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Predictive Accuracy of Social Comparison, Five Big Factors of Personality on Mood Contagion among Social Networking Users of Universities students

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Abstract

The study aimed at Predictive Accuracy of Social Comparison, Five Big Factor of Personality in predicting of Mood Contagion among Social Networking Users of Universities students. The sample consisted of 288 students from volunteers' university stage students. The scales application was performed electronically by the google form platform. The study depended on a correlational approach. The paper used the Mood contagion, five big factors of personality in social networking scales, then the study produced the social comparison scale. The findings proved that two factors Neuroticism and Extraversion had positive effects on mood contagion. Finally, the social comparison had a positive effect on mood contagion.

Keywords: Mood modification, Mood Contagion; Five big factors of personality, social comparison.

Introduction

Psychological studies have focused on studying the Big five factors of personality and their impact on the positive and negative individual's emotions and how psychological control and its function in mood modification or imbalance. Psychological studies differed in dealing with personal and social comparison. While other studies dealt with the descending comparison and the upward comparison with a prototype of the friends around him in the context. Recently, studies have concentrated on the scope of social interactions and comparisons in virtual reality and social networking sites because of their importance. In this study, the researchers considered that the ideal and the real self has differed during the users' social comparisons in social networks. Social comparisons cause mood, and this effect varies according to personality traits, which is what the current study sought to verify.

Mood contagion

It is a condition in an individual's mood, either positive or negative, that causes an overflow of feelings and emotions that threatens the center of the individual's existence in the presence of another person who believes that he is facing the same or a different context. Mood contagion occurs in the presence of a calm or nervous reaction to a critical situation (Gump & Kulik, 1997).

Mood contagion defined as a flow of emotions and feelings that a person reincarnates from following another person in the context of dynamic interactions. This empathy includes a superficial representation of feelings related to the moment of the situation, and

its impact fades emotionally or is deeply affected by the nature of a similar context for some time (Hennig-Thurau, Groth, Paul & Gremler, 2006).

One of the mood stimuli is the nature of knowledge that is circulated, that evokes attention, and calls for certain types of memories, or that provokes sympathy and provokes positive or negative emotion (Canli, 2004).

Stages of a mood contagion

1. *Primitive emotional contagion*: The transmission of feelings from one person to another occurs because of the recipient's unconscious emotional processes. Mood contagion is often followed by a simulated emotional state that occurs in the following steps:

a. Social Emotion: It is a stage in which emotional reactions are formed by others. At this stage, people learn to recognize, classify, and organize their feelings through conversations, emotional expression, and individual reactions during social networking chats (Eisenberg, Cumberland, & Spinrad, 1998; Reindl, Gniewosz, & Reinders, 2016).

b. The appearance of some physiological symptoms because of the intense reincarnation of the emotional experience. The main catalyst in mood contagion is the sender's display of feelings and emotions, which leads to higher levels of emotional arousal, especially if emotional experiences are similar (Barsade, 2002; Hennig-Thurau et al., 2006).

c. Social and emotional interactions are supportive through (feelings of acceptance and comfort, checking the emotions and emotions of others, solving problems, and encouraging emotional expression). Unsupportive interactions occur by avoiding discussion with others, decreasing bonds and relationships, and even punitive reactions because of expressing feelings (Barańczuk, 2019). The emotional interactions may be confrontational, or punitive, or the individual avoids social interaction during his negative emotions to preserve the social interaction and the integrity of relationships and bonds (Connor-Smith & Flachsbart, 2007).

Sharing information provides some insight into how mood contagion can occur during feelings of social interactions. There are differences between cognitive contagion and mood contagion, as the transmission of ideas is different from the feeling's transmission. Words are a means of understanding and expressing thoughts, but words are less likely to understand feelings. While empathy is a type of non-verbal cue that promotes feelings perception. Therefore, responses and emotions occur in direct face-to-face contact. Mood contagion depends on the emotional processing of cognitive information such as evaluation, interpretation, anticipation, and simultaneous individual intentions for idea sharing (Barsade, 2002).

2. *Conscious emotional contagion*: Mood contagion depends on the awareness of the individual during his social comparisons between his experiences and the strangeness of the variables of the current crisis. Accordingly, the recipient searches for the nature of feelings necessary for the social information processing to empathize cognitively and emotionally with others. Its vagueness increases when it realizes the falsehood and deception of the sender (Barsade, 2002; Gump & Kulik, 1997; Hennig-Thurau et al., 2006).

