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Dark Triads and Selfie Addiction among University Students: Self -Presentation as Moderator

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Abstract

The current research scrutinized the relationship in dark triad and selfie addiction it further investigated the moderating role of self-presentation on facebook. The sample of study comprised of 300 students (18 to 30 years) drawn from various Public universities of Punjab, Pakistan. Selfities scale by Amjad and Adil (2017), Revised Self-Disclosure Scale (to measure presentation on facebook) by Young and Brown, (2016) and Short Dark Triad scale (Jones & Paulhus, 2013) were used to measure study variables. Result indicated significant relationship in all subscale of dark triad, selfie addiction and self-presentation. Moreover, it was found that Machiavellianism significantly positively predict intimacy while psychopathy significantly positively predict obsession whereas Narcissism was significant positive predictor of self-esteem, taking and posting selfies, intimacy and obsession. Results further showed that self-presentation moderated the relationship between Machiavellianism, Psychopathy and selfie addiction.

Keywords: *Dark Triad, Selfie Addiction, Self-presentation on Facebook.*

Introduction

Nowadays, development of technology is growing rapidly and the internet addiction has become a widespread topic for the researcher in the domain of behavioral addiction. Using bio-psychosocial framework, Griffeth (2005) explain six components to define any behavioral addiction including withdrawal, mood modification, conflict, replace, tolerance and salience. He claims that if any individual fulfill this six essential criteria he should be operationally well-defined as addicted to that actual behavior. Early researches in this area focused on internet addiction, and impact of technology related mental health problems on individual (Griffiths, 1995, 1996; Young, 1996, 1998). Later Selfies addiction and dependence appeared to be another phenomenon that seriously affect on mental health. Senft and Baym, (2015) define selfies taking and addiction as a practice that send different messages to different individuals, audience and communities. This phenomenon usually occurs in teenager, but it can also occur in adults.

Selfie taking and posting becomes prevalent through various social media app such as Facebook, WeChat, Instagram and others photo-sharing platforms. Facebook has become a coliseum for social interaction among adolescent and adults in all over the world. Self-presentation is an especially significant element of

Facebook. The obvious element of image construction and self- disclosure is profile photo. They present their self in more attractive way because the central element of the self-presentation to establish reputation in social context. Give the prevision of selfie posting on social networking site like Facebook many factors are involved self-esteem, personality trait that drive this behaviour. Previous literature reported narcissism is an important factor regarding posting selfie on social networking sites (Barry et al. 2017; Fox and Rooney 2015; Kim et al. 2016). American Psychiatric Association (APA) had classified selfitis as mental disorder (Vincent, 2014). The author postulated that selfitis as an obsessive-compulsive wish to take picture and post its to social media as a way to improve one's low self-esteem and to fulfill the needs for intimacy and attention. Ma et al. (2017) describe selfie taking in term of self-presentation theory to influence other. The selfie taking is not a separate action because other factors are also involved when it is sent on social media. This action enables individuals to present themselves in more controlled condition. In recent years, selfie taking considered as an awful activity, when sharing it on social media sites (Frosh 2015; Moon et al. 2016; Rettberg 2014; Roberts & Koliska 2017;).

Researchers explore the selfie behaviour in many dimensions such as in the context of gender, race (Albury, 2015), luxury selfies (Marwick, 2015), military selfies (Dishy, 2017), and the association with some personality trait (Choi et al. 2017; Qiu et al. 2015). They concluded the logic behind people clicks and post selfies are to take attention, to boost self-esteem, to get rid of boredom (Moreau, 2014). Research illustrated that Selfies are an index of low self-esteem, attention seeking behavior or social dependence, (Peek, 2014).

Blades (2014) conduct study to scrutinize the relationship in taking of selfie and self-esteem. Study involved 2,071 individuals; result revealed that 39% individuals taking picture of themselves rather than other and 60% confessed having low self-esteem. While talking about posting of selfie in relationship of self-esteem researches illustrated posting selfies reflected high self-esteem individual select those way in which they present in more attractive way and post on social networking site to receive more positive social feedback and social support (Seiter, 2015). At the same time, posting selfies is also indicator of low self-esteem because one's compared others, and may receive negative social feedback (Barry et al., 2015).

