Examining the Relationships Between Self-Esteem, Narcissistic Traits and Usage of Social Media Services of Instagram and Twitter

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Abstract--Self-esteem is believed to be controlled by ones' own sentiment of being incorporated, preferred and acknowledged by others. Individuals who express large amounts of confidence are frequently being confused with appearing to be narcissistic and the other way around. The aim of this study was to examine the correlation between the use of social networking sites like Twitter and Instagram, on self-esteem and narcissism. The sample comprised of female Twitter and Instagram users residing inSaudi Arabia. Rosenberg's Self Esteem Scale (SES) and Narcissistic Personality Inventory (NPI) were used. Female Arab Twitter users (n=20) were given a survey asking them about their Twitter interactions. Female Arab Instagram users (n=44) were given a similar survey about Instagram usage and they completed a SES and a Narcissistic Personality Inventory. Results indicated a significant positive correlation between Twitter elites' feeling of being viewed and self-esteem scale, r= 0.65, p <0.01. However no significant correlation was found for low self- esteem and low interactions and self-esteem and narcissism.

Keywords--Social media; self-esteem; narration; interaction; online

I. INTRODUCTION

In the recent couple of years, the utilization of social media has turned into an inexorably prevalent relaxation movement in numerous nations over the world [1].

People visit online media platform to participate in various sorts of stimulation and social movement including playing recreations, mingling, conveying, and posting pictures [2]. In spite of the fact that this has rapidly turned into an ordinary present day marvel [3], concerns have been raised in regards to the potential addictive utilization of internet based life or social media [4].

Such exorbitant and urgent use has been characterized as being excessively worried about online life, driven by wild inspiration to use web-based social networking and committing so much time and effort to web-based life that weakens the other imperative aspect of life[5].

In addition, these online stages assume a vital job in the relaxation and public activities of youths and grown-ups[6].Youngsters have rapidly turned out to be acclimated with being continually "on the web", and seem to adjust to new innovations quicker than their elders [7]. Furthermore, youngsters use social media to build their characters and culture without intrusion from guardians or those in a place of power [7].

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Few examinations investigating singular contrasts as far as narcissism have found it to be distinctly related to various online interpersonal interaction practices [8,9]. On the other hand, social media usage enables people to express their aspirations and demonstrate their victories to a possibly vast group of onlookers, and to get exceptionally unmistakable prizes and acknowledgment through "preferences" and constructive remarks from other web-based life clients. Most contemporary examinations allude to narcissism as a moderately wide conduct attribute area, communicated by, among others, egotistical gaudiness, haughtiness, manipulativeness, and comparative highlights [10]. In any case, the intricacy of the narcissism build needs featuring.

An exploration recommends that narcissism is a standout amongst the most dominant indicators of self-special substance through internet based life [10]. Narcissism alludes to "an identity attribute mirroring a pretentious and swelled self-idea" and is described by an implausible positive self-awareness [11], particularly of qualities, for example, status, physical appearance, social notoriety, and knowledge [11].In any case, as internet based life may speak to a satisfying mode for people with raised narcissistic qualities specifically, it is speculated that narcissism will be decidedly identified with addictive utilization of web-based social networking. Furthermore, past research has demonstrated that individuals with low self-esteem, view web-based life as a more secure spot to express themselves, when compared to individuals with high self-esteem [12].

Social media platform such as Twitter and Instagram give another scene to people to display themselves and deal with their social connections on the web [13]. With the development of social innovations accessible to internet and cell phone clients, these platforms provides novel scenes to self-divulgence, self-introduction, and impression the executives [14]. Specifically, Instagram, a versatile photograph sharing application, has pulled in social media clients to introduce themselves by means of an assortment of photos and short recordings by making the procedure less demanding than at any other time [15]. An ongoing report showed that two key inspirations for utilizing Instagram are self-articulation and social connection, recommending that Instagram clients use photos of a wide range of things to display their real and perfect selves, just as to keep up social connections [16]. In addition, Twitter is more modern in comparison to the popularly social network Facebook, as the users keep them self updated through tweets and share their opinion through tweets[17].