Emotional reactions are contagious during social interaction, as they have a role in influencing individual thoughts, feelings, and behaviors (Coco, Ingoglia & Lundqvist, 2014). Emotional convergence occurs because of behavioral mimicry (simulation) of

movement, faces, situations, and sounds in a way that makes the individual sympathize with, represent, and imitate them (Dezecache, Eskenazi & Grèzes, 2016). The contagion of conscious mood occurs in two phases:

a. *Emotional similarity* increases the threat of belonging to a specific endowment, event, or duty, or to a companion who believes that he/ or she is experiencing the same situation or future (Gump & Kulik, 1997). Emotional similarity refers to seeking the individual's feelings on the dynamics of social interaction, and mood contagion occur consciously and unconsciously in the same single situation, and this is due to the person's tendency to mimic and synchronize facial expressions, sounds and movements to emotionally close with another person (Hennig-Thurau et al., 2006).

b. *Behavioral mimicry*: It refers to facial expressions and states of tension and anxiety that highlight the contagion of the individual's mood and the degree of his vulnerability and empathy to those emotions that were transmitted to him because of simulation or commitment (Gump & Kulik, 1997). These symptoms often indicate engaging in positive socially helpful behaviors indicative of empathy (Balconi & Canavesio, 2013). These expressions are a mechanism for conveying feelings between people (Olszanowski, Wróbel & Hess, 2019). In the case of rapid mood contagion, one interprets facial reactions present in the social context as either (Lishner, Cooter & Zald, 2008): (a) a motor mimic that causes subsequent mood contagion via facial reflexes or (b) an expressive product of an initial emotional response. If either of the above explanations is correct, then after noticing emotional expression measures of facial muscle activity would be used to detect emotional contagion.

Mood contagion in social media

People in traumatic situations and crises use social media to share their feelings. Just as in the real world, emotions can be passed on from one person to another. This scope refers to a mood contagion. People are affected by an individual's feelings and emotions can be moved on from one person to another. Steinert (2020) indicated that mood contagion is a phenomenon that resembles the individual's feelings with others because of his exposure to a mood state from others. Feelings on social media can be likened to contagious diseases over a long period. One does not know the nature of mood contagion. Mood contagion goes beyond people's feelings because their emotions affect the way they think and seem. Sharing feelings leads to feedback to modify those emotions. People may talk or write about an event in response to describing the feelings of others or writing about the event.

Emotional reactions and mood contagion progress quickly within social media, increasing mood contagion receptors. In moments of the coronavirus pandemic and the demands of social distancing, many people are wasting more time in front of their smartphones and tablets, which increases sentiment and online mood contagion. The visible digital sentiment contagion that followers receive is like sentiment people express through status updates with emotional notification messages. Emotional messages are converted into digital social feelings. Social networking platforms contribute to the expanse of online emotions and subsequent mood contagion. Digital companies try to promote the expression of sentiments (sadness, anger, admiration, support, surprise) because emotions keep people in touch on social networking. The way emotion attracts attention is an important part of explaining why emotional content is so prevalent on social networking. Emotional information flows on social media more quickly than information that is not

related to emotions. Moreover, the presence of emotional and moral words in the means of communication and social message declared increases dramatically, it seems that digital media platforms lead to the inflammation of the content that promotes anger (Steinert, 2020).

Mood contagion in social networking sites is measured by the number of times the user reshares or retweets each message for each ethical or another context (Brady, Wills, Jost, Tucker & Van Bavel, 2017). Individuals' comments Language is also one of the direct ways to express feelings and emotions, whether emotionally or morally, reflecting hate, love, sympathy, or other sentiments. Mood contagion depends on: (1) the relationship between the people notification and its recipient, (2) the emotional content of the message, (3) the mood and how similar it is to the publisher's emotions and feelings, (4) the social comparison made by the message reader with its publisher. The researchers believe that mood contagion may arise because of interaction with friends and strangers, not only this but also the circle of colleagues.

Emotional states are transmitted to others by mood contagion, provoking them to experience the same feelings as those almost them. Positive and negative moods can turn to others. Long-term moods (such as depression and happiness) are moved through social media. Mood contagion outcomes from experiencing an interaction (putting yourself in someone else's shoes) rather than being exposed to a companion's feelings. Kramer, Guillory, and Hancock (2014) indicated that positive and negative moods are associated with social media interactions.

The emotional event content may distort the moral aspect of the individual, which distorts the memory as it calls for emotional and emotional memories that the individual suppresses, thus recalling some emotional cues in it is unclear or wrong and its recognition is improbable. Emotional messages may carry a threat to the self, which makes him neutral or prejudiced in his writings, and usually finds manipulation by those who integrate with him in the emotional content, as the social networking includes someone who is like him or who differs from him in the emotional experience (Kensinger, Choi, Murray & Rajaram, 2016).

The Role of Big Five Personality Factors in the Mood Contagion Phenomenon

There is some psychological evidence conducted on the relationship between mood stimulation and the five big factors of personality, including what was confirmed by Gross, Sutton, & Ketalaar (1998) that extraversion and neuroticism are more related to positive and negative moods. Baronzo (2019) notices that mood is the effect of the general state of the individual because of frequent exposure to positive or negative emotions because revealing his thoughts, beliefs, needs, sentiments, and emotions, especially where an individual's goal is related to the quality of emotional or emotional life or to seek to improve his mood.

