

# Hexaco Personality Traits As Predictors Of Selfie-Posting Behaviours Among Adolescents

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#### **Abstract**

Previous studies have shown that personality traits especially narcissism are associated with selfie-posting behaviours described as self-portrait photos shared on social networks. The present study therefore investigated the prediction of different selfie-posting behaviours by HEXACO personality traits among adolescents controlling for age, gender and sexual orientation. A 19-item Selfie Frequency Scale (SFS) about the frequency of own selfies, group selfies and selfies with partner, and 60-item HEXACO Personality Inventory-Revised were the instrument used for data collection from 296 adolescents (169 males and 130 females) from 5 post-primary schools in the south-eastern Nigeria. Their ages ranged from 13 to 17 with the mean age as 15.04 (SD  $_{age} = 4.25$ ). The results suggest that Honesty-Humility negatively predicted all kinds of selfies; Agreeableness and Openness negatively predicted own selfie alone; while conscientiousness negatively predicted own selfie and group selfie. Emotionality and Extraversion positively predicted own all kinds of selfies. Moreover, female adolescents and not exclusively heterosexuals were more prone to posting own selfies, group selfies and selfies with partner. Implications of the findings concerning selfie-posting behaviours as representing some relevant aspect of individuals' personality and social interactions were highlighted. As selfie-posting behaviours have become more trending these days, it offers additional insights on personality traits, self-representations and social interactions among adolescents.

Key words: HEXACO personality traits, predictors, selfie-posting behaviours, adolescents.

### Introduction

In the recent times, selfies, an online behaviour seem to be trending among adolescents all over the world. According to Oxford Online Dictionary (2015), a selfie



is a self-portrait image usually taken with a Smartphone or a webcam and shared on social networks. According to Senft and Baym (20015), self-portrayal is one of the most widespread online activities, particularly among adolescents; and college-age young adults (Katz & Crocker, 2015). Lee and Sung (2016) observe that Smartphone users take approximately 93 million selfies each day, and in 2014 approximately 880 billion online photos were shared on social media. It is also observed that 30% of the total photos shared on social networking sites (SNS) in 2014 were selfies posted by adolescents (Locateadoc.com, 2014). It has been estimated that Instagram users alone have shared 238 million photos with the hashtag #selfie and 128 million photos with the hashtag #me (Weiser, 2015). Also, a study in the United States showed that 98% of young adults (aged 18 to 24) took selfies, and 69% tended to share selfies 3 to 20 times daily (Katz & Crocker, 2015).

Sorokowski and colleagues (2015) distinguish among three types of selfies: own selfies (i.e. selfies taken alone), selfies with a partner, and group selfies. People usually engage in such online behaviours as selfies for various reasons such as self-presentation, attention-seeking and feedback from peers (Katz & Crocker, 2015; Kiprin, 2013); for communication, achievement and entertainment (Sung, Lee, Kim & Choi, 2016). According to Nadkarni and Hofmann (2012), social media use fulfils two social needs: self-presentation and belonging. Selfie-sharing on SNS improves one's self-esteem/mood through "likes" (Reich, Schneider & Heling, 2018) and seems to be especially related to self-presentation behaviours and relationship construction (Sorokowski et al., 2016; Taylor, Hinck, & Lim, 2017).

The craze for selfie especially among teenagers have led to greater interest in exploring the psychological and psychosocial aspects of the phenomenon, thereby buttressing the debate on the psychopathological aspects of the behaviour as well as and the growing risks of hyper-pathological conceptualization of common media use



(Billieux et al., 2015; Kardelt-Winther et al., 2017). Albury (2015) argues that even though posting selfies allows people to express their own identity and social relationships, other psychological factors might contribute to different selfie behaviours.

Analyzing the attitudes toward selfie-taking and posting, Katz and Crocker (2015) found that self-presentation, identification and attention-seeking plays a dominant role in selfie behaviour. Also, Kiprin (2013) found that selfies help people experiment with their appearance, accessories, and environment. Warfield (2014) reports that young women believe that selfie-taking help them to feel authentic. According to Nguyen and Barbour (2017), young women consider selfies to be authentic expressions of their identity.