The purpose behind the uses of selfies and use of gratification of selfie depended upon the personality of the individual. Every person has their own opinions and need for selfies (Rutledge, 2013). Numerous theories suggesting that differences in personality play an important role on the maintenance or development of addictive use of distinct online applications. Although, every individual has distinct personality traits or has different using motives, these differences in motivations and personalities lead toward practice of different types of addiction (Katz et al. 1973; Ryan et al. 2014; Rubin, 1993). Recent study suggested that personality traits associated with antisocial online behavior (Craker & March, 2016; Panek et al. 2013).

Previous researches focused on narcissism with relationship of selfie posting behaviours and literature indicated narcissism as a predictor of posting of selfies (Kim & Chock 2017; Sung et al. 2016). Actual behaviour and number of selfies posted on social networking sites (Fox & Rooney 2015; Kim et al. 2016) and intention related to posting of selfie (Kim et al. 2016; Sung et al. 2016). Current study focus on dark personality triad with relationship of selfie addiction. Dark triad are those traits in personality by which a person motivates to create social distress, do crimes and shows how much a person can be cunning. This includes three subclinical personalities narcissism, machiavellianism, and psychopathy (Paulhus & Williams, 2002), three traits share informal terms of falseness, self-promotion, emotionlessness, disagreeableness, aggression and mistreatment (Furnham et al. 2013; Jonason & Webster, 2010).

Empirically these three-construct overlapping but conceptually distinct. The recent non-clinical measures were developed that permitted to evaluate these variables in normal populations (Fox & Rooney, 2015). One of the dark triad personalities was Machiavellianism which refers to the propensity to control or influence others for personal gain (Christie & Geis, 1970). Machiavellianism technically manipulate, effect

of unemotional and relationship making (Jones & Paulhus, 2009). Narcissism is reference to designate self-love, egocentric, unkind of others. Narcissus felt feeling of affection with what another person thought (Quinodoz, 2005). Narcissism lay underlying insecurity and evident belief that person is smarter, attractive and better than others (Gabriel et al. 1994; Raskin & Terry, 1988). While the psychopathy termed as pitiless or manipulation of others (Hare et al. 1993). Psychopaths often involve in impulsive and sensation-seeking behaviors without consideration of others and lack of empathy (Jonason & Krause, 2013).

Based on the previous observation it has been found that selfie addiction and narcissism behavior increase drastically. Furthermore, researches illustrated that those individuals score high on narcissism they post more selfies on social networking site as compare to those who score lower (McCain et al. 2016; Weiser, 2015). Empirical studies supported the hypothesis that narcissism and selfie posting behavior have positive relationship. Further, researcher argues that narcissism has a positive outcome of selfies taking (McCain et al. 2016), other researchers had found no relationship of narcissism with selfie taking (Re et al. 2016). Some researches mention that taking a selfies is linked with the isolation, narcissism and suicide (Bushak, 2015). According to Campbell (2014) taking a lot of selfies as needed to look perfect could lead toward serious mental health issues. He also reported that Dr. Panpimol Wipulakorn from Thailand government psychiatrist had warned their youngster they face serious emotional problem when they post more selfies but receive negative feedback.

When we talk about the selfie, we cannot disregard the self-presentation. People take and post selfie to boost their self-esteem and for self-development. However, Self-development is a main task for emerging adults (Arnett, 2015). Self-presentation is a pivotal element of self-development. It is a crucial element in the rising of one's self and maintained reputation in a social context (Baumeister & Tice, 1986). Every person tries to manage the impression on other. It is called the self-presentation. According to Leary and Kowalski (1990) it is a process in which person convey to other they have certain characteristic and they are certain kind of people. Social media provide new interactive platforms in which self- presentation and peer influences to co-construct the standards of beauty (Meier & Gray, 2014). Social network sites such as Facebook and Instagram have promoted peer contrast related to images and look among individuals (Mascheroni et al. 2015). Nowadays more teenage girls involve in online self-presentation activity such as posting selfies and outfit of the day to observe and compare with peers (Kaplan & Haenlein, 2010).

