follows: 1=Never, 2=Rarely, 3=Sometimes, and 4=Often. The scoring for remaining items 1,5,6,9,10,15,16,19, and 20 is in reverse order as follows: 4=Never, 3=Rarely, 2=Sometimes, and 1=Often.

Research Design

A correlational research design is used in this study. In this study, the correlation between loneliness and selfie addiction, extraversion and selfie addiction, neuroticism and selfie addiction, and psychoticism and selfie addiction is seen for each participant.

Procedure

Two methods of data collection were applied. One was Google form and the other was manual questionnaires. For both the forms the title was changed to "Social Media Usage" to avoid biases by the participants. The link for Google form was circulated through What'sApp. Google form was divided into various sections where each section had one questionnaire. In all there were four sections. Each section had different instructions based on the questionnaire.

Section 1 consisted of the demographic details of the participants like their Email Address, Name, Age, Gender, and Educational Qualification.

Section 2 included the first questionnaire EPQR-S in which participants were instructed to choose only one of the two possible answers- 'yes' or 'no'.

Section 3 included the second questionnaire called Selfie Addiction Scale in which participants were instructed to choose only one of the six possible answers- 'Strongly Disagree', 'Disagree', 'Weakly Disagree', 'Weakly Agree', 'Agree', or 'Strongly Agree'.

Section 4 included the third questionnaire called UCLA Loneliness scale in which participants were instructed to choose only one of the four possible answers- 'Never', 'Rarely', 'Sometimes', or 'Often'.

Results

A descriptive analysis was run on 150 participants who were a part of this study. Out of the total 150 participants 58 participants were males and 92 were females (M=1.61; SD=.49). All the participants were in the age range of 18 to 28 years (M=23.40; SD=2.38).

Correlational analysis reveal a significant positive correlation between loneliness (M=43.63; SD=8.68) and selfie addiction (M=80.63; SD=26.09) and between neuroticism (M=6.75; SD=26.09) and selfie addiction. However, there was no significant relationship established between extraversion (M=8.22; SD=2.80) and selfie addiction and psychoticism (M=3.81; SD=1.86) and selfie addiction as can be seen in Table 1.

Table 1: Shows the Correlation between Loneliness and Selfie Addiction and Between Neuroticism and Selfie Addiction

	Loneliness	Neuroticism	Extraversion	Psychoticism
Selfie Addiction				
r	.234**	.180*	-.022	.123
p	.002	.028	.787	.135

**. Correlation is significant at the 0.01 level
*. Correlation is significant at the 0.05 level.

Age also had a negative correlation with loneliness and neuroticism but had no significant relationship with any other factors like selfie addiction, extraversion, or psychoticism. Which suggests that as age increases, loneliness and neuroticism reduces.

Table 2: Shows the Correlation between age and Loneliness and Age and Neuroticism

	Loneliness	Neuroticism
Age		
r	-.182*	-.163*
p	.026	.046

*. Correlation is significant at the 0.05 level

Linear regression analysis was done to check if loneliness, extraversion, neuroticism, and psychoticism are significant predictors of selfie addiction. From table 3 we can see that the linear regression model with loneliness as a predictor produced R^2 = .055, F(1, 148) = 8.59, p < .005. The linear regression model with neuroticism as a predictor produced R^2 = .065, F(2, 147) = 5.13, p > 0.05. This suggests that people who are more lonely will be more prone to selfie addiction. It can also be seen that neuroticism is not a significant positive predictor of selfie addiction.

Table 3: Regression Analysis Showing Loneliness as a Predictor of Selfie Addiction

Variable	Mean	SD	R	R Square	Adjusted R Square	F	Linear regression weights	
							B	β
Loneliness	43.63	8.68	.234	.055	.048	**8.59***	.704	**.234***
Neuroticism	6.75	26.09	.180	.032	.026	4.94	.887	.109

*. Correlation is significant at the 0.05 level.

An independent sample t-test was conducted to compare loneliness and neuroticism in participants scoring low and high on selfie addiction scale. From Table 4 we can see that there was a significant

Asian Resonance

difference in loneliness in the low selfie addiction (*M*=41.53; *SD*= 9.61) and high selfie addiction (*M*=45.80; *SD*=7.03) conditions; t(148) = -3.099, p = 0.002. Also, there was a significant difference in neuroticism in the low selfie addiction (*M*= 6.13; *SD*= 3.29) and high selfie addiction (*M*= 7.38; *SD*= 3.01) conditions; t(148) = -2.424, p = 0.017.

