

The relationship between social media use and narcissism

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ABSTRACT

The relationship between social media use and narcissism has been a subject of research, since the first social media sites emerged. Research has shown that social media use can cause narcissism on the one hand, and narcissism on the other hand, and it can increase social media use with a potentially mutual effect between the two of them. Currently, the narcissistic culture is reproduced and narcissism is encouraged in social media. It has been observed that social media sites are an ideal environment to meet narcissistic needs, and narcissistic behaviors are rewarded. In addition, the narcissistic attitudes and behaviors in real life are also reflected in the behaviors on social media and their narcissistic levels increase further.

Keywords: Addiction, behavior, narcissism, social media use.

NARCISSISM

The origin of the term narcissism is evolved from the story of Narcissus in Greek mythology. The most known and detailed version of the story, which has various versions, was written by Ovid, the Roman poet. Young and handsome Narcissus arrogantly rejected many admirers of him. Goddess Nemesis (the goddess of retribution and revenge), responds to the prayer of one of his lovers that Narcissus humiliated and rejected, punishes Narcissus with unrequited love. Narcissus sees his reflection in the pond that he went to drink water, falls in love with the image he sees. He cannot take his eyes off from his own reflection even for a moment and remains without eating and drinking, and he dies on the shore of the lake due to his passion for himself.^[1]

In the psychology literature, the term narcissism was first referred in relation to the mythological story mentioned in 1898 by the English sexologist Havelock Ellis who used the term "Narcissus-like" for autoerotic (sexual pleasure from his own body) behavior, which he believed to be observed mostly

in women, and defined this term as "the tendency to absorb sexual feelings in self-adoration and often disappear completely".^[2]

Narcissism was a concept that has been researched in many subfields of psychology and studied in various dimensions. Until now, narcissism has been divided into subtypes as primary, secondary, grandiose, and vulnerable. Sigmund Freud discusses narcissism under two types and defines primary narcissism as a normal maturation phase of healthy psychosexual development (oral, anal, phallic, latent, genital) in his article "On Narcissism: An Introduction" published in 1914. This stage is a stage in which the child is completely egocentric, insensitive to the feelings and thoughts of others, and directs his libidinal (life) energy to himself or herself. Secondary narcissism was explained as the libidinal energy being withdrawn from external objects and directed toward the ego due to the deviations experienced in this process, while the child is expected to separate the libidinal energy from himself or herself and direct it to other objects.^[3] Grandiose narcissism and vulnerable narcissism

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have opposite characteristics in many respects. Grandiose narcissists are defined as individuals who are extroverted, egocentric, arrogant, desire to attract attention, insensitive to the needs of others, exaggerated self-esteem and low anxiety levels. Vulnerable narcissists, on the other hand, are defined as individuals who are introverted, sensitive, have a high level of anxiety, sensitive to criticism, and extremely modest.^[4-6]

The concept of narcissism, with different classifications in the literature, is mainly studied from two perspectives. These are the distinctions between normal narcissism and pathological narcissism. Every individual has needs to be liked, approved, cared for, appreciated, and loved. These narcissistic personality traits-like needs are present in every individual somewhat. Normal narcissism is having sufficient amounts of these features and having positive effects on the mental health of the individual. The inflated perspective that the individual is special and superior from others is pathological. Pathological narcissism is defined as extreme self-admiration, the need to be approved and appreciated constantly, apathy to others, and lack of empathy.^[7-9] The diagnostic criteria for narcissistic personality disorder to differentiate normal narcissism from pathological narcissism are defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM). Egotism, disregard for others, egocentrism, and

low empathy are traits associated with all subtypes of narcissism.^[10]

Recently, the neural basis of narcissism has also been the subject of studies. In a study, the focus was the neurological process of motor resonance, the activation of corresponding motor representations in the brain during the observation of both performance and actions. The same neural motor zones are activated, when someone exhibits and observes the same behavior. This tendency can be demonstrated behaviorally in the automatic mimicry task where a series of cues point participants to raise their index finger or middle finger. However, each index is placed over the video of a hand raising the index finger or middle finger. Thus, in a particular experiment, when participants observe one hand while raising the middle finger, they can see 1, which is the numerical sign that indicates raising the index finger (Figure 1). Typically, following an incompatible action hinders the ability to perform the flagged response. As a result of this study, narcissists were relatively unaffected by social stimuli and exhibited a significantly low interference effect. In other words, narcissists resonate less with the actions of others. These findings indicate a neural mechanism which can support and even contribute to the general lack of empathy of narcissists and their ability to understand others.^[11]

