Narcissism Epidemic: In Search of an Elusive Generational Increase

Svetozar Kuzman

ABSTRACT

There has been a lot of debate on the purported self-indulgence and narcissism of younger generations, who have often been presented as significantly more narcissistic than older generations. This has led some authors to posit the existence of a "narcissism epidemic." In this review, we aim to provide a summary of research on the narcissism epidemic and provide an insight into the historical context of the debate. We show that the evidence behind the narcissism epidemic hypothesis is fairly weak. Moreover, we show that most studies on the narcissism epidemic employ an oversimplified definition of narcissism. Finally, we advocate for a more widespread utilization of more nuanced and complex models of narcissism recently put forward by a group of researchers.

Keywords: Narcissism epidemic, Narcissistic personality inventory, Trifurcated model of narcissism, Twenge's research, Young people

Faculty of Philosophy, University of Belgrade, Belgrade, Serbia

Correspondence to: Svetozar Kuzman, thekuzma@gmail.com

Additional material is published online only. To view please visit the journal online.

Cite this as: Kuzman S. Narcissism Epidemic: In Search of an Elusive Generational Increase. Premier Journal of Social Science 2025;3:100010

DOI: https://doi.org/10.70389/PJSS.100010

Received: 6 January 2025

Revised: 4 April 2025

Accepted: 4 April 2025

Published: 19 April 2025

Ethical approval: N/a

Consent: N/a

Funding: No industry funding

Conflicts of interest: N/a

Author contribution: Svetozar Kuzman – Conceptualization, Writing – original draft, review and editing

Guarantor: Svetozar Kuzman

Provenance and peer-review: Commissioned and externally peer-reviewed

Data availability statement: N/a

Introduction

"Narcissism epidemic" has been used to describe recent societal developments in the West.[1–9] This concept has been used to point out an increase in narcissism that has become apparent among youth in the 2000s and onward, with Millennials and Generation Z being allegedly more narcissistic than the previous generations,[10] with similar hypotheses being brought in relation to the youngest generation, Generation Alpha.[11] While there is still little research on the purported rise in narcissism in Gen Z and even less in the context of Generation Alpha, there is a serious backlog of studies on the narcissism of older generations, although authors differ significantly in their understanding of the alleged narcissism epidemic.

This review aims to provide an overview of research on the narcissism epidemic, providing an unbiased summary of the complex debate and multiple narratives on this topic. Keywords "narcissism epidemic," "narcissism culture," and "generation me" were used to search PubMed and Google Scholar to identify research articles for inclusion. This decision was made because of the close connection between the keywords and, crucially, because the idea of a "narcissism epidemic" first appeared in the context of discussions surrounding "narcissism culture." "Generation me" was included as a relevant keyword because it has been used prominently[1] as a term that denotes younger generations who are allegedly more narcissistic than older generations. After exhausting the search results for the first keyword (i.e., "narcissism epidemic"), the search was repeated with the other keywords.

The following paragraph describes the inclusion/exclusion criteria. Articles specifically discussing changes/increases in narcissism on individual and societal levels were included in the analysis. Articles that mentioned relevant concepts without providing an elaborate discussion on them (e.g., mentioning the narcissism epidemic in passing) were not included. There were no specific requirements regarding the types of articles to be included: original research articles, review articles, commentaries, and other types of articles were included in this review. Moreover, there were no requirements regarding the recency of articles (older and more recent articles were all considered for inclusion). Only peer-reviewed articles were included in this review. Before presenting the debates surrounding the narcissism epidemic, we will give a brief overview of perspectives on narcissism that are important for understanding these debates.

The initial database search involved the reading of article titles and abstracts and the application of inclusion/exclusion criteria to the content of titles and abstracts. After the removal of articles that did not meet the inclusion/exclusion criteria and after the removal of duplicates, full versions of the articles were retrieved and read by the author. After applying the inclusion/exclusion criteria to the full versions of retrieved articles and removal of articles not relevant to this review, the final list of articles was formed.