Self-presentation on facebook and selfie addiction also related with the personality traits. Researcher examined the big five model of personality traits associated with facebook use (Marshall et al. 2015). They depict that extroversion, narcissism, openness, agreeableness and consciousness associated with posting selfie on Facebook to communicate, updating about close relationships. The other study focused on three personality traits that have been influence on self-presentation. Result shows that introvert people less prefer profile photo and more reserved with regard self-presentation (Krämer & Winter, 2008). Previous study found that self-presentation strategy plays the moderating role between the social networking sites use and perceived social support (Kim & Tussyadiah, 2013). The purpose of the study is to examine the relationship between the selfie addiction and dark triad and moderating role of self-presentation on Facebook. The primary aim of the study is to examine moderating role of self-presentation on Facebook in the relationship between dark triad and selfie addiction among adults.

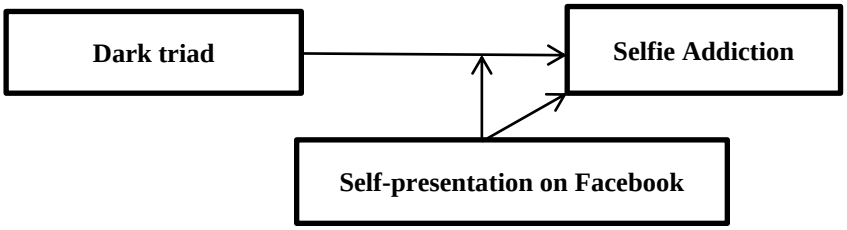

Figure 1: Conceptual framework of the present study.

The following hypotheses were posed:

H1: There will be relationship between dark triad, selfie addiction and self-presentation among students.
H2: Dark triad will be positive predictor of selfie addiction among the students.
H3: Self-presentation on Facebook will moderate the relationship between dark triad and selfie addiction.
H4: There will be significant gender differences on Dark Triad, Selfie addiction and self-presentation.

Method

The sample of the present study comprised of (*N* = 300) adults, it was further divided into male (*n* = 150) and female (n=150) both genders get given equal representation. Age ranges 18-50 with education of matric, intermediate or undergraduates were included in the sample frame of the study. Individuals below this age or above this age were not part of present study. Mentally disabled or mentally retarded individual was not included in this sample size. All the scales were applied to the sample (N=300) to explore the impact of demographics on present study variables. The correlation research design was used to explore the effect and relationship of the variables. The data was collected from university and college students.

Measurements

Demographic Form

Demographic form was designed to seek information from participants required in the study such as age, gender, education and number of selfies that take per day, Do you take Selfie? Please specify number of Selfies you take per day, Do you post/ upload your Selfie on social media? Before data collection informed consent was given to participants indicating purpose of the study.

Short Dark Triad 3

A short dark triad scale (SD3) developed by Jones and Paulhus (2014) was used. This scale contained total 27 items with subscales of narcissism, psychopathy and Machiavellianism and Likert scale is 1-5. It contained 5 reverse items which are 11, 15, 17, 20, and 25. Scale ranges from 27-135. Original scale reliability is narcissism (α = .77), psychopathy (α = .80) and Machiavellianism (α = .78) (Jones & Paulhus, 2014).

Self-Presentation on Facebook

The self-presentation was consisting on five dimensions; it's measured by modified versions of the Revised Self-Disclosure Scale (Yang & Brown, 2016). Depth scale consists on 9 items, positive consist 4 items, authenticity scale comprise 5 items, deliberate (intentionality scale consist 4 items. Each multi-item scale was evaluated for an acceptable Cronbach alpha level (*a* >0.70) to indicate internal consistency of the items in the scale (Ables, 2013).

Selfities Scale

The scale was developed by Amjad & Adil in (2017). This scale contained total 27 items with subscales of self-esteem, taking and posting, intimacy and obsession. Self-esteem subscale consist of 6 items (1,2,3,4,5,6) its alpha reliability is (α .8). Taking and posting subscale consist of 5 items its alpha reliability is (α .79). Intimacy subscale consist of 6 items (12,13,14,15,16,17) its alpha reliability is (α .85) Obsession subscale consist of 10 items (18,19,20,21,22,23,24,25,26,27) its alpha reliability is (α .89). It is Likert scale is 1 to 5 (Amjad & Adil, 2017).