However, there seem to be conflicting motives behind selfie-taking and posting. For instance, Sung, Lee, Kim and Choi (2016) argue that attention-seeking, archiving, communication, and entertainments are the motivating factors behind selfie-posting on SNS. Other scholars argue that personality factor such as narcissism is a significant predictor of selfie-taking and frequently posting, especially among women (Fox & Rooney, 2015; Sorokowski et al., 2015; Weiser, 2015; Lee & Sung, 2016; McCain et al., 2016; Barry et al., 2017). Similarly, Halpern, Valenzuela and Katz (2016) suggest that selfies produce a self-reinforcement effect – and narcissists take and post selfies frequently to maintain a positive self-image, which in turn increases their levels of narcissism. Also, an Italian study indicates that various personality traits predict different selfie-posting behaviours in adolescents and young adults (Baiocco et al., 2016).

Again, Etgar and Amichai-Hamburger (2017) note that the three principal motivations behind selfie-taking are selfie-approval, belonging, and documentation; and argue that each motivation can be connected to various personality traits. However, they failed to establish connections between these motivations and



narcissism. This somewhat conflicting finding indicates that selfies are a multidimensional phenomenon that requires further research to understand its antecedents. Some researchers have emphasized the analysis of psychopathological (obsessive) traits among selfie-taking adolescents (Balakrishnan & Griffiths, 2017; Griffiths & Balakrishnan, 2018). Some have also emphasized the positive psychological effects such as a good possibility for selective self-presentation, self-promotion and self-disclosure (Diefenbach & Christoforakos, 2017). However, others have focused on the connection between personality traits and selfie behaviours; and established that extraversion, openness to experience, neuroticism and consciousness are related to social network use (Eftekhar, Fullwood & Morris, 2014; Ryan & Xenos, 2011). More recent studies focusing specifically on the Five Factors model as the main theoretical framework and its relationship with online behaviour found that extraversion and neuroticism are good predictors of selfie behaviours (Qui, Lau, Yang, Qu & Zhu, 2015; Sorokowska et al., 2016).

However, even though the Five Factors Model of personality remains the most frequently used in personality research, it has been challenged in recent times by a six-factors model known as the HEXACO personality trait because of its promising and interesting results that indicated a better understanding of phenomena beyond the Five Factors Model (Ashton & Lee, 2007; Ashton, Lee & de Vries, 2014; Lee & Ashton, 2004). In fact, a recent review by Ashton, Lee, and de Vries (2014) indicated that the HEXACO model with the inclusion of the sixth and unique factor known as Honesty-Humility appeared to predict different phenomena better than the Five Factors model even though the Five Factors model is still acceptable and widely used. The Honesty-Humility dimension, which makes the HEXACO model distinct and unique, appears to be responsible for the model's superiority to the Five Factors model in predicting various outcomes especially antagonistic and exploitative attitudes and behaviours (e.g., Lee & Ashton, 2005; Lee et al., 2013). Thus, the inclusion of the Honesty-Humility dimension and its facets to the HEXACO model has



been responsible for the outperformance of the HEXACO model when compared to the Five Factors model in the explanation of various outcomes relating to anti-social or self-serving behaviours such as workplace and academic delinquency, criminal behaviours, sexual harassment, egoism, narcissism, status-driven, risk-taking, Machiavellianism and psychopath (Ashton, Lee, Pozzebon, Visser & Worth, 2010; De Vries & Van Kampen, 2010; Lee et al., 2013; Van Gelder & De Vries, 2012).

Interestingly, the literature suggests that both the HEXACO and Five Factors models of personality are based on the same lexical and cross-cultural studies, but the HEXACO model comprises six dimensions instead of five (Ashton et al., 2006). The dimensions include Honesty-Humility, Emotionality, eXtraversion, Agreeableness, Consciousness, and Openness to experience. The major difference between HEXACO and the Five Factors model of personality is in the inclusion of a sixth factor known as Honesty-Humility trait in the HEXACO model, making it unique. Individuals who score high on the Honesty-Humility scale are described as sincere, truthful, honest, unassuming, fair and genuine in interpersonal relationship, while those that are low on the scale tend to assume the position of self-importance, use of flattery to obtain favours and tend to go against rules to achieve their desires. Moreover, studies have shown that low Honesty-Humility is a good predictor of anti-social, manipulative, and unethical behaviours and tend to be strongly associated with the Dark Triad of personality (i.e. narcissism, psychopath, and Machiavellianism) (Ashton et al., 2014). The Dark Triad of personality is in tandem with a self-centred, manipulative, callous, unemotional, un-empathetic, and ready to use or hurt others for personal gain (Ashton et al., 2014).