Table 4: Shows the t-test Scores of Participants scoring low and High Selfie Addiction Across Loneliness and Neuroticism

SA	N	Mean	SD	t	df	Sig. (2-tailed)
Loneliness						
Low	76	41.53	9.61	-3.099	148	.002*
High	74	45.80	7.03	-3.112		.002*
Neuroticism						
Low	76	6.13	3.29	-2.421	148	.017*
High	74	7.38	3.01	-2.424		.017*

*. Correlation is significant at the 0.05 level

Discussion

The aim of the present study was to explore the relationship between Eysenck's Personality traits (Extraversion, Neuroticism, and Psychoticism) and Selfie Addiction and between Loneliness and Selfie Addiction in Indian youth. This study aimed to add to the pool of past researches.

The first hypothesis was that participants scoring high extraversion will have a higher selfie addiction score. Past researchers have found that since extroverts are more sociable, they tend to use social networking sites more than introverts. Extraverts are highly motivated to make new connections and relations online (Orchard et al., 2014). Extraverted people show more tendencies to share selfies and photos on SNS (Sorokowska et al., 2016). Contradicting the above literature, Amichai-Hamburger et al., (2002) has found that introverts tend to use more internet than extroverts and extroverts prefer more face-to-face interaction than online interaction. Our results reveal that there was no significant relationship between extraversion and selfie addiction. This might be because extroverts may prefer more traditional social interaction as compared to online interaction as stated in the study by Amichai-Hamburger et al., (2002).

The Second hypothesis was that participants scoring high on neuroticism will have a higher selfie addiction score. It has been revealed that neurotic people are more involved with internet as they try to locate their original self on social networking sites (Amichai-Hamburger et al., 2002). They tend to use SNSs to escape from their anxiety provoking lives (Orchard et al., 2014). Studies reveal that neurotics tend to be more addicted to mobile phones (Ehrenberg, Juckes, White & Walsh, 2008). It has been found that among various other types of selfies, people posting duckface selfies have high neuroticism scores (Qiu et al., 2015). Our results reveal that neuroticism has significant positive correlation with selfie addiction. This means that participants having higher score on neuroticism tend to have higher score on selfie addiction. Our results are in line with the past literature that neurotic people find solace in online social networking behaviour as neuroticism and selfie addiction are positively correlated.

The third hypothesis was that participants scoring high on psychoticism will score high on selfie addiction. From the past researches, it was found that psychotics had a higher tendency to use social networking sites because they had freedom of speech and were not under any external control or inhibitions (Orchard et al., 2014). A positive relationship has been found by Fox & Rooney (2015) between psychopathy and online photo sharing. This means that participants showing higher photo posting habits had a high score on psychopathy. Saroshe et al., (2016) found that psychopathy predicted posting selfies online but not editing them before posting. Our results reveal that there was no significant relationship between psychoticism and selfie addiction. This means that participants scoring high on psychoticism show no significant difference in selfie addiction as compared to participants scoring low on selfie addiction.

The last hypothesis was that participants scoring high on loneliness will score high on selfie addiction. The past studies suggest that selfies represent loneliness in one's life (Di Sia, 2017). Lonely people tend to take more selfies than people who have good social communication (Charoen sukmongkol, 2016; Carmean & Morris, 2016). It has been found that lonely people are more addicted to smart phones (Wong, Tho & Sin, 2016) and internet usage (Özdemir et al., 2014). Our results are in line with past researches. It was found that loneliness was significantly positively related with selfie addiction. This means people scoring high on loneliness parameter will score high on selfie addiction. Regression analysis reveals that loneliness is a significant predictor of selfie addiction. This suggests that lonelier the person is, the chances of selfie addiction are more.

Conclusion

In conclusion, the present research aimed to explore the relationship between Eysenck's Personality traits like Extraversion, Neuroticism, and Psychoticism and Selfie Addiction and between Loneliness and Selfie Addiction in Indian youth. Our results reveal that only Loneliness and neuroticism had a significant positive relationship with selfie addiction. Extraversion and psychoticism had no relationship what so ever with selfie addiction. It was also revealed that loneliness was able to predict selfie addiction but neuroticism was not a predictor of selfie addiction. This suggests that people who are lonely are more addicted to selfie clicking and posting behaviour as compared to people who do not

Asian Resonance

perceive themselves as lonely. Also, neurotic people are more addicted to selfie clicking and posting behaviour as compared to emotionally stable people. An inverse relationship was also found between age and loneliness and age and neuroticism suggesting that higher the age of participants, lower will be their loneliness and neuroticism. This might be because as people grow old, they mature and eventually develop a family and career which makes them busier in their life. This then leaves them with no time for being alone as they have a partner.