Results

The analysis assumption descriptive statistics and inter-correlations between the study variables were measured before calculating the results. The frequency and percentages of demographic characteristics were Summarized that frequency of men (f = 150, 50%) and women (f = 150, 50%) were nearly equal. Sample was categorized on the basis of adults' level young adults (53.3%) and middle adults (46.7%). Further investigate that 79% people take the selfies and 36% people post selfie on social networking site. Moreover, demonstrate the mean differences standard deviation reliability of all present study variables. The results show significantly high alpha reliability of study variables Machiavellianism, narcissism, psychopathy, self-esteem, taking and posting selfies, intimacy, obsession and self-presentation on facebook (α = .63, .66, .61,77,64,77, .83, .89) respectively.

To account the correlation among all study variable Pearson correlation was conduct. As showed that a positive correlation between all the study variables. The finding indicated that Machiavellianism, narcissism and psychopathy positively correlate with subscale of selfie addiction (self-esteem, taking and posting selfies, intimacy and obsession) and self- presentation on facebook.

Table 1: Inter Scales Correlation (N=300)

Variables	2.	3.	4.	5.	6	7	8
1. Machiavellianism	.53**	.40**	.25**	.21**	.30**	.22**	.41**
2. Narcissism		.48**	.35**	.25**	.34**	.27**	.39**
3. Psychopathy			.19**	.21**	.20**	.31**	.42**
4. Self-esteem				.54**	.74**	.46**	.34**
5. Taking and posting					.63**	.45**	.25**
6. Intimacy						.50**	.34**
7. Obsession							.56**
8. Self-presentaionon facebook							

**p<.01

Table 2: Simple linear regression analysis for dark triad predicting sub scale of Selfities (N=300)

	Self-esteem			Taking& posting			Intimacy			Obsession		
Variables	*B*	*F*	ΔR^2	*B*	*F*	ΔR^2	*B*	F	ΔR^2	β	F	ΔR^2
MACH	.08	14.8***	.122	.09	8.76***	.072	.16*	15.61***	.128	.06	13.39***	.111
NRCM	.30***			.16*			.24***			.13*		
PSYPTH	.01			.09			.02			.21***		

NOTE. MACH= Machiavellianism, NRCM= narcissism, PSYPTH= Psychopathy ***P< .001, **P< .01, *P< .05

Table 2 present the results of dark triad predict the selfie addiction. The simple linear regression analysis computed with subscale of dark triad as a predictor and Selfie addiction as an outcome variable. The table 2 represents four models. 1st model is show that narcissism is positive predictor of self-esteem while Machiavellianism and psychopathy has non- significant effect on self-esteem. 2nd model shows that narcissism is positive predictor of taking and posting selfies while Machiavellianism and psychopathy has non- significant effect on taking and posting selfies. 3rd model show that narcissism and Machiavellianism is positive predictor of intimacy and psychopathy has non- significant effect on intimacy. 4th model show that narcissism and psychopathy is positive predictor of obsession while Machiavellianism has non-significant effect on obsession.

Table 3: Multiple Regression Analysis for Machiavellianism, self-presentation and Machiavellianism*self-presentation predicting selfie addiction (N = 300)

Variables	*β*	95% CI *LL, UL*
Machiavellianism	.31	[-.04, .66]
Self-presentation	.35*****	[.26, .44]
Machiavellianism*self-presentation	.01*****	[.01, .03]
R2	.24	
Δ*R2*	.01	
F	32.60*******	
Δ*F*	4.08*	