Another difference between the Five-Factor Model and the HEXACO model lies in the agreeableness and emotionality factors. In the HEXACO model, agreeableness describes a cooperative, patient and lenient person as against a person who is ill-tempered, irritable, and resentful, which is somewhat different from agreeableness



in the Big Five Factor model that excludes ill-tempered and irritable terms. Also, emotionality in the HEXACO model, characterized by fear and anxiety, describes an individual prone to vulnerability, sentimentality, and fearfulness against one who is fearless, detached, and tough-minded characterizes neuroticism in the Five Factors model. Thus, emotionality in the HEXACO model is similar to neuroticism in the Five Factors model, except that it lacks the angry hostility facet included in the Five Factors model and not describing an individual who is high on the dimension. Also, sentimentality, another facet of emotionality in the HEXACO model, is associated with agreeableness in the Five Factors model.

The other remaining three dimensions of the HEXACO model (i.e., extraversion, conscientiousness, and openness to experience) are similar to the Five Factors model. More specifically, high on eXtraversion are described as optimistic, feel positively and confidently secure in social gathering and interactions, and have feelings of enthusiasm and energy. In contrast, people who are low on the scale consider themselves as unpopular, awkward and insecure in social gathering and interaction, indifferent in social activities, and less lively and pessimistic. People high on conscientiousness tend to be organized in their time and physical surroundings, disciplined, strive for perfection and accuracy in their dealings, and careful in decision makings. In contrast, people with low scores on this scale tend to be careless, negligent, unorganized and unconcerned with orderliness in their surroundings and schedules and acts impulsively without reflection. Lastly, people high on openness to experience are fascinated by the beauty of art and nature; characterized by curiosity, inquisitiveness; and tend to be imaginative and creative and take kin interest in unusual ideas or peoples. On the other hand, people with low scores on the scale tend not to be impressed by artworks and nature, less intellectual, uncreative and less fascinated by novel and unconventional ideas.



Therefore, the present study explored the relationships between the HEXACO personality traits and online selfie behaviours (i.e. own selfies, selfies with partner, and group selfies). It also controlled for age, gender and sexual orientations, which are found in the literature to be associated with selfies and online behaviours (Jang, Han, Shih & Lee, 2015; Sorokowski et al., 2016; Dhir, Pallesen, Torsheim & Andreassen, 2016; Chong, Zhang, Mark, & Pang, 2015).

The Honesty-Humility dimension of the HEXACO model can provide insight into online behaviour since a high score on the scale has been linked to fairness and cooperative attitude and behaviour with others (Hilbig & Zettler, 2009; Chirumbolo & Lee, 2010). Similarly, a low score is linked to narcissism which positively predicts selfies (Barry et al., 2015; Fox & Rooney, 2015; Sorokowski et al., 2015; Weiser, 2015). As such, people who are low on the scale could engage more in posting selfies to seek attention to rely on others to attain their own social goals on the social network. Also, studies have indicated that narcissism characterized by attention-seeking (exhibitionism), false pride, grandiosity and exploitative tendency aimed at regulating self-esteem is strongly and negatively associated with Honesty-Humility traits and positively correlated with extraversion (Jonason & McCain, 2012; Bresin & Gordon, 2011; Lee & Ashton, 2005). Thus, the utility of the HEXACO model, especially the Honesty-Humility facet, in predicting selfies could be supported.

Also, as studies have shown, low Honesty-Humility is strongly associated with the Dark Triad of personality (i.e. narcissism, psychopath, and Machiavellianism) (Ashton et al., 2014), an indication of anti-social, manipulative and unethical behaviours. Therefore, individuals low on Honesty-Humility could engage in posting selfies to affirm their bloated beliefs and positive self-image. Also, individuals that are high in consciousness could be less involved in online behaviour and Internet use as it might be a kind of distraction from their focus on offline activities. It is therefore expected that consciousness will be negatively correlated to online behaviours.