The extrovert and the unstable person are characterized by the positive and negative influence of the emotion that was conducted by Watson, Wiese, Vaidya, & Tellegen (1999) on 4457 participants, which obtained a correlation between neuroticism and the negative influence of emotion was .58. The association value was 0.51 between extraversion and positive mood. Larsen & Ketelaar (1991) found that extraversion and neuroticism are associated with positive and negative moods in high levels of stimuli. The mood of excitement was also associated with extraversion and neuroticism (McFatter, 1998).

Bono and Vey (2007) confirmed that the extrovert suffers from opposite feelings that express sadness and anger when he expresses his emotions. Neuroticism is also associated with mood disruption to frequent exposure to negative emotional experiences, the continuation of those experiences, or cases of failure to imitate models of people to replace social comparison.

Canli (2004) also studied the effect of emotional processing in the social comparison of people with neurotic and extrovert personalities during the cognitive and emotional information sharing between two opposite people in the emotional state (one of them feels sad and the other feels happy). The study emphasized that the upward comparisons helped to reach the state of extroversion, while the downward comparisons helped to be because of an imbalance of neuroticism mood.

In the research of Barańczuk (2019), a meta-analysis of the Big-five factors and emotional regulation strategies was applied, and it noticed lower levels of neuroticism and higher levels of extraversion and openness to emotional experience. Agreeableness and conscientiousness are associated with adaptive emotion regulation strategies (re-evaluation, problem-solving, and vigilance) and are associated with lower maladaptive emotion regulation strategies (avoidance and suppression).

Social comparison

Social comparison is defined as an individual's tendency to compare his achievements, status, and experiences with the performance of others. Social comparison evaluations occur when an individual lacks an unbiased criterion for evaluating his abilities and opinions. Often the individual decides who he perceives as a comparison target. Then, He makes a set of social comparisons to achieve purposes other than self-evaluation (Yang, 2016).

Social comparisons refer to the tendency to use others as references of information to determine, appraise, and calibrate one's self-performance according to the ability of others. Or it aims to determine how to act, think and feel compared to the performance and opinions of others. These comparisons define our capabilities and social standing so that human needs, need for belonging, and self-esteem. It can be in its fullest form, especially if the user has friends from other cultures (Haferkamp & Krämer, 2011).

The social comparison process requires choosing a target for comparison (a person who is superior in one trait and another inferior in another), and the outcome of the comparison (accommodating the amount of variance between the two sides of the comparison). High achievers who have positive characteristics if the other is superior to him in ability while declining social comparison occurs when comparing oneself with inferior others who have negative characteristics (Haferkamp & Krämer, 2011; Vogel, Rose, Roberts & Eckles, 2014). One denotes more negative in his feelings when one compares oneself with someone inferior (Haferkamp & Krämer, 2011). Responses may be frustrating, and this may be reflected in one's identity as one differs oneself based on the perceived opinions of others (Nesi & Prinstein, 2015).

Individuals in their tendency to make social comparisons with others are characterized by three properties (Yang, 2016): (1) have a high level of general and specific self-awareness, (2) are socially oriented, and this reflects in their interest, empathy, and sensitivity to the needs and feelings of others, (3) Tendency to negative emotion and self-suspicion, so they often have low self-esteem and high neurotic traits.

Since social media sites are a tool for promoting the ideal self and building a profile with more desirable images, these sites provide a degree of ambition and flexibility in presenting and promoting the self in the character that the promoter might like to see in his personality, and accordingly. The social-personal comparison is occurred another person by balancing the self-located in that ideal self (Vogel et al., 2014). The declared ideal self may be real or false (Turel & Gil-Or, 2019). This falsehood may be intentional or conscious as a negative result to maintain psychological well-being or as a response to a downward personal comparison (Turel & Gil-Or, 2019).

The false self may be a means to modify the personal appearance of the individual or enhance some aspects related to his life in a way that positively enhances his openness towards life again (Nesi & Prinstein, 2015). Accordingly, these sites affect the individual's motivation and psychological well-being. The individual engages in upward social comparisons more than downward social comparisons, which causes envy and low self-esteem (Yang, 2016).

Research Problem

It was noticed in the recent period that followed the widespread invasion of the Corona epidemic outbreak, the Arab countries' cancellation of studies, and temporary suspension of interests to limit contact, and the epidemic spread. University students resorted, through the screens of smartphones, and tablets, to compare themselves with those of the same level as their colleagues and began to comment on them positively or negatively, which leads to an improvement in mood and overcoming the crisis in upward comparisons, or hostile mood in cases of descending comparison. The problem of the study is summarized in the following question: What is the relative contribution of each of the social comparisons and the Big-Five factors of personality and mood contagion among university student's social networking users?

Objectives of the study:

1. Estimating the relationships between social comparison and the Big-Five factors of personality and mood contagion among university students social network users.
2. Studying the relative contribution of social comparison and the Big-Five factors in predicting mood contagion among university students social networking users.

Research motivation

This study assumes that social networking sites convey a picture of reality in the sense of many successful and attractive people. Because of this distorted image, individuals feel unsatisfied with their position, their physical attractiveness, and experience the effect of this difference because they believe they are not so beautiful as models to make social comparisons.