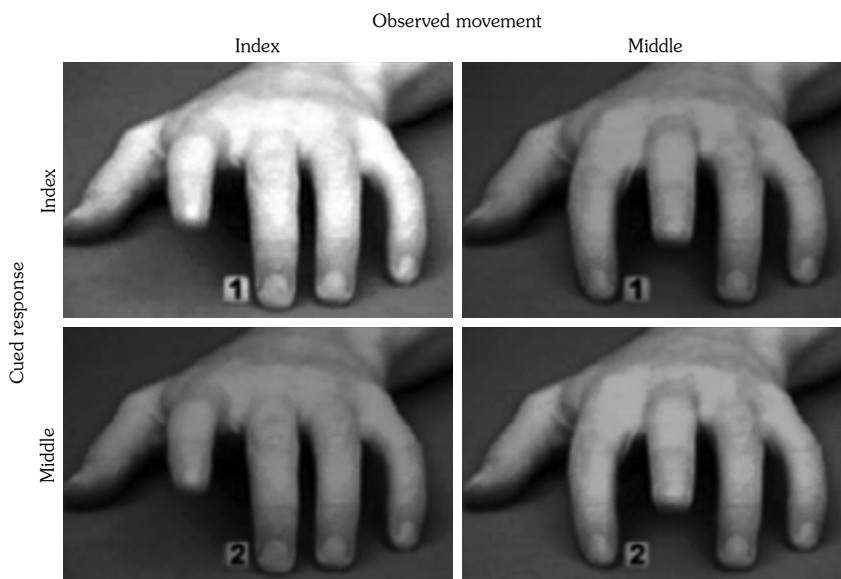


Figure 1. Experimental conditions.^[11]

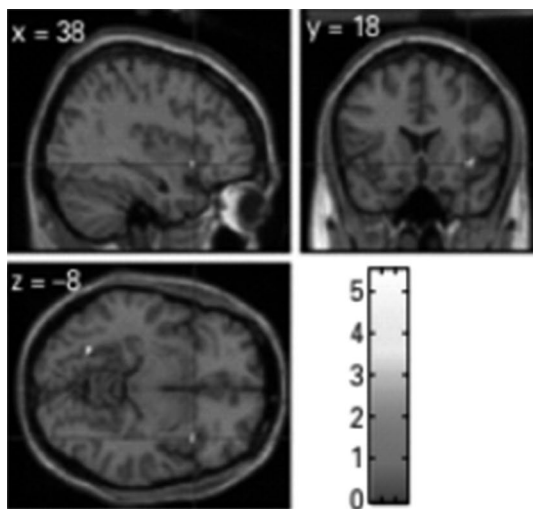
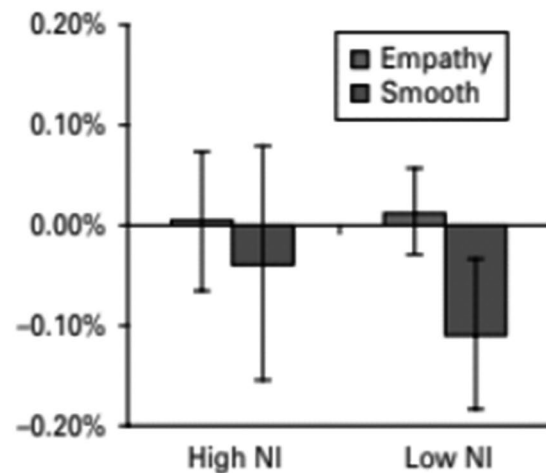


Figure 2. Significant changes in signals of empathy and non-empathy between high- and low-narcissism subjects.^[12]

In a neuroimaging experiment conducted on the example of non-clinical narcissists, the patients were divided into high-narcissism and low-narcissism subgroups and given the task of empathizing with pictures of emotional faces. At the end of the study, the patients in the high-narcissism group showed significantly reduced deactivation during empathy, particularly in the right anterior insula (RAI) (Figure 2). The RAI is an important brain structure in experiencing and predicting emotions,^[12-16] plays a role in self-representation,^[17,18] and is typically associated with empathy with others.^[19]

SOCIAL MEDIA

Social network sites are virtual communities where users can create individual public profiles, interact with their real-life friends and meet other individuals based on their common interests. Social media use has become an increasingly popular leisure activity in many countries around the world in the last few years.^[20] Currently, Facebook, Instagram, Twitter, YouTube, and WhatsApp are the most used social media applications. In the Digital in 2020 report prepared by We Are Social and Hootsuite, it is stated that more than 4.5 billion individuals use the internet worldwide and 3.8 billion of them are active social media users. This number has increased by 9.2% compared to the previous year.^[21]