Furthermore, emotionality could be positively correlated to online behaviours as individuals with a high level of the trait may see social networks as an avenue to express themselves due mainly to the link between emotionality and social anxiety (Ashton et al., 2006). Therefore, emotionality in the present study could be positively correlated to online selfies behaviours.

Regarding the control variables, studies have shown that adolescents and females usually engage in online behaviours and tend to post selfies on social network websites (Dhir et al., 2016; Sorokowski et al., 2016; Jang et al., 2015). Concerning sexual orientation and online behaviour, the literature is not so clear about their relationships. However, studies have indicated that sexual orientation predicts online behaviours. The differences in the use of social networks as not exclusively heterosexual adolescents do commonly engage in Internet and social networks to find friends and romantic partners in order to make up for the perceived difficulty of finding offline contact with Lesbian, Gay, Bisexual, Transgender/Transexual (LGBT) peers (Morelli, Bianchi, Baiocco, Pezzuti, & Chirumbolo, 2016; Chong et al., 2015; De Haan et al., 2013).

## **Hypotheses**

The following hypotheses were postulated:

- 1. Honesty-Humility will significantly predict different selfie-posting behaviours (i.e. own selfies, group selfies and selfies with partner).
- 2. Emotionality will significantly predict different selfie-posting behaviours (i.e. own selfies, group selfies and selfies with partner).
- 3. Extraversion will significantly predict different selfie-posting behaviours (i.e. own selfies, group selfies and selfies with partner).
- 4. Agreeableness will significantly predict different selfie-posting behaviours (i.e. own selfies, group selfies and selfies with partner).

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- 5. Consciousness will significantly predict different selfie-posting behaviours (i.e. own selfies, group selfies and selfies with partner).
- 6. Openness to experience will significantly predict different selfie-posting behaviours (i.e. own selfies, group selfies and selfies with partner).

### Methods

# **Participants and Procedures**

Participants for the present study were 296 adolescents (40.9% males, n = 196 and 59.1% females, n = 130) within the age range of 15 to 17, with the mean age was 16.04 (SD  $_{\rm age}$  = 4.25). They were selected from upper secondary and lower tertiary schools in the southeast of Nigeria after obtaining their written informed consents by selecting "Yes, I agree to take part in this study" written on the first page of the survey. All the participants gave their informed consents in line with the Helsinki Declaration. The questionnaire comprised of two sections: (1) socio-demographic information, mobile/social networks/app usage patterns, and (2) HEXACO Personality Inventory and Selfie Frequency Scale (SFS). Within the first section, participants were asked certain questions regarding Smartphone, the purpose of using Smartphone (calling, sending messages, share photos/videos, surf the Internet), and which apps and social networks they prefer using for sharing of messages and photos.

### Measures

HEXACO Personality Traits: A 60-item HEXACO Personality Inventory-Revised (Ashton & Lee, 2009) was used to assess the personality traits of the individuals. The inventory measures the six major dimensions of the HEXACO personality traits: Honesty-Humility, Emotionality, eXtraversion, Agreeableness, Conscientiousness and Openness to experience. Each item of scale was rated on a 5-point Likert scale ranging from 1 (Completely Disagree) to 5 (Completely Agree). In the present study,



the scales demonstrated good psychometric properties: Honesty-Humility (Cronbach alpha of .71), Emotionality (Cronbach alpha of .72), eXtraversion (Cronbach alpha of .76), Agreeableness (Cronbach alpha of .74), Consciousness (Cronbach alpha of .71) and Openness to experience (Cronbach alpha of .70) as reported by the author in the present study.

Selfie-Posting Behaviours: A 19-item Selfie Frequency Scale (SFS) (Manna & Boursier, 2017) was used to assess how often adolescents share the different kinds of selfies i.e. own selfies, group selfies and selfies with partner within the last six months. The questions were rated on a 5-point Likert scale ranging from 1 (Never) to 5 (Always). An example of the question include: "How often you do publicly post your own selfies on social network?" A Cronbach alpha of .78 was established for this study demonstrating the good internal consistency of the scale.