Methodology

Participants: A 288 university students, and their ages ranged from 18 to 44 years, with a age average 19.77 and a standard deviation of 3.13. It was classified by gender as 32 (10.9%) males, 256 (87.4%) females, and 5 (1.7%) not mentioned. It divided by the educational stage as 251 (85.7%) with a first university degree, 11 (3.8%) graduates, and 31 (10.5%) with postgraduate studies.

Instruments

Social networking sites social comparison scale: The scale was prepared according to a study (Alicke, 2007) to compare the comments of others via social networking

sites to assess their impression on the individual's self-evaluation and to give him an opportunity for how others perform in a task. A three-point Likert scale was formulated giving agree (3), neutral (2), and disagree (1).

Validity: Exploratory factor analysis was performed using the method of principal component analysis (PCA) method and the Orthogonal rotation (Varimax). The factors' eigenvalues were 3.18 and 2.69, respectively. The two factors explained 26.47% and 22.38%, respectively, of the variance of the correlation matrix. The item loadings were as follows:

Table 1: Exploratory factor analysis of the social comparison scale.

Items	**explicit comparison**	**implicit comparison**
I write posts that show me more loyal than my colleagues	.67	
My posts will be upward to everyone on Facebook	.70	
I feel superior while writing my posts	.73	
I talk about myself and my successes in my Facebook posts	.56	
I feel friendly to others when I console my posts	--	--
I feel preferred to Facebook friends		.79
Being with Facebook friends always makes me unique		.83
I compare my past events with what happens to my friends		.67
I try to post pictures that interest me like my classmates		.52
) I honestly comment on posts that provoke me	.53	
) I put comments on my posts to expose their authenticity	.58	
) I reject the idea that my friends are prime	.58	

The results revealed that items 1, 2, 3, 4, 10, 11, and 12 were loaded on the first dimension. The item loading ranged between 0.53 to 0.73, while items 5, 6, 7, 8, and 9 were saturated on the second dimension. The second-dimension loadings ranged between 0.52 to 0.83.

Reliability: scale stability was performed using Cronbach's alpha coefficient, whose value was 0.762 for the scale items. The alpha coefficient of the explicit comparison dimension was 0.738, while the alpha coefficient values item deleted ranged from 0.686 to 0.817. then item no. 4 was deleted. The value of the alpha coefficient for the implicit comparison dimension was 0.760, and the alpha coefficients item deleted ranged from 0.659 to 0.739.

***Big five factors of personality scale in social networking sites*:** Moussa (2016b) designed the scale to evaluate personality traits among social network users. Then, he verified its credibility using exploratory and confirmatory factor analysis, and the stability of items was proven through the two analyzes. Its stability coefficient ranged from 0.51 to 0.69. The scale response was modified in this study from the quadrant into the five-point Likert scale so that it is always given (5), often (4), sometimes (3), rarely (2), and never (1). In its final form, the total number of items was 22.

Validity and reliability: The validity was estimated using the confirmatory factor analysis using the maximum likelihood method in the LISREL 8.51 software. The goodness- of fit indicators were (X^2= 451.9, P < .01), RMSEA= .071, NNFI= .70, GFI= .90, and SRMR= .077. The goodness of fit indicators was accepted, while the X^2 and NNFI

indices were poorly fitted, as they are affected by the sample size. The item loadings of scale items on dimensions as shown:

Table 2. Confirmatory factor analysis of the Internet's Big Five Factors scale items.

Factor	Items	Factor loadings	Standard error	t-value
Extroversion	I am constantly looking for new friends	.41	.060	6.84
	I feel my presence within others liking my comments	.39	.065	5.94
	I like posting photos of social events I've subscribed to	.59	.064	9.20
	The best theme for discussion with Facebook friends	.70	.063	11.14
	I prefer to chat rooms while talking to my friends	.47	.066	7.11
Neuroticism	I unfriend people whose comments annoy me	.21	.075	2.83
	I get worried when I comment on posts of the opposite sex	.18	.074	2.39
	I am posting my depression on Facebook	.73	.070	10.36
	I vent my anger by writing my thoughts on my Facebook page.	.80	.069	11.48
Agreeableness	) I congratulate my colleagues on their happy occasions	.31	.066	4.76
	) I prefer to follow the comments on my response to it	.39	.068	5.72
	) I share my blogs and websites with my Face-book page	.60	.068	8,87
	) I welcome the friendships of those I know and those I overlook them	.34	.067	5.04
	) I accept friendships of the opposite sex.	.22	.070	3.21
Conscientiousness	) I avoid responding to offensive comments about myself	.56	.034	16.76
	) I tag the source of the comments you quoted	.01	.031	.31
	) I apply privacy to post comments that may offend others	.08	.032	2.37
	) I refuse to comment on people I don't know on Facebook	2.65	.50	5.29
Openness	) I share to spread innovative ideas	.41	.078	5.25
	) I prefer to join cultural groups	.28	.078	3.63
	) I despise liking art and entertainment pages	.03	.078	.37
	) I find it interesting to add the experiences gained to my Facebook page	.70	.080	8.80

Items saturated on dimensions. The item loadings were statistically significant at p= .05. Item 16 was omitted from the conscientiousness factor. Item 21 was also ejected

from the openness to experience. The alpha coefficient for dimensions were Extroversion .69, Neuroticism .71, Agreeableness .77, Conscientiousness .54, and openness .61.