Individuals use social media for two main reasons: (i) connecting with others and (ii) managing the impression they make on others.^[22] Social media takes advantage of pre-existing social impulses.^[23] Individuals are directed to connect with others, manage their reputations, and gain significant adaptive advantages of doing so.^[24] Finding ways to fulfill our need to belong to a social group can be just as important as fulfilling our basic biological needs, such as food and sexual intercourse, that are essential for our survival.^[25] Strong social connections increase psychological well-being and protect individuals from feelings of loneliness and depression.^[26] Social media provides a platform for individuals to satisfy this basic social drive (Figure 3).^[24]

Social media offers a platform where modern individuals can meet their basic social needs with five basic behaviors. These behaviors are mainly based on three areas: social cognition (e.g. mentalizing), self-referential cognition, and social reward process.^[24] The nervous systems underlying these cognitive processes are shown (Figure 4).

SOCIAL MEDIA AND NARCISSISM

Social media is a basic environment for narcissism, and the growth of social media has been potentially associated with the cultural growth of narcissism. In literature, social media

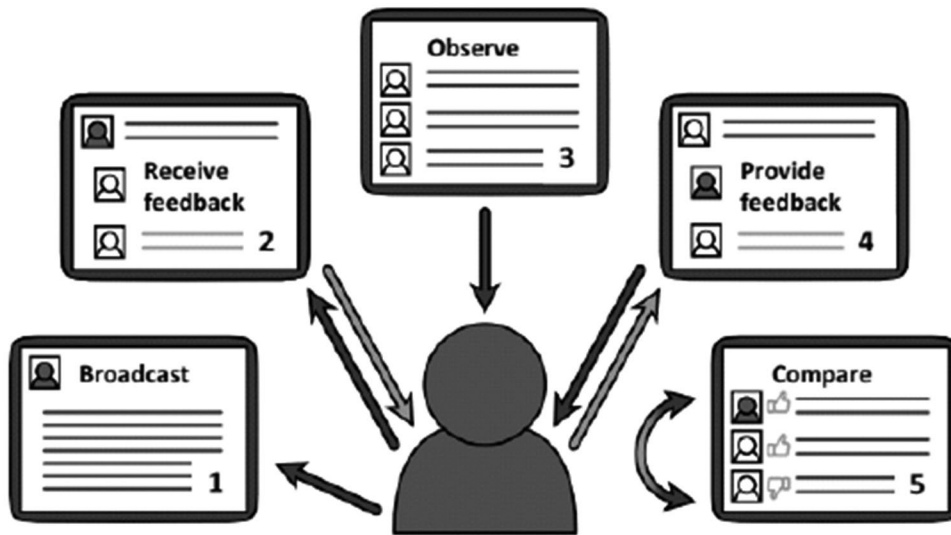


Figure 3. Five Key Social Media Behaviors. Social media users can: (1) broadcast information; (2) receive feedback on this information; (3) observe the broadcasts of others; (4) provide feedback on the broadcasts of others; and (5) compared themselves with others.^[24]

is associated with narcissism, but it is not known in which direction the causal arrows are. On the one hand, narcissism can cause social media use, and thus narcissism can increase social media usage; On the other hand, social media use can cause narcissism, and increased use of social media can increase narcissism or have a reciprocal, two-way effect (Figure 5). In addition, as a third factor, cultural individualism can cause both.^[27] Lowen^[28] outlines that narcissism defines both a psychological and a cultural situation.

Thus, Twenge and Campbell^[29] attribute the rise of narcissism to the focus on self-admiration that dominates culture. In addition, they state that the narcissistic culture is reproduced on social media and narcissism is encouraged through social sharing platforms.

The most important opportunities provided by social media to its users can be counted as presenting oneself, building and maintaining one's own ideal identities, and voluntary disclosure of private information.^[30,31] Social media platforms