## **Control Variables**

The control variables considered in this study as covariates include age, gender, and sexual orientation. Particularly for sexual orientation, the participants were assessed using Kinsey Scale (1948) designed on a 5-point Likert scale ranging from 1 (exclusively heterosexual) to 5 (exclusively homosexual).

# **Results**

Descriptive statistics and zero-order correlation of the study variables are reported in Table 1. With regard to correlations among the control variables and different kinds of selfies, gender was negatively correlated to own selfies (r = -.12, p < .05), group selfies (r = -.10, p < .05), and selfies with partner (r = -.14, r = p < .05). Age was also negatively correlated to own selfies (r = -.20, p < .01), group selfies (r = -.23, p < .01), and selfies with partner (r = -.18, p < .05). However, sexual orientation was found to be correlated with only own selfies (r = .20, p < .01). Concerning the relationships between HEXACO personality traits and selfies, Honesty-Humility was



negatively correlated with own selfies (r = -.16, p<.05), group selfies (r = -.15, p<.05), and selfies with partner (r = -.18, p<.01). Emotionality was found to be positively correlated with own selfies (r = .17, p<.05) alone. eXtraversion was positively correlated with own selfies (r = .19, p<.01) and group selfies (r = .18, p<.05) alone. Agreeableness had a significant negative correlation with own selfies (r = -.12), group selfies (r = -.14, p<.05), and selfies with partner (r = -.12, p<.05). Also, Conscientiousness had significant negative correlations with own selfies (r = -.15, p<.05), group selfies (r = -.13, p<.05), and selfies with partner (r = -.15, p<.05). Openness to experience also was negatively correlated with own selfies (r = -.10, p<.05), group selfies (r = -.12, p<.05), and selfies with partner (r = -.15, p<.05).

Table 1: Descriptive statistics and zero-order correlation of the study variables

S/no	Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	Gender	-	-	-											
2	Age	15.65	4.32	10*	-										
3	So	-	-	.01	.15*	-									
4	Н	3.84	0.86	15*	.02	.05	-								
5	E	3.31	0.56	18*	.15*	.03	.18*	-							
6	X	3.52	0.56	.02	.03	02	03	20*	-						
7	A	2.29	0.75	.01	.15*	.04	25**	04	03	-					
8	C	3.15	0.16	10*	.26**	02	.20*	.09	.20*	.09	-				
9	O	3.13	0.66	15*	25**	.12	.19*	.07	.15*	.05	.25**	-			
10	os	2.70	1.02	12*	20*	.20*	16*	.17*	.19*	12*	15*	10*	-		
11	GS	2.02	1.50	10*	23**	.05	15*	.08	.18*	14*	13*	12*	.25**	-	
12	SP	2.01	1.40	14*	18*	.03	18*	.04	.04	12*	10*	15*	.40**	.35**	_

Note: \*\* P < .01; \* P < .05, Gender was coded as 1 = Males and 2 = Females; H = Honesty-Humility; E = Emotionality; X = eXtraversion; A = Agreeableness; C = Consciousness; O = Openness to Experience; OS = Own Selfies; GS = Group Selfies; SP = Selfies with partner.



Table 2 shows the results of hierarchical regression analysis of selfies on HEXACO personality traits controlling for age, gender and sexual orientation. In the analysis, all the variables were entered in two steps. In step 1, the control variables, i.e. age, gender, and sexual orientation, were entered as covariates, while the HEXACO personality traits were entered in step 2.

In assessing the own selfies and the predictions of HEXACO personality traits, the control variables - age, gender, and sexual orientation - were entered in first step as covariates, and they collectively accounted for 5% of the variance ( $R^2$  = .048, p =.01). Thus, age ( $\beta$  = .25, p = .000), gender ( $\beta$  = .18, p = .002), and sexual orientation ( $\beta$  = .12, p = .005) significantly predicted own selfies. In the second step, the HEXACO personality traits were entered in the second step and they accounted for 12.5% of the variance ( $R^2$  = .125). The control variables – age, gender and sexual orientation – were still significant predictors of own selfies, but when they were controlled, low Honesty-Humility ( $\beta$  = -.16, p = .01), low Agreeableness ( $\beta$  = -.12, p = .01), low Consciousness ( $\beta$  = -.15, p = .001), low Openness to experience ( $\beta$  = -.10, p = .05), high Emotionality ( $\beta$  = .17, p = .01) and high eXtraversion ( $\beta$  = .13, p = .01) were all significant predictors of sharing of own selfies on social media.