Suggestions

The method of data collection used for the present study was purposive sampling however for future researches the sampling can be more precise by selecting only those participants having high selfie addiction score on the selfie addiction scale. Furthermore, a revised version of each questionnaire can be taken to reduce the total number of items. Also a larger sample would be a better predictor of the study. Lastly, the age range of participants can be more expanded from young adults to old adults.

Reference

1. "Selfie." Merriam-Webster.com.Merriam-Webster, n.d. Web. 2 Oct. 2017.
2. Acar, A. (2008). Antecedents and consequences of online social networking behavior: The case of Facebook. Journal of website promotion, 3(1-2), 62-83.
3. Alblooshi, A. (2015). Self-Esteem Levels & Selfies: The Relationship between Self-Esteem Levels and the Number of Selfies People Take and Post, and the Uses and Gratifications of Taking and Posting Selfies (Doctoral dissertation, Middle Tennessee State University).
4. Amichai-Hamburger, Y., Wainapel, G., & Fox, S. (2002). " On the Internet no one knows I'm an introvert": Extroversion, neuroticism, and Internet interaction. Cyberpsychology & behavior, 5(2), 125-128.
5. Anonymous (2014). American psychiatric association makes it official: 'selfie' a mental disorder. Retrieved from: http://adobochronicles. com/2014/03/31/american-psychiatricassociation-makes-it-official-selfie-a-mental-disorder/comment-page-1/
6. Anonymous (2014b). 'Selfitis,' 'Cyberespionage,' 'Protoplanet' newest words in oxford dictionaries. Retrieved from:http://adobochronicles.com/ 2014/ 04/18/selfitis-cyberespionageprotoplanet-newest-words-in-oxford-dictionaries/
7. Barry, C. T., Doucette, H., Loflin, D. C., Rivera-Hudson, N., & Herrington, L. L. (2017). "Let me take a selfie": associations between self-photography, narcissism, and self-esteem. Psychology of popular media culture, 6(1), 48.
8. Carmean, D. M., & Morris, M. E. (2016). Selfie examinations?: applying computer vision, hashtag scraping and sentiment analysis to finding and interpreting selfies.
9. Charoensukmongkol, P. (2016). Exploring personal characteristics associated with selfie-liking. Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 10(2).
10. Di Sia, P. (2017). The" selfie" phenomenon between psychology, normality and extremisms. World Scientific News, 80, 88-100.
11. Diefenbach S, Christoforakos L. The Selfie Paradox: Nobody Seems to Like Them Yet Everyone Has Reasons to Take Them. An Exploration of Psychological Functions of Selfies in Self-Presentation. Front Psychol. 2017;8:7
12. Dutta, E., Sharma, P., Dikshit, R., Shah, N., Sonavane, S., Bharati, A., & De Sousa, A. (2016). Attitudes toward selfie taking in school-going adolescents: An exploratory study. Indian journal of psychological medicine, 38(3), 242.
13. Ehrenberg, A., Juckes, S., White, K. M., & Walsh, S. P. (2008). Personality and self-esteem as predictors of young people's technology use. Cyberpsychology & behavior, 11(6), 739-741.
14. Fox, J., & Rooney, M. C. (2015). The Dark Triad and trait self-objectification as predictors of men's use and self-presentation behaviors on social networking sites. Personality and Individual Differences, 76, 161-165. doi:10.1016/j. paid.2014.12.017
15. Francis, L. J., Lewis, C. A., & Ziebertz, H. (2006). The Short-Form Revised Eysenck Personality Questionnaire (Epqr-S): A German Edition. Social Behavior and Personality: an international journal, 34(2), 197-204. doi:10.2224/ sbp. 2006.34.2.197
16. Grabmeier, J. (2015, January 06). Hey, Guys: Posting a Lot of Selfies Doesn't Send a Good Message. Retrieved October 28, 2017, from https://news.osu.edu/news/2015/01/06/hey-guys-posting-a-lot-of-selfies-doesn%e2%80%99t-send-a-good-message/
17. Gupta, N., Krishnamurthy, V., Majhi, J., & Gupta, S. (2013). Gadget Dependency among medical college students in Delhi. Indian Journal of Community Health, 25(4), 362-366.
18. Kela, R., Khan, N., Saraswat, R., & Amin, B. (2017). Selfie: Enjoyment or Addiction? Journal of Medical Science And clinical Research, 05(01), 15836-15840. doi:10.18535/jmscr/v5i1.96
19. Kim, J. W., & Chock, T. M. (2017). Personality traits and psychological motivations predicting selfie posting behaviors on social networking sites. Telematics and Informatics, 34(5), 560-571.
20. Krämer, N. C., Feurstein, M., Kluck, J. P., Meier, Y., Rother, M., & Winter, S. (2017). Beware of selfies: The impact of photo type on impression formation based on social networking profiles. Frontiers in psychology, 8.
21. Lenhart, A., Ling, R., Campbell, S., & Purcell, K. (2010, April 19). Teens and Mobile Phones. Retrieved October 28, 2017, from http://www.pewinternet.org/2010/04/20/teens-and-mobile-phones/
22. Molloy, A. (2014). 'Selfie obsessed'teenager Danny Bowman suicidal after failing to capture 'the perfect selfie,'. The Independent, 24.