Mood contagion scale: Doherty (1997) prepared this scale to estimate the impression, imitation, and empathy of social networking site users because of their responses and interaction on social networking sites with positive and negative emotional influences. Moussa's (2016a) Arabic version of the scale was applied to the participants. The five-point Likert scale (always, often, sometimes, rarely, never) was selected. The respondent is given 4 (always), 3 (often), 2 (Sometimes), 1 (rarely), and a score of zero given for never responding. Doherty (1997) hypothesized that response never signifies contagion or emotional imitation, that is, the emotional aspect never moves in the singular.

Validity: Construct validity is achieved using the CFA technique. The unweighted least square method was used to test the model because multivariate normality was violated. The two-factor model was fitted according NNFI= .90, GFI= .93, SRMR= .087 and the model had poor goodness of fit among chi-square index (X^2= 381.7, P < .01) and RMSEA= .110.

Reliability: The alpha stability coefficient of the scale was estimated and equaled 0.794 while the alpha coefficient for the dimension of negative mood contagion was 0.659, and the alpha if the item was deleted ranged from 0.605 to 0.658. The alpha coefficient of the positive mood infection was 0.682, and the alpha, if the item was deleted, ranged from 0.610 to 0.677.

Procedures

The scales that included social comparison, personality, and mood contagion were applied electronically through the Google form application link in late December 2019 and continued until the end of January 2020. Then, an Excel file was prepared the data file was prepared in IBM SPSS 28 program. Finally, Numeric codes were given to the demographic variables like gender, age, and university degree.

Statistical analysis

The data were analyzed using IBM SPSS v.28 software. Pearson's correlation coefficient, multiple regression analysis, and exploratory factor analysis have been used. The LISREL 8.51 was used to verify the construct validity. Confirmatory factorial model of mood contagion and the Big-five factors of personality were done. The goodness of fit criteria like RMSEA (value 0.08 or less), GFI, NNFI (value 0.95 or more), chi-square statistic, and the associated probability P-value (no statistical significance) (Amer, 2018).

Results and Discussion

Association coefficients between study variables

Pairwise method was used for missing data handling. Pearson correlation matrix for the relationships between variables, and the results were as follows:

Table 3. Pearson's correlation matrix for the relationships between the study variables

		Extroversion	**Neuroticism**	**Agreeableness**	**Conscientiousness**	**Openness**
Social comparison	Coefficient	-.110	.300**	-.079	.113	.057
	C.I.	[-.223- .006]	[-.117- .114]	[-.193- .037]	[-.002- .226]	[-.059- .171]

		Extroversion	Neuroticism	Agreeableness	Conscientiousness	Openness
Mood contagion	Coefficient	.248**	.243**	.219**	.127*	.112
	C.I.	[.136- .353]	[.131- .349]	[.106- .326]	[.011- .239]	[-.003- .225]

Notes: (**) refers to significance correlation coefficient at .01, and (*) significance at level.05, 95% level of C.I, Confidence interval computed by Fisher test.

The results concluded that there is a positive relationship between social comparison and neuroticism. This means that the more the social comparison increases with his acquaintances through social networking sites, the more nervous excitement occurs to him because of his relative lower level than those who compare him, and this may differ (Haferkamp & Krämer, 2011).

The reason for the direct association between neuroticism and social comparison may be due in the case of the downward comparison, or it may be caused by the frustrating feelings he receives within the comments of his colleagues on promoting his person with a false self, which gives him feedback opposite to expectations about the perceptions of others and this conclusion agrees with (Nesi & Prinstein, 2015).

The results showed that there is a positive association between neuroticism and mood contagion. The mood is a condition that gives the user a certain type of emotion as a result of stopping a social trend that the individual seeks within his interactions with the communication sites. Often the individual tends in his difficult interactions to negative emotion and self-certainty, so self-esteem decreases accordingly, and the neurotic trait is common in the person at the time, and this is harmonious with the study (Yang, 2016).

The researchers explain the positive correlation between mood contagion and extroversion that the individual may continue the ideal self in his comments and posts on Facebook, to enhance the self-image of his followers, to obtain compliments or interact with those personalities that he sees in comparison with himself, and this is consistent with (Vogel et al., 2014).

Often the individual may arrive gradually through upward social comparison with whom he agrees within personality traits or in mood, and accordingly the mood shifts due to periods of interaction, so the two people become positive, for example, and accordingly, the self-image may improve because of meeting in the real self and the ideal self, and this partially agrees with (Vogel et al., 2014). It differs from (Turel & Gil-Or, 2019), where the falsehood in self-presentation so that the individual emerges in an extroverted or acceptable image as a model among his followers on the communication sites, and here there is a trivial improvement in the presentation of the self, that is, it is unconscious in order to preserve psychological well-being, this may explain the positive association between mood contagion, extraversion, and agreeableness.