Table 2: Hierarchical regression analyses of selfies on HEXACO personality traits controlling for age, gender and sexual orientation

					Selfies		_			
Variables		Own Selfi	Selfie _		Group Selfie			Selfie with Partners		
(n = 862)	$\Delta R^2$	β	t	$\Delta R^2$	β	t	$\Delta R^2$	β	t	
Step 1	.05*			.04*			.03*			
Age		25**	-1.65		20**	-1.45		21**	-1.54	
Gender		18**	-1.21		14**	-1.03		12**	-1.04	
Sexual orientation		.12**	1.07		.01	.27		03	.45	





Step 2	Step 2			·09*			.07*	
Age		18**	-2.49		19*	-2.87	15	** -1.82
Gender		14**	-1.00		06	45	04	31
Sexual Orientation		.10*	.89		.05	.38	.03	.30
Honesty/Humility		16**	-1.85		15**	-1.07	18	** -1.04
Emotionality		.17**	1.06		.19**	.95	.10	1.01
Extraversion		$.08^*$	.98		.20**	1.45	.10	.90
Agreeableness		12*	38		04	32	03	45
Conscientiousness		15*	87		14**	-1.24	06	63
Openness to experience		10*	68		02	92	08	98

Note: \*p<.05, \*\*p<.01

Regarding group selfies and the predictions by HEXACO, personality traits, age, gender, and sexual orientation as the control variables were entered in the first step as covariates, and they collectively accounted for 3.6% of the variance ( $R^2$  = .036, p = .000). However, age ( $\beta$  = -.20, p = .000) and gender ( $\beta$  = -.14, p = .001) appeared to be significant predictors of group selfies, indicating more of the younger adolescents than older ones reported sharing of selfies with groups on social networks. Also, the results indicate that more females reported posting group selfies than males on social media. In the second step, the HEXACO personality traits were entered in the equation model as predictors, and they accounted for 9.3% of the variance ( $R^2$  = .093, p = .000). Age and gender were still significant predictors but when they were controlled, low Honesty-Humility ( $\beta$  = -.15, p = .001), low Consciousness ( $\beta$  = -.14, p = .003), high emotionality ( $\beta$  = .19, p = .000), and high eXtraversion ( $\beta$  = .20, p = .000), predicted posting of group selfies on social media. However, Agreeableness and Openness to experience were not significant predictors of sharing of group selfies on social media.



Finally, concerning selfies with partners and the predictions by HEXACO personality traits, the control variable (age, gender and sexual orientation) which were entered in the first step as covariates collectively accounted for 2.9% of the variance ( $R^2$  = .029, p = .000). It was only age ( $\beta$  = -.23, p = .000) that significantly predicted selfies with partners, indicating that younger adolescents reported more sharing of selfies with partners on social media than the older ones. In the second step of the equation model, the HEXACO personality traits were entered, and they accounted for 6.8% of the variance ( $R^2$  = .068, p = .000). However, age alone significantly predicted selfies with partners; but Honesty-Humility ( $\beta$  = -.18, p = .025) negatively predicted selfies with a partner when the variable was controlled. Emotionality ( $\beta$  = .10, p = .035) positively predicted selfies with partners. Also, eXtraversion ( $\beta$  = .10, p = .041) negatively predicted selfies with partners. However, Agreeableness, Consciousness and Openness to experience domains were not significant predictors of selfies with a partner.

#### **Discussion**

The present study investigated HEXACO personality traits as predictors of selfie behaviours (i.e. own selfies, group selfies and selfies with partner), controlling for age, gender, and sexual orientation. The results of the study revealed that Honesty-Humility personality traits negatively predicted selfies. Emotionality positively predicted selfies. eXtraversion positively predicted selfies. Agreeableness negatively predicted selfies. Openness to experience negatively predicted own selfies alone. Lastly, consciousness negatively predicted posting of own selfies and selfies with a partner.