*p<.05, ***p<.001

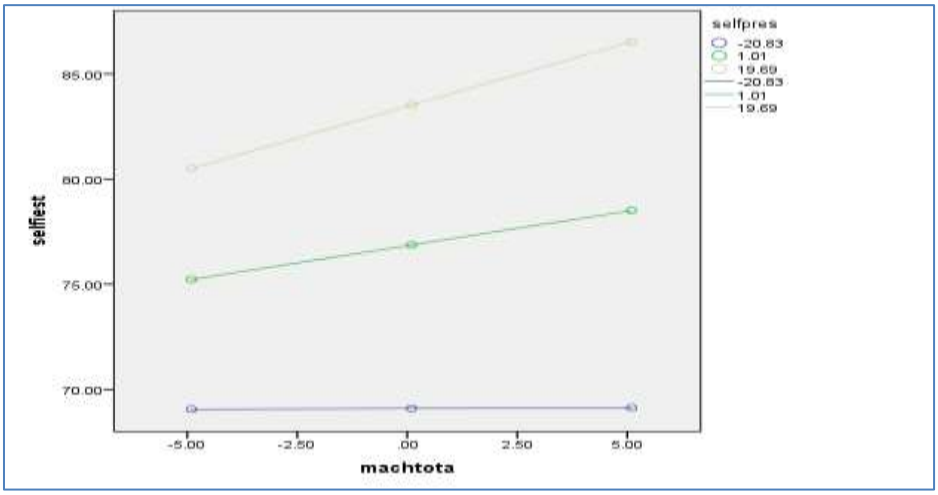

Figure 2. Graphical presentation of Machiavellianism*self-presentation predicting selfie addiction

Regression analyses were run again combining multiplicative terms between selfie addiction and the dark triad domains, to analyze moderator effects of self-presentation through multiple regression analysis. Results showed that Machiavellianism (β = .01, t = 2.02, p < .05) and psychopath (β = .01, t = 1.89, p <.05) interactions was significant. Thus, self-presentation seems to be a significant moderate relationship between the 2subscale of dark triad (Machiavellianism and psychopath) and selfie addiction.

Table 4: Multiple Regression Analysis for Narcissism, self-presentation and Narcissism*self-presentation predicting selfie addiction (N = 300)

Variables	*B*	95% CI *LL, UL*
Narcissism	.70***	[.34, 1.06]
Self-presentation	.31***	[.22, .40]
Narcissism *self-presentation	.01	[-.01, .02]
R^2	.271	
ΔR^2	.004	
F	36.67***	
Δ*F*	1.80	

****p<.001*

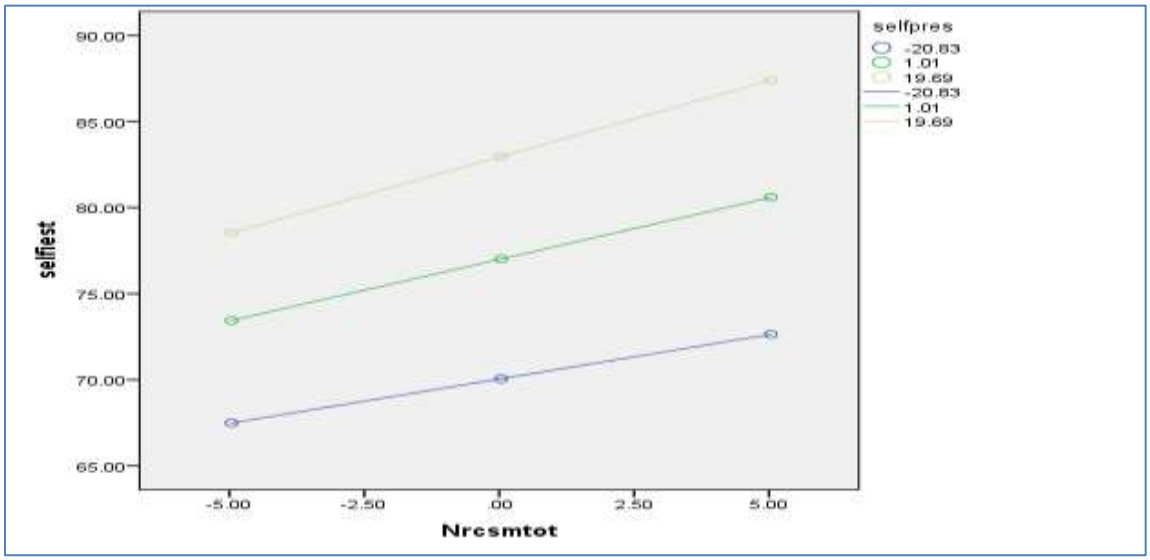

Figure 3. Graphical presentation of Narcissism*self-presentation predicting selfie addiction

Table 5: Multiple Regression Analysis for psychopathy, self-presentation and psychopathy *self-presentation predicting selfie addiction (N = 300)