It was noted that there is no correlation between agreeableness, openness, and social comparison, as the individual may be drawn to some social comparisons in an unrealistic manner, which causes envy and jealousy from his friends, which leads him to low self-esteem and lack of self-acceptance, and this is consistent with (Yang, 2016).

The downward social comparison may commit the individual to strict evaluation criteria to assess his feelings, thoughts, and abilities in a way that causes frequent failure,

or exaggerate self-promotion in a way that may cause him to clash with others. Therefore, the individual prefers solitude, and this agrees with (Haferkamp & Krämer, 2011).

A positive correlation was observed between agreeableness and mood contagion. The individual, with his acceptance among others, makes him express by nature what he is going through within a positive or negative mood, which may become sympathy for him, and provide supportive knowledge to modify the mood in a way that makes the individual adapt and modify quickly in an ideal characteristic interaction in social media, this is consistent with (Barsade, 2002; Eisenberg et al., 1998).

It was noted that the relationship between openness and contagion of mood, which seems logical, is not significant, as the individual's excessive openness to life and his feelings in a way that may lead to the greed of others in him, and the punitive responses he takes because of this happening, shocking or neutral interactions arise that avoid a conflict, and therefore the false self that the individual used to beautify his recurring problems, and this is compatible with (Barańczuk, 2019; Connor-Smith & Flachsbart, 2007).

Linearity of Predictors

Linearity hypothesis tested as pre-condition of multiple regression analysis by scatter plots. A normal probability plot had been drawn between the dependent variable and the Z-score of predictors because of outliers in its variables' data. The scattering plots as shown:

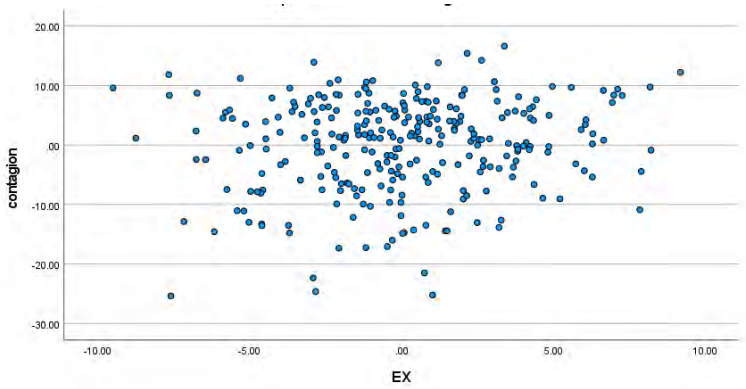

Figure 1. Scattering plot of Extroversion subscale

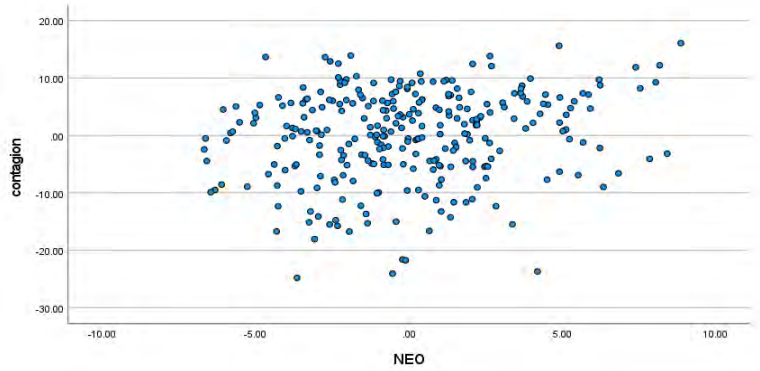

Figure 2. Scattering plot of Neuroticism subscale

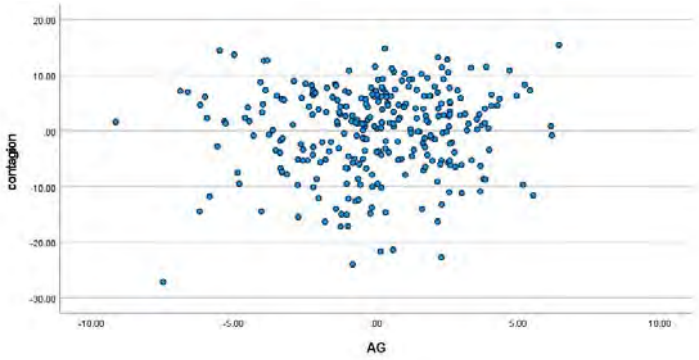

Figure 3. Scattering plot of Agreeableness subscale

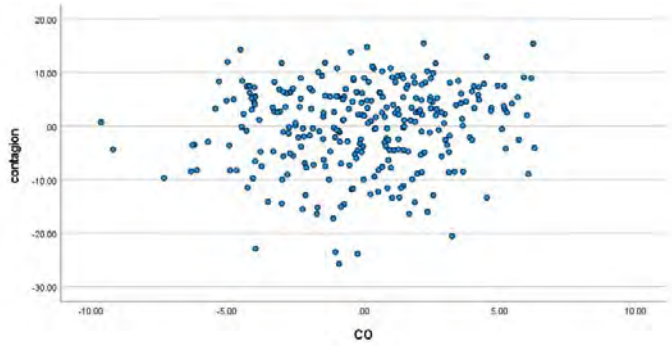

Figure 4. Scattering plot of Conscientiousness subscale

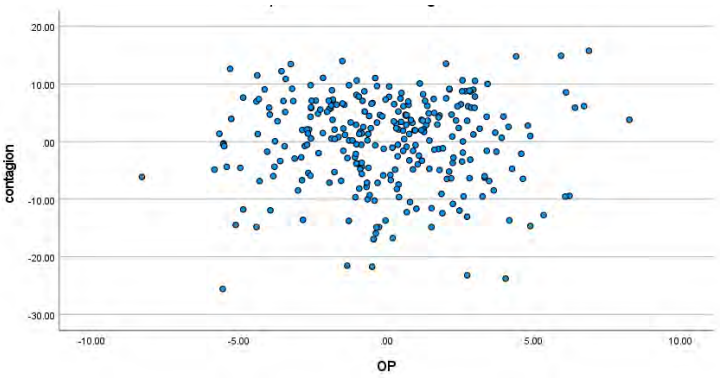

Figure 5. Scattering plot of openness subscale

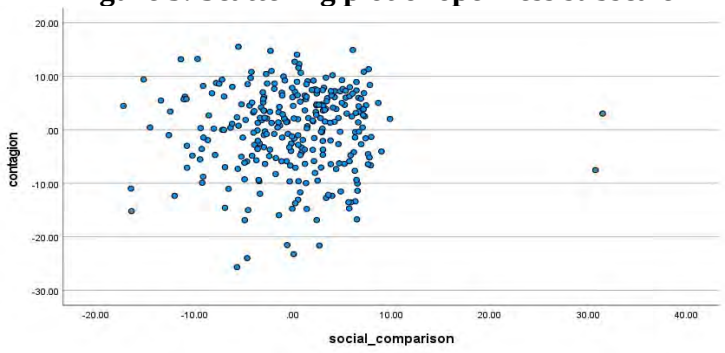

Figure 6. Scattering plot of social comparison scale

The plots showed that the predictors violated the linearity condition of multiple regression analysis. But predictors of Agreeableness and openness subscales and social comparison scale have semi-linearity which showed in scattering bold spots in plots.

Normality

Kolmogorov-Smirnov test was used to check the linear normality of predictors. The results as shown in table 4.

Table .4. Kolmogorov-Smirnov normality test results.

	Kolmogorov-Smirnov		
	Statistic	**df**	**Sig.**
Extraversion	.079	288	<.001
Neuroticism	.080	288	<.001
Agreeableness	.088	288	<.001
Conscientiousness	.090	288	<.001
Openness	.075	288	<.001
Social comparison	.097	288	<.001

The results showed that the predictors violated the normality condition of regression. Multiple regression has the robustness of normality and linearity.

Multiple Regression analysis:

Missing values handling using a pairwise method, six predictors entered at the Multiple regression statistical design. The results revealed the possibility of forming a prediction model to determine the relative contribution of the study variables to predict the levels of mood. The multiple correlation coefficient equaled 0.338, and the determination coefficient was 0.115.

Table 5. Regression coefficients for the predictors to the mood contagion

Predictors	**B**	**Std. Error**	**Beta**	**T**	**Sig.**	**Zero-order correlation**	**Partial correlation**	**VIF**
Constant	43.301	3.999	--	10.83	<.001			
Extraversion	.281	.133	.15	2.11	.036	.248	.125	1.542
Neuroticism	.430	.143	.18	3.01	.003	.243	.177	1.097
Agreeableness	.223	.170	.091	1.31	.191	.219	.078	1.544
Conscientiousness	.305	.154	.11	1.99	.048	.127	.118	1.031
Openness	.014	.168	.005	.09	.932	.112	.005	1.143
social comparison	.029	.076	.022	.39	.705	.011	.023	1.034

The results showed that the predictor variables data freed from the collinearity problem according to the VIF indicator.

The results showed that Conscientiousness is a positive predictor of mood contagion ($\beta = .11$, $p = .048$). This result is logical. In the conscious state of the individual and his ambition to promote his current state, the upward comparison helps the individual to

pass the current distress of the individual, in addition, one benefits from his previous experiences and improves the emotional and social information processing, and this is consistent with (Barsade, 2002; Gump & Kulik, 1997; Hennig-Thurau et al., 2006).

