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Narcissus plays video games

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ABSTRACT

Two phenomena of our time have fascinated the general public and the scientific community alike: (a) narcissism as a personality characteristic with important implications for daily social functioning, and (b) the (vast) use of digital media such as video games. But how are these phenomena related to one another? To investigate this question, we administered an online survey to 2,891 individuals to assess their levels of narcissistic admiration and rivalry (NARQ; Back et al., 2013) and their video-gaming activities (frequency of playing, reasons for playing, preferred game genre and role). Results revealed that these narcissism dimensions were differentially related to video gaming: Individuals high on rivalry played video games for distraction and preferred action games and acting as lone fighters; those high on admiration played video games to stimulate their imagination and preferred the role of team leader. Findings were robust when controlling for sex, age, extraversion, and agreeableness.

According to Greek mythology, Narcissus was a young man who stared into a lake all day to watch his beautiful reflection. Science and the public alike have been fascinated by narcissism for decades (Freud, 1914/1990), aiming to understand its causes, correlates, and social consequences. This fascination has perhaps even increased since, in their much disputed book, Twenge and Campbell (2009) reported a rise in the level of narcissism in young Americans. With the emergence of Online Social Networks (OSNs), narcissism research has focused more and more on digital environments. It seems that modern-day narcissists stare at their Facebook profiles all day and wait for the selfies they posted to be liked by others (Sorokowski et al., 2015). Although OSNs are often described as the emerging phenomenon of our modern time, there is yet another medium that is used by 1.8 billion people all over the globe (Statista, 2015), spreading across both sexes and all age groups (Entertainment Software Association, 2014): video games. Maybe modern-day narcissists stare at their computer screens all day long and want their avatars to be the best in the game. Interestingly, our knowledge about the relation between narcissism and video gaming so far is sparse. Because narcissism is known to have some benefits for the self and others (e.g., leadership status, Brunell et al., 2008; success in dating, Dufner, Rauthmann, Czarna, & Denissen, 2013) but also comes with costs (e.g., poor management rankings, Blair, Hoffman, & Helland, 2008; conflicts in close relationships, Buss & Shackelford, 1997; Campbell & Foster, 2002), it is important to understand narcissists' behavior in real as well as in virtual environments.

1. The importance of studying narcissism

Narcissism is a construct used in clinical psychology to describe individuals with high but fragile self-esteem (Kernberg, 1998). However, narcissism is also used as a dimensional descriptor of personality, referring to the extent to which individuals have a grandiose view of themselves (e.g., Paulhus, 2001). Research has shown that narcissism comes along with self-assured, humorous, and charming behaviors (Back, Schmukle, & Egloff, 2010; Paulhus, 1998) but also with hostility, arrogance, and selfishness (Bushman & Baumeister, 1998; Buss & Chiodo, 1991; Colvin, Block, & Funder, 1995). Back et al. (2013) explained these apparently inconsistent behavioral patterns in their recently proposed Narcissistic Admiration and Rivalry Concept (NARC). According to this model, narcissism can be disentangled into two positively related but distinct dimensions: narcissistic admiration and narcissistic rivalry. A narcissist's overarching goal, to maintain a grandiose self, can hence be achieved through two strategies: gaining social admiration from others through self-promotion (e.g., charming and self-assured behaviors) or preventing social failure through self-defense (e.g., devaluation of others, hostile and aggressive behaviors). The social benefits of admiration have been found to be most prevalent at short-term acquaintance (e.g., Back et al., 2010; Oltmanns, Friedman, Fiedler, & Turkheimer, 2004), whereas the social costs of rivalry have emerged in the long run (e.g., Blair et al., 2008; Paulhus, 1998).

2. The importance of studying video gaming

Besides watching TV, exercising, and reading, playing video games is one of the most common leisure activities. User statistics have revealed

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that people spend more and more time gaming—from 5.1 h a week in 2011, to 5.6 h in 2012, to 6.3 h in 2013 (Nielsen Company, 2015). Whereas in prior video games, Spartanic designs prevailed, with technological advances, gamers can nowadays imitate almost every kind of action in fascinatingly designed virtual environments. This provides gamers with the possibility of engaging in all sorts of behaviors that they otherwise could not do (e.g., driving an aircraft), to step into environments in which they could not reside (e.g., outer space), and to act out roles that they normally would not occupy (e.g., detective). "[They] can pretend they are Olympians, Formula 1 drivers, rock stars or sharpshooters" (Ablow, 2013; see also Przybylski, Weinstein, Murayama, Lynch, and Ryan (2011)). Such aspects may also include being the hero, cooperating with teammates and forming communities, and competing with and manipulating rivals. Taking into account both the significant amount of time spent gaming and the huge variety of possible behaviors, video gaming is considered a meaningful context with potential long-term consequences for the individual and his or her social environment.