Thus, this work has assessed the correlation between Twitter interactions (retweets, favourites, new followers) and users' self-esteem. In addition, this work has also evaluated the extent of Instagram usage and feedback influences levels of narcissism. It is hypothesized that Instagram users that frequently post images- selfies in particular are more likely to have higher narcissism scores and a lower score in self-esteem. It is also hypothesized that there will be a negative correlation between narcissism and self-esteem, the higher the self-esteem score, the lower the narcissism score and vice versa.

II. METHODOLOGY

Data Collection

The data collection was done via an online survey, one that is self-formulated based on the understanding of how Twitter and Instagram works and that was considered as interaction in the Twitter and Instagram world and

also via a self-esteem measurement assessment and narcissistic personality inventory. Rosenberg Self Esteem assessment was also done used in this the results received were evaluated accordingly, by reflecting on the original hypothesis.

Participants

For the Twitter evaluation, 20 female frequent Twitter users who tweet at least 5 times a day, age ranging between 16 and 35 were chosen for this study. As for the Instagram evaluation, a combination of n=44 female frequent Instagram users who post pictures at least daily, and age ranging between 16 and 35 (as this is generally the age group for the technology-based generation).

Sampling

Participants were recruited as a random sample to represent the Instagram and Twitter population and are frequent users. For the Twitter evaluation, female participants are ideal participants as, given the cultural context, and were easier to contact. Participants were separated in accordance to their follower count in order to gain an understanding of any contrasts between imagined audience and actual audience. In addition to this, it was used to measure the interactions experienced by the users, subsequently compared the findings to their self-esteem result.As for the Instagram evaluation, similar approach was used to measure the interaction experienced and findings was compared to their narcissism outcome.

Instrumentation

A survey was conducted on 'survey monkey'. It included questions on how frequent the participants receive interactions on their social media. Another assessment was conducted on the same participants, The Rosenberg self-esteem scale (SES) is applied to measure how they felt about themselves generally and see if there was any correlation between the imagined audience/interactions and self-esteem. The RSES is a 10 item scale used to measure global self-worth based on a 4 options ranking scale ranging from strongly agree to strongly disagree. The participants were asked questions reflecting on their negative and positive aspects, therefore offering unidimensional accuracy. This scale was ideal as it is inclusive to all the factors encompassing self-esteem as a whole and does so in 10 items therefore the participants do not lose focus in completing it. It is also intimate enough but not too intimate to the degree that participants feel they are over sharing. The terms used in the questions are very simple and understood by those whose native language is not English which was ideal for the Arab-based sample.For the Instagram evaluation, the following was used.The Narcissism Personality Inventory was used to measure how highly the participants thought of themselves generally and analyzed if there was any correlation between the imagined audience/interactions and self-esteem.

Data analysis

As it was online-based study, the potential candidates for participation were conducted via direct message on Twitter. Upon their agreement and their given consent, the assessment (RSES) and survey was e-mailed to the participant and they were requested to send their completed surveys and assessments within a 3-day period. Results were evaluated by their accumulated data from the survey and from their self-esteem score. The Spearman

correlation coefficient was deduced. Results were evaluated by their accumulated data from the survey and from their narcissism and self-esteem score. This was done using the SPSS program.

III. RESULT AND DISCUSSION

Users Self-esteem

The reliabilities Cronbach's Alpha evaluation is shown in Table 1. Based on Table 1, the reliabilities of Cronbach's Alpha of 0.661 for the questions that were related to the users' feeling of imagined audience, therefore the data collected from those questions were combined into one variable.

Table 1: Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
0.661	3

Table 2 shows the correlation outcome. After the data was correlated statistically, it was found that there was insignificant and little (yet still positive) correlation of r=0.344, p= 0.150, r=0.344, p= 0.138, and r=-0.018 p= 0.941between the self-esteem score and the responses to the questions Q1, Q2 and Q3 respectively. A correlation of r=0.528, p < 0.01 which is fairly significant was shown for the responses depicting a sense of imagined audience, supporting the hypothesis that self-esteem increases with an increase in Twitter feedback in general.