The study concluded that neuroticism is a predictor of mood contagion (β=.18, p=.003), and this has a repeated psychological interest, one of which is that the perceived neuroticism in the one's notifications and the future perceived in social comparison processes may lead to a negative influence on mood, while the other meaning It agrees with Barańczuk's (2019) study that a lower level of neuroticism improves assessment processes, problem-solving, and alertness and thus enhances the emotional experience and helps one cope.

In addition, mood improvement affects the social comparison processes and makes it incremental with neurotic personalities who compare and improve the emotional processing of the information that is shared, especially for people with different moods, and this agrees with Canli (2004).

The results of the study were confirmed by the results of Gross et al. (1998) found that the most influential factors in positive and negative moods are extraversion (β = .15, p = .036) and neuroticism (β = .18, p = .003). The results were confirmed by Barańczuk (2019), which sees that extraversion and neuroticism are related to thoughts, feelings, personal beliefs, special emotions, and the quality of feelings, and the nature of the mood is consistent with the nature of the neurotic or extrovert personality.

Also, personal beliefs are the most control of an individual's comparison processes, as for self-judgment, it is reflected in the same of the notifications and comments of others, which the individual perceives and even derives from his judgments, whether they result from downward or upward comparisons. These notifications and comments help the individual to control his emotions and mood, especially if it repeated successful emotional experiences that modify the behavior of the individual and this is in line with (Barsade, 2002; Coco et al., 2014).

The results agreed with Watson et al. (1999) that extraversion is less effective than its Neuroticism counterpart in mood contagion. This result is due to several reasons, including that extraversion is a social personality and that emotion is in essence a social component. Others' comments on a particular post may add some humor that turns the track of a downward comparison into an upward comparison. Neuroticism is associated with a higher rate of mood, so the emotional state is reflected in sad or defeatist statements that express the individual's personality selectively to follow or republish and it's related to Larsen & Ketelaar (1991).

According to Cohen (1988)'s effect size approach the effect size (f^2) could be computed as the following:

$$f^2 = \frac{R^2}{1 - R^2}$$

Since R^2 is equaled to .115, U refers to a number of predictors which equaled six predictors, the level of significance equaled .05, and f^2 refers to the effect size index. The effect size according to Cohen's approach f^2 = .130 which is large.

Conclusion and Applications

The study verified the relative contribution of each of the personal and social comparisons, which is usually made by people in the prime of life, especially university stu-

dents and workers with their families and peers of approximately the same age. The study was also concerned with determining the value of the relative contribution of each of the Big-five personality factors in predicting mood contagion (whether mood impairment or mood improvement).

The study determined and paid attention to the mood and not the emotion contagion as the irritability is immediate in occurrence and disappears relatively with the disappearance of the symptom that causes the mood disorder. Mood is defined as the condition that affects the individual in the last week or two because of interaction with his peers, friends, and acquaintances on social networking sites. The two researchers used the emotional contagion scale prepared by Mousa (2020). Modifications were done to the scale items to express the individual's contagious mood or mood state in the last week or two at the most before the application of the study activities.

The Big-five factors of personality, prepared by Mahmoud Mousa (2016). It differs from the Personality scales in that it is concerned with the behavioral patterns that express the individual personality in social networking sites. The available images of the Big Five Factors scale appear to measure linguistically aspects of personality in live interactions between people face to face.

The study prepared a measure of personal social comparison. It did not adopt the descending and ascending personal comparison components. The study chose the two dimensions of implicit comparison and explicit comparison, as the user of social networking sites will avoid the response mode that represents it explicitly and will choose those that express what it should be, especially since social networking sites converge the ideal self with the real self. The individual can express those personal comparisons that he makes with his relatives, peers, friends who are known, strangers, and the circle of acquaintances, and he cannot specify the type of comparison, ascending or descending, because this will expose him to mistake.

We can refer to the reason for the insignificance of agreeableness, conscientiousness, and openness as influences in the contagion of mood, and the justification for this is that the individual feels that he is socially accepted, and this acceptance is measured by the number of likes he received from his colleagues and friends on social networking sites. An individual's posts also reflect what others expect of him or are liked by his followers on the one hand, and this is justified by re-reading his posts as others like them. The individual reviews his publications whenever others admire them, to see them from their perspective, and this is maintained by the convergence or merging between realistic and idealistic selves to some extent.

While conscience is one of the ideals that people must possess, and conscience appears in the writings and publications of users of social networks, even if it is not available, and conscientiousness and openness to other experiences, beliefs, and ideas are nothing but an idea that the individual reached because of his access to social networking sites social.

The study suffers from some limitations, including that the researchers did not deal with positive and negative moods as dealt with by previous studies. This approach of the downward and upward social comparison was rejected in this study, it was replaced by a general factor model of personal comparison so that the general contribution, positively or negatively, to the mood contagion, instead of the positive and negative moods repetition that addressed in previous studies.

The study also neglected the role of gender in the dependent variable, which is mood infection, as previous studies had proven the superiority of females over males in mood infection. Also, the study did not verify the previous study result because this may lead to a type I error. After all, the female sample was more than double the males.

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