Variables	*B*	95% CI *LL, UL*
Psychopathy	.21	[-.15, .57]
Self-presentation	.36***	[.27, .45]
psychopathy *self-presentation	.01*	[-.001, .02]
R^2	.24	
ΔR^2	.01	
F	31.73***	
ΔF	3.60*	

****p<.001, *p<.05*

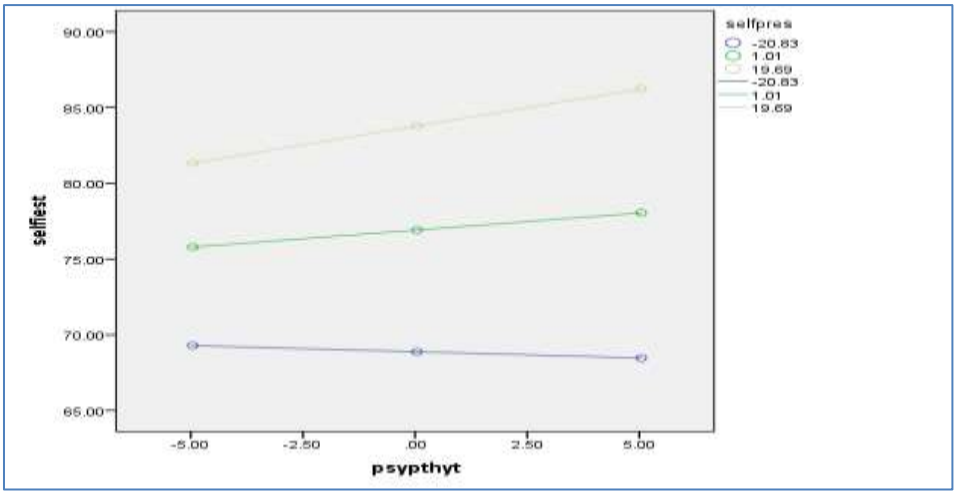

Figure 3: Graphical presentation of Psychopathy*self-presentation predicting selfie addiction.

Table 6: Gender Differences in Present Study Variables (N=300)

	Men		Women			95% Confidence Interval of the Difference		
Variable	M	SD	M	SD	t(298)	LL	UL	Cohen's d
Machiavellianism	28.33	5.40	27.42	5.15	1.48	-.29	2.10	.17
Narcissism	28.12	5.24	28.02	5.26	0.17	-1.08	1.29	.01
Psychopathy	27.60	5.61	26.18	4.82	2.36**	-.25	1.51	.27
Selfities	79.03	16.2	74.73	19.9	2.05*	.23	2.61	.19
Self-presentation on facebook	87.81	18.6	73.92	24.3	5.55** *	8.96	18.8	.64

*p< .01, *p< .05, *p <.001

Lastly, as prior studies' findings that the personality characteristics associated with selfie behavior tended to be stronger for males than for females (Fox & Rooney, 2015; Sorokowski et al., 2015). The present study findings show that men scored high on all the dark triad personalities, selfie addiction and self-presentation as compared to women.

Discussion

The purpose of the study was to investigate the relationships among dark triads, selfie addiction. Within the dark triad this study further shows relationship between Machiavellianism, narcissism and psychopathy with self-presentation on Facebook. Furthermore, it was further intended to investigate does self-presentation moderates the relationship between the selfie addiction and dark triad.

The results of present study indicated that there was significant correlation among Machiavellianism, narcissism, psychopathy, selfie addiction and self-presentation (See table 1). Finding of current study showed positive correlation between Machiavellianism, narcissism, psychopathy depicting that higher level of these traits will lead to selfie addiction. researches illustrated that narcissistic individuals post more selfies on social networking sites (McCain et al. 2016; Weiser, 2015). Furthermore, study also reported no relationship in narcissism and selfie taking (Re et al. 2016). Moreover, previous research reported that Machiavellianism is negatively related with positive intimacy and positively related with negative intimacy (Lo & Ng, 2019).