Consistent with the hypothesis of the study, the Honesty-Humility personality trait negatively predicted selfie-posting behaviours. The negative association between the Honesty-Humility personality trait and posting of selfies indicates that people who are high on this personality trait reported a low level of selfie-posting. In contrast,



those who are low on the trait reported a high level of selfie-posting on social media. The finding may not be surprising because Honesty-Humility is a trait that describes an individual who is fair, sincere, honest and genuine in interpersonal relationship and cooperates with others in order to maintain social equality and may likely attach no special importance to elevated social status. In contrast, persons that score low on the trait are known to be sly, deceitful, pretentious, hypocritical, boastful and pompous and have feelings of self-importance and may resort to selfie-posting as a way of managing their impression by seeking admiration and bragging in order to appear socially desirable on social media. As social networks enable one to make self-presentation, it is plausible that such people that are low on trait may resort to posting self-appealing portraits to showcase their physical appearance, social popularity and status in social media.

The positive association between emotionality and selfie-posting behaviour indicates that people who scored high on emotionality posted high selfies against those who reported low on the trait. The finding is in agreement with previous investigations on the use of social media (Seidman, 2013). This may be so because people high on the trait are fearful and anxious and are sentimentally attached and need emotional support from others as against those who are low on the trait that has little or no need to share their concerns and feel emotionally detached from others. Thus, as emotionality is associated with social anxiety, people high on this trait may see social networks as an avenue to showcase some aspects of themselves as against the offline reality (Forest &Wood, 2012; Seidman, 2013). Therefore, it is possible that such people may use selfies as an avenue to express and disclose hidden aspects of their lives since they have a strong emotional bond and attachment to others.

Also, as expected, eXtraversion positively predicted selfies. In other words, eXtraversion was positively associated with posting selfies, which indicates that high on the trait reported a high level of selfie-posting as against those that are low on the



trait that reported a low level of selfie-posting. The findings may not be surprising because the high level of eXtraversion is associated with an individual's positive feelings and confidence in the group and interpersonal relationships, thereby predisposing them to online self-presentation. The finding is consistent with previous studies (e.g. Kramer & Winter, 2008; Marcus & Schutz, 2006; Sorokowska et al., 2016), which report that individuals that high on trait tend to be unrestrained in presenting aspects of their own lives and perhaps tend to present themselves in an elaborate and flamboyant manner. Also, as individuals that are high on the trait are deemed to be highly sociable, selfie-posting to them may assume a way to reach out to virtual social contact.

The results of this study showed that consciousness negatively predicted own selfies and group selfies. The negative association between consciousness and selfies suggests that individuals high on consciousness are likely to avoid posting of selfies while those low on the trait were predisposed to posting selfies on social media. This finding is expected because Consciousness personality trait describes individuals that are very careful when taking decisions as against those that are low on the trait that make decisions on impulse with little or no reflections; and as such Consciousness individuals may be less likely to spend their time on social media as it may constitute distraction to them (Butt & Phillips, 2008). It is also possible that since highly conscientious individuals are organized and careful in their dealings, they might want present themselves on social media in ways that are consistent with their self-perceptions. The inability of conscientiousness to predict selfies with partner may lie in the manner and nature of romantic pictures in relation to own and group selfies. Selfies with partners or romantic partner selfies tend to portray less inappropriate contents and are more of social norms.

The results of the study showed that agreeableness had a negative prediction of own selfies alone. This shows that more agreeable individuals are more likely to avoid



posting own selfies as against less agreeable individuals who would not be restrained to post own selfies on social media. That the agreeable individuals would be restrained to post own selfies on social media may be because the trait represents an individual that are easily in control his/her emotion and not easily given to acting rashly by posting own selfies on social networks. However, it is surprising that agreeableness failed to predict group selfies and selfies with partners because high agreeableness individuals are ready to trust others again and establish friendly relations even after having been treated badly.