Table 2: Correlation for Self Esteem Score

Variables	Correlations	Q1	Q2	Q3
Self Esteem Score	Correlation Coefficient	0.344	0.344	-0.018
	Sig.(2tailed)	0.150	0.138	0.941
	N	20	20	20

User'sNarcissism

The reliabilities Cronbach's Alpha evaluation is shown in Table 3. Based on Table 3, the reliabilitiesof Cronbach' Alpha 0.458 for the questions related to the users' feeling of imagined audience, therefore the data collected from those questions were combined into one variable.

Table 3: Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
0.458	3

Table 4 shows the correlation score. Based on Table 4, it was found that there was no significant correlation between the participants' narcissism scores and their self-esteem scores, with a Spearman correlation of

only r=-0.076, p= 0.626. This indicates that both mental states are independent from each other and do not have a cause and effect relationship. Despite the Twitter study's results indicating a positive correlation between imagined audience and self-esteem, the Instagram results scored r=0.158, p= 0.304, which showed an insignificant correlation between the imagined audience and self- esteem.

Table 4: Correlation score

Variables	Correlations	Narcissism Score	Self Esteem Score	Imagine Audience
Narcissism Score	Correlation Coefficient	1.000	-0.076	0.318
	Sig.(2tailed)	-	0.626	0.035
	N	44	44	44
Self Esteem Score	Correlation Coefficient	-0.076	1.000	0.158
	Sig.(2tailed)	0.626	-	0.304
	N	44	44	44
Imagine Audience	Correlation Coefficient	0.318	0.158	1.000
	Sig.(2tailed)	0.035	0.304	-
	N	44	44	44

Based on Table 5, there was however a significant positive correlation of r= 0.410, p < 0.01 between narcissism scores and the amount of posts the participants upload. A positive correlation was deduced for narcissism scores and the extent of the imagined audience the participants' experience and also for the amount of feedback (in the form of likes and comments) they received. Similarly to the Twitter imagined audience eliciting higher self-esteem, the larger the perceived Instagram audience, the higher the narcissism score.

A positive yet insignificant correlation was found between whether a participant felt ''Instagram famous'' and their narcissism score. Interestingly, when the number of Instagram followers was correlated with the self-esteem scores there was only an insignificant coefficient of r=0.179 p= 0.246. This strikes a point that one's feeling of having an audience can trigger an emotional response of superiority and arrogance and it can also trigger a response of feeling worthwhile and content.

Table 5: Correlation score

Variables	Correlations	Narcissism Score	Q1	Q2	Q3
Narcissism Score	Correlation Coefficient	1.000	0.223	0.179	0.410
	Sig.(2tailed)	-	0.146	0.246	0.006

Overall Discussion

No significant correlations were found when being assessed with self-esteem scores. This indicates that those with self-esteem do not gain their confidence and self- worth from Instagram. Instead, those who are more prone to narcissism have a tendency to indulge in Instagram for their feelings of superiority and self-worth [13-15].

The concept of this research is to explore the fine line separating narcissism and self- esteem in the cyber world. Having high self-esteem indicates a healthy state of mind, where a person feels the extent of their self-worth is based upon their true achievements and a genuine feeling of being accomplished. Narcissists however feel a sense of superiority and grandiose based on an emotional void, which causes obsession to be seen as the best [18].

What may confuse the general public is how similar both mental states are manifested online, which is an issue that this research addresses [19]. For instance to easygoing spectators, posting a huge amount of selfies being presented may show up on be a demonstration of fearlessness, inferring that the client is alright with the manner in which they look and are upbeat to impart that to their adherents. Then again, an overabundance in selfie transferring is likewise seen as a weep for help that has mental ramifications [18].The results obtained for the narcissism and Instagram were somewhat less significant than initially imagined. This is inline with the work of Sheldon et al.[20] where it was reported that narcissism was had less significant effect in Instagram.

IV. CONCLUSION

This study was done to examine the correlation between usage of social networking sites such as Twitter and Instagram and self- esteem and narcissism. Key findings indicated a significant positive correlation between Twitter elites' feeling of being viewed and self-esteem scale. However, no significant correlation was found for self-esteem and interactions, and self-esteem and narcissism. Thus, self-esteem is influenced by the feeling of being included and involved.

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