3. Prior research on narcissism and video gaming

An interesting first exploration of the narcissism–gaming link was provided by Kim, Namkoong, Ku, and Kim (2008). In their large sample of 1471 Korean online gamers, they found that narcissism was positively correlated with online game addiction. However, both the individual difference and the gaming variables were measured with a clinical focus (narcissistic personality disorder scale and online game addiction scale). Although they assessed the gamers' favorite aspects of playing (e.g., leveling and building up their character), they did not report the correlations between these aspects and narcissism. Further research on video gaming has taken into account personality traits other than narcissism. For instance, high neuroticism (Mehroof & Griffiths, 2010; Müller, Beutel, Egloff, & Wölfling, 2014) and low extraversion and conscientiousness have been found to be related to internet gaming disorder (Müller et al., 2014; Wang, Ho, Chan, & Tse, 2015); low agreeableness was linked to playing violent video games (Chory & Goodboy, 2011); and all Big Five traits but neuroticism predicted leadership motivations in gaming (with a negative effect of agreeableness; Graham & Gosling, 2013).

Overall, however, our knowledge on the narcissism–gaming association is limited because prior video-gaming studies (a) did not include personality traits such as narcissism (Yee, 2006); (b) assessed video gaming with a (clinical) focus on gaming addiction (Gentile et al., 2011); or (c) focused on violent video games (e.g., Anderson & Bushman, 2001; Elson & Ferguson, 2014), one game genre, or a specific game (most frequently World of Warcraft; Bessière, Seay, & Kiesler, 2007; Billieux et al., 2013; Graham & Gosling, 2013; Herodotou, Kambouri, & Winters, 2014; Visser, Antheunis, & Schouten, 2013), thereby neglecting the variety of existing game genres. In addition, most studies on narcissism and online behavior (e.g., Bergman, Fearrington, Davenport, & Bergman, 2011; große Deters, Mehl, & Eid, 2014) have predominantly relied on one narcissism measure, the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), a questionnaire that, despite its wide use, has been criticized for not distinguishing between beneficial and maladaptive aspects of narcissism (Ackerman et al., 2011; Back et al., 2013).

4. The present research

The objective of the present study was to examine the relation between narcissism and video gaming in a fine-grained manner. For this purpose, we itemized narcissism into its dimensions of admiration and rivalry and assessed video gaming in a likewise detailed way, ranging from gaming behavior and reasons for playing to preferred game genres and roles. This strategy prevented us from drawing potentially invalid generalizations about video gaming in general and allowed us to examine the spectrum of gaming forms. Moreover, disentangling narcissistic admiration and rivalry has been well-demonstrated to provide an understanding of narcissism's diverse, potentially conflictive, correlates (e.g., Dufner et al., 2015; Fatfouta, Gerlach, Schröder-Abé, & Merkl, 2015). Playing video games should be appealing to narcissists because games offer a chance for social admiration (e.g., by dominating leaderboards, guiding a team), whereas the perils of social failure can be avoided or diminished (e.g., by playing as frequently as necessary to win a game), thereby boosting the narcissist's ego. Thus, we expected a positive correlation between narcissism and video gaming (see Kim et al. (2008)). Importantly and more specifically, we expected differential correlates of narcissistic admiration and rivalry: The former should be related to gain-oriented reasons for playing as well as game genres and roles that allow the gamer to hold a position from which to offer guidance; the latter should be associated with escape-oriented reasons for playing as well as power-related game genres and roles.

5. Method

5.1. Participants[1]

A total of $N = 2{,}891$ individuals (2,421 male, 470 female) with a mean age of 23.17 years ($SD = 5.99$; Range: 13 to 65) participated in our study. Of those participants, $N = 2{,}734$ individuals (2,377 male, 357 female) with a mean age of 23.06 years ($SD = 5.91$, Range: 13 to 65) affirmed the item "yes, I play video games."

5.2. Procedure and instruments[2]

We placed links to our online questionnaire on various online forums as well as on popular online game sites. To achieve heterogeneity of the sample, no exclusion criteria other than having access to the Internet and understanding German were specified. As an incentive to participate in the study, four vouchers of 50€ were raffled.

5.2.1. Narcissism

Participants provided ratings of their level of narcissism using the Narcissistic Admiration and Rivalry Questionnaire (NARQ; Back et al., 2013). The 18 NARQ items cover both narcissism dimensions, admiration and rivalry, and were administered on 5-point Likert-type scales ranging from 1 (*do not agree at all*) to 5 (*agree completely*).[3] Cronbach's alpha was $\alpha = .82$ for admiration, $\alpha = .81$ for rivalry, and $\alpha = .84$ for the full narcissism scale.

5.2.2. Control variables

Participants reported their sex and age. Extraversion and agreeableness were assessed using the Big Five Inventory-SOEP (BFI-S; Schupp & Gerlitz, 2008), a 15-item, validated, short version of the Big Five Inventory (BFI; Lang, John, Lüdtke, Schupp, & Wagner, 2011). Participants provided their answers on a 7-point Likert scale ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). Cronbach's alpha was $\alpha = .45$ for agreeableness and $\alpha = .81$ for extraversion. These coefficients were largely consistent with those reported previously (Hahn, Gottschling, & Spinath, 2012).

5.2.3. Video-gaming behavior

All participants reported whether they played video games or not. Those who approved the item "yes, I play video games" indicated how

[1] The data were gathered as part of a larger project (Braun et al., submitted for publication). However, the analyses in the present article do not overlap with those of the previous work.

[2] Further measures were applied, but they were not relevant to the present research question and were thus not mentioned in this paper.

[3] The response format ranged from 1 to 5 instead of 1 to 6 (Back et al., 2013) because the NARQ was still in its developmental phase when data collection began for the present study.