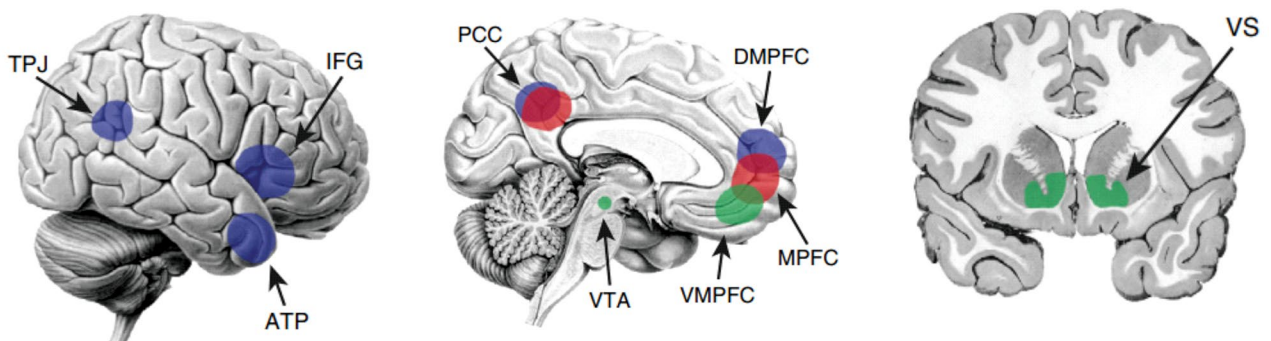


Figure 4. Brain networks allegedly involved in the use of social media. Extensive brain imaging research into social cognition, conducted with offline paradigms, has revealed several major brain networks that could be involved in social media use. (i) The mentalizing network (brain regions in blue): dorsomedial prefrontal cortex (DMPFC), temporoparietal junction (TPJ), anterior temporal lobe (ATL), inferior frontal gyrus (IFG), and posterior cingulate cortex/precuneus (PCC); (ii) the self-referential cognition network (brain regions in red): medial prefrontal cortex (MPFC) and PCC; and (iii) the reward network (brain regions in green): ventromedial prefrontal cortex (VMPFC), ventral striatum (VS), and ventral tegmental area (VTA).^[24]

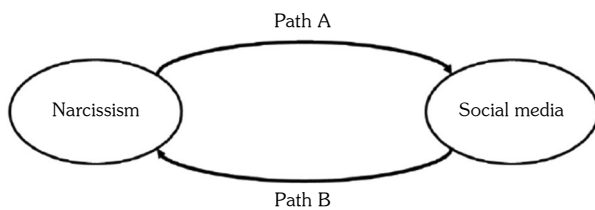


Figure 5. Reasonable causal pathways linking narcissism and social media. Way A is narcissism that affects social media. Way B represents social media influencing narcissism. Together, pathways A and B represent a two-way effect.^[27]

are a unique and ideal environment for meeting narcissistic demands and studies indicate that narcissistic individuals use social media sites compulsively.^[32] Individuals have had the opportunity to express themselves through social media, to announce their achievements to wide populations and to be recognized by other individuals.^[33] In addition, social media rewards narcissistic needs, such as getting too much appreciation and having great number of friends.^[29] Excessive photo sharing, frequent situation updates, and the number of friends are related to narcissistic tendencies.^[34] Individuals with high scores on the narcissism scale share more photos on social media platforms.^[35] In addition, individuals with high narcissistic tendencies tend to remove posts that do not reach the desired number of likes.^[36] Narcissistic individuals focus on short-term relationships to achieve more popular, successful and higher status rather than interpersonal intimacy, intimate, and longer-term relationships.^[30] In this regard, social media allows individuals to establish a large number of, but superficial relationships. Therefore, it is reasonable for narcissists to have more friends on social media.^[37]

Studies reveal that narcissistic behaviors increase the use of social media. Indeed, it has been observed that individuals exhibiting narcissistic behaviors control their Facebook accounts frequently and spend more time compared to non-narcissistic ones.^[38] Those with narcissistic attitudes and behaviors in real life are reflected in their behaviors on social media, tend to use Facebook more frequently, frequently update their status to show themselves more, and

their narcissistic levels increase even more with their posts being appreciated.^[38,39] In a study with a total of 945 participants as 790 Facebook users and 155 non-Facebook users, various personality traits and differences in mental health among these groups were examined. The results showed that Facebook users score higher on narcissism, self-confidence, and extroversion than non-Facebook users.^[40]

Individuals use social media to self-importance, to gather attention, appreciation, and status. In a study, individuals uploaded attractive photos and shared the most interesting information about themselves to achieve these achievements.^[29] The relation between the narcissism and selfie-taking behavior is also intriguing. In a study conducted to examine this relationship, the authors found that those with high levels of narcissism paid more attention to the comments and likes of others on social media and followed others' selfies more.^[41] Another study showed that sharing a selfie was associated with narcissism only in male participants and not in female participants.^[42] In another study, the link between the selfie-posting and three aspects of narcissism (leadership/authority, magnificent exhibitionism, authority/exploitation) was investigated.^[43] According to the results, a positive significant relationship was found between the frequency of sharing selfies and leadership/authority and magnificent exhibitionism, as well as authority/exploitation.^[44,45]

In conclusion, as active social media users increased, so did the interest in social media websites and narcissism. Although most people use social media to connect with others, research has shown that social media use and narcissism are related. I hope that the evidence of narcissism will be investigated more in these rapidly developing platforms.

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