The current study further demonstrated significant correlation of dark triads and self-esteem, taking and posting selfies, intimacy, obsession and self-presentation (see Table 1). The researcher reported that selfie addiction was most associated with loneliness, low self-esteem, narcissism and depression (Kaur & Vig, 2016). The result of study shows that grandiose narcissism is associated with taking selfies and post on social networking sites, individual feeling more positive affect while taking selfies, and involved in self-presentation motives (McCain et al. 2016). Researcher carried out a study on 50 Indian adolescents age (12-18) (Singh & Tripathi, 2016). They conclude that selfie addiction is positive correlate with narcissism and hyperactivity while negative correlate with self-image. In this study further showed that Self-presentation is positively correlate with all Selfities subscale and dark triad. Researcher reported that at York University self-reports were assemble from 100 Facebook users result show that those individuals more narcissistic and get low score on self-esteem were more likely to involved in online activity and some self-promotional activity to make the impression (Mehdizadeh, 2010).

The results of the regression analysis also suggest that that Machiavellianism significantly positively predict intimacy. Furthermore, as indicated in past studies Machiavellianism is found to be a positive predictor of the intimacy attitude of an individual (Lo & Ng, 2019). While psychopathy significantly positively predictor of obsession whereas Narcissism was significant positive predictor of self-esteem,

taking and posting selfies, intimacy and obsession. Previous studies suggest that narcissism has positive relationship with selfie posting behavior (Lee & Sung, 2016).

To test the moderating result of self-presentation, dark triad and selfie addiction multiple regression analysis was employed. Specifically, this is the first study to investigate how self-presentation acts as moderator between selfie addiction and dark triad. So, result shows that self-presentation act as a moderator between Machiavellianism, psychopathy and selfie addiction. Machiavellianism associated to form a positive reputations and impression management. While narcissists and psychopaths less worried toward appropriateness due to impulsiveness and overstated self-view. Machiavellians were deliberately concerned about their status (Jones & Paulhus, 2010) which they expertise of ingratiation among others (Rauthmann & Will, 2011). Machiavellianism predicted by self-oriented goal quest on Facebook (Rosenberg & Egbert, 2011). In addition to the Machiavellianism, we found that psychopathy is characterized by lack of self-control and impulsivity (Jones & Paulhus, 2010).

The result supported hypothesis showed significant impact of gender on study variables. Men higher scored on all the dark triad. Gender differences among dark triad can be seen also in literature that in all three dark triad males scored higher as compared to women in them (Paulhus & Williams, 2002). National Institutes of Health reported that the narcissistic personality disorder is three times higher as for people in their 20s as for the generation that is now 65 or older (Westen & Chang, 2013). The current study result shows that men are more interested in taking and posting selfies as compare to women. Recent researches reported that men communicate in order to form social-standing and control (Gefen & Ridings, 2005). Thus, men need for social endorsement and appreciation to prove themselves to be an important and conversant person (Gupta & Hee-Woong, 2007).

Limitation and Implication

One of the limitations of the present study its inability to understand causality due to the correlational design. The other limitation is with respect to the generalizability of the study. Data was assembled just from the Punjab universities because of the time confinements and limited resources. In this way, the results have compelled generalizability. It is suggested that data should be gathered from different areas and population to build the generalizability of the study. The sampling strategy utilized as a part of this study was convenient sampling. Therefore, it can emerge questions in regards to the representativeness of the sample. To lessen this limitation, data should be collected using random sampling technique. It was a quantitative research which does not produce in-depth data like qualitative research. So, the data was not improved and extensive. Therefore, it is suggested for future researchers that qualitative data must also be collected in addition to quantitative data. Due to novelty of the research, researcher did not find any validate measure for self-presentation on facebook revised self-disclosure scale items were manipulated to evaluate the self-presentation behavior on facebook. If researcher used the validated measure for this phenomenon result will be different. The present study has important practical implications. This study paved way for new researches to study these constructs in combination in Pakistani Culture. As the individuals' day by day going towards or develop negative traits. This research will help people get better understanding of how they are influenced by negative traits and how much they are producing negative traits in themselves.

Conclusion

This study found the impact of dark triad on selfie addiction and moderating role of self-presentation on Facebook among adults. Hence, the sample of study taken can provide a better understanding of these construct in our society. These results provide novel and useful insight about the selfie addiction and association with dark personalities. Further the present study explored the impact of gender and age differences in dark triad, selfie addiction and self-presentation on Facebook. It was observed that the level

of Machiavellianism, psychopathy and narcissism were higher in men which shows that men are more aggressive, violent and manipulative in our society.

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