Asian Resonance

23. Moody, E. J. (2001). Internet use and its relationship to loneliness. CyberPsychology & Behavior, 4(3), 393-401.
24. Orchard, L. J., Fullwood, C., Galbraith, N., & Morris, N. (2014). Individual differences as predictors of social networking. Journal of Computer-Mediated Communication, 19(3), 388-402.
25. Özdemir, Y., Kuzucu, Y., & Ak, Ş. (2014). Depression, loneliness and Internet addiction: How important is low self-control? Computers in Human Behavior, 34, 284-290. doi:10.1016/j.chb.2014.02.009
26. Paris, C. M., & Pietschnig, J. (2015). 'But first, let me take a selfie': Personality traits as predictors of travel selfie taking and sharing behaviors.
27. Perlman, D., & Peplau, L. A. (1981). Toward a social psychology of loneliness. Personal relationships, 3, 31-56.
28. Pittman, M. (2017). Phoneliness: An Exploration of the Relationships Between Mobile Social Media, Personality and Loneliness (Doctoral dissertation, University of Oregon).
29. Qiu, L., Lu, J., Yang, S., Qu, W., & Zhu, T. (2015). What does your selfie say about you?. Computers in Human Behavior, 52, 443-449.
30. Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. Journal of personality assessment, 66(1), 20-40.
31. Saroshe, S., Banseria, R., Dixit, S., & Patidar, A. (2016). Assessment of Selfie Syndrome among the Professional Students of a Cosmopolitan City of Central India: A Cross-sectional Study. International Journal, 2(2), 1.
32. Singh, S., & Tripathi, K. M. (2016). Selfie: A New Obsession. SSRN Electronic Journal. doi:10.2139/ ssrn.2920945
33. Solanki, A. P. (2017). Selfie Addiction Scale. J Psychiatry, 20(2). doi:10.4172/2378-5756-C1-018.
34. Sorokowska, A., Oleszkiewicz, A., Frackowiak, T., Pisanski, K., Chmiel, A., & Sorokowski, P. (2016). Selfies and personality: Who posts self-portrait photographs?. Personality and Individual Differences, 90, 119-123.
35. Thomée, S., Härenstam, A., & Hagberg, M. (2011). Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults-a prospective cohort study. BMC public health, 11(1), 66.
36. Verma, D. (2017). Selfie Syndrome and Role of Counseling. International Journal of Research In Science & Engineering, 196-199. Retrieved from http://ijrise.org/asset/archive/17NovSp55.pdf
37. Wong, K. C., Tho, F. L., & Sin, H. N. (2016). A Study of The Relationship Between Smarthphone Addiction and Loneliness Among Male and Female Undergraduates in UTAR (Doctoral dissertation, UTAR).
38. Word of the Year 2013 | Oxford Dictionaries. (n.d.). Retrieved October 28, 2017, from http://blog.oxforddictionaries.com/press-releases/oxford-dictionaries-word-of-the-year-2013/