Lastly, openness to experience also had a negative prediction of own selfies alone. This indicates that individuals that reported being high on the trait were more constrained to post own selfies compared to those that reported being low on the trait that were more ready to post own selfies on social networks. The result is somehow surprising because openness to experience is a trait description of individuals that take very strong interest in appreciating various art forms and natural wonders and express themselves in arts. Also, they tend to accept the unusual and are receptive of ideas that might seem strange or radical and as such are likely to engage in such online behaviours as posting of selfies. Conversely, individuals with very low scores on agreeableness scale are rather unimpressed by most works of art, feel little intellectual curiosity, avoid creative pursuits, and feel little attraction toward ideas that may seem radical or unconventional. Thus, such an individual may not take interest in online behaviour such as posting of selfies in social media.

# Control variables and selfies

Even though the main focus of this study was on HEXACO personality traits, some interesting results were observed regarding the relationship between the control variables (age, gender and sexual orientation) and posting of selfies. The results of the study revealed that gender had a negative prediction of selfies which indicates



that females reported significantly more posting of selfies than males. This is however in line with previous research findings (e.g. Sorokowska et al., 2016; Dhir et al., 2016; Jang et al., 2015) which had established similar findings. The reason for the differences could be that females tend to show more interest in online positive images of themselves and the selection of pictures to showcase on social media than males (Haferkamp, Eimler, Papadakis, & Kruck, 2012). Also, posting of photos on social media seems to be more acceptable by females than males because it is in the nature of females to present themselves physically attractive (Manago et al., 2008).

Another interesting revelation of the present study was the significant prediction of selfies by sexual orientation which indicates that not heterosexuals reported more posting of selfies than heterosexuals. As previously explained, cultural expectations make it possible for females respond more to attractive physical appearance than males. Therefore, it is possible that the not heterosexuals i.e. the gay, lesbian, and bisexual individuals may not care much about cultural expectations or gender stereotypes associated to posting selfies on social media as dating apps are much more popular among not heterosexual individuals.

Also, the present study showed that age was a significant factor in predicting posting of selfies. Specifically, age had a significant negative prediction of selfies which indicates that younger adolescents posted selfies than the relatively older ones. This finding is consistent with other previous research evidence which indicated that age seems to be a factor in Internet-based activities and SNS (Dhir et al., 2016; Nguyen, 2014; Chae, 2017). The reasons could be that young ones especially females are likely to experiment with new and different looks and selfie-posting on social media may be an attempt to cultivate an ideal form of online self-presentation and receiving feedback.

## **Implications**



This study offers some theoretical and practical implications. Theoretically, with the widespread of social networking, it is important to examine the personality traits associated with it in order to differentiate between normal and abnormal behaviours in the area. The study therefore offers insight regarding the motivation and the functions of selfie-posting behaviour in relation to HEXACO personality traits demonstrating the utility of the theoretical postulation of the HEXACO model based on self-presentation. Since selfie-posting behaviours represent a relevant aspect of adolescents' social interactions, the popularity of selfie-posting behaviour offers further relevant information on individuals' personality traits and self-representations. Practically, this study provides a lead to understanding online self-presentations as it is a further enlightenment on the fact that selfie-posting behaviour may be a way to express the need for affirming one's positive self-image, or for disclosing hidden aspects of self, or seeking out virtual social contacts that could be related to personality traits.

### **Limitations and Directions for Future Studies**

The data for this study was based on a self-report survey which is subject to common error variance. Ideally future research should be based on practical and observable data of selfie-posting behaviour. Also, interpretation of the data was suspect due to cross-sectional and self-report measures used for this study which makes it difficult to address the issue of causality. Therefore, future research should try to employ longitudinal approach in order to explain the stability of personality traits overtime. Also, this study focused only on adolescents making the ability to generalize questionable. Therefore, future research should extend the scope to older adults since they may differ in their use of social media. Furthermore, further,



categorization of selfies (own, group and with romantic partner) may not be exhaustive. Thus, future research should delineate categories in such a way that potential significant information may not be lost.

### Conclusion

Despite the popularity of selfie-posting behaviours, the social, cognitive and psychological factors involved remains relatively unknown. The present study was an attempt to investigate the relationship between HEXACO personality traits and different selfie-posting behaviour among adolescents. In addition, the present study was a contribution to knowledge on social media use by its examination of the relationship between age, gender and sexual orientation and selfie behaviours. The study revealed that Honesty-Humility and Emotionality were most consistent predictors of selfie-posting behaviour.

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