Defining Narcissism

Narcissism has inspired philosophers, artists, and scientists, for centuries (for an example, see Figure 1). Narcissism denotes narcissism in general, in all its manifestations. Narcissism can be thought of as a continuous or categorical variable. Therefore, narcissism can vary on a continuum and be more or less intense.[12,13] Categorical viewpoints of narcissism typically discern between pathological (e.g., narcissistic personality disorder [NPD][14]) and nonpathological narcissism (e.g., narcissism assessed with the Narcissistic Personality Inventory [NPI][15]) or between different subtypes of narcissism (e.g., grandiose and vulnerable narcissism[16]). The two general ways of thinking about narcissism are not mutually exclusive; on the contrary, a nuanced and appropriate understanding of narcissism necessitates careful synthesis of the two viewpoints (i.e., narcissism as a continuum and narcissism as a set of categories).

NPI

The NPI is one of the most widely used tools in the assessment of narcissism.[17,18] It is also the most commonly used narcissism assessment tool across studies included in this review. For this reason, a brief presentation of NPI, its structure, and psychometric characteristics is due. NPI was developed initially by Raskin and Hall,[15] with brief versions of the questionnaire (40- and 16-item versions) developed subsequently. The items found in this questionnaire reflect the Diagnostic and Statistical Manual of Mental Disorders III (DSM-III) representation of narcissistic personality.[19]

The NPI items were designed to assess the non-pathological levels of narcissism across most criteria mentioned in DSM-III. Examples of NPI items include "I really like to be the center of attention," "I want to amount to something in the eyes of the world," "I like having authority over people," and "I will be a success."[15] The items, it is evident, loosely follow the DSM-III definition of narcissistic personality, attempting to tap into the less overtly pathological manifestations of narcissism.

The NPI, and especially its longer versions, have solid internal consistency[20] and test-retest reliability,[21] which means that a person who endorses numerous narcissism-related claims will be more likely to endorse other similar claims. Moreover, a single person who completes the same NPI questionnaire across two testing sessions will likely obtain similar scores. The NPI, however, does not reliably assess pathological narcissism.[22]

Narcissism as a Pathology

Pathological narcissism often refers to the NPD, defined in DSM-5[14] as the presence of five out of the following nine symptoms in a period of at least 1 year:

1. Envy
2. Entitlement
3. Manipulation and exploitation of others
4. Grandiose ideas of self-importance
5. Believing that one is special and should only socialize with similar special people
6. Need for admiration
7. Fantasies of incredible success, fame, beauty, etc.
8. Arrogance
9. Lack of empathy

Fig 1 | Echo and Narcissus (detail of the painting depicting Narcissus, cropped by the author of the article). By John William Waterhouse - cgGohYq-VdecNw at Google Cultural Institute maximum zoom level, Public Domain, https://commons.wikimedia.org/w/index.php? curid=21878879

Diagnosing NPD entails extensive case study, testing, and careful clinical reasoning by a mental health expert, usually a psychiatrist or clinical psychologist, to assess the presence of symptoms of NPD as well as the extent of dysfunction caused by NPD. By definition, NPD entails a significant degree of dysfunction in most or all areas of life, impeding general well-being and reducing the quality of interpersonal relationships.[14] This is an important note to take before we move on to review the studies that bring evidence in favor of or against the narcissism epidemic hypothesis.

Origins of the Narcissism Epidemic and Related Concepts

One of the earliest mentions of the narcissism epidemic came in the context of discussing the culture of narcissism in the article of Battan.[23] This article argues that initial ideas regarding increases in narcissism among the members of American culture came from US journalists in the 1970s. In this context, the authors were interested in the increase in narcissism in the United States since the end of World War II. These initial discussions were motivated by an apparent increase in the solipsistic ideologies in the United States, exemplified in the works of Guru Maharaj Ji, L. Ron Hubbard, Werner Erhard, and others.[23] Postwar economic prosperity was also evoked as a factor that brought a rise in narcissism.

Lasch's understanding of the culture of narcissism has also been impactful.[24] Lasch argued that the culture of narcissism in the United States stemmed from the subsiding of American Victorianism and the emergence of corporate capitalism. According to this viewpoint, the typical neurotic psychopathological manifestations experienced a decline, making way for the chronically bored, narcissistic personality type. Lach evoked certain psychoanalytical evidence that provided the basis for these claims. One such author was Heinz Kohut, who provided major contributions to the psychoanalytic understanding of narcissism in his books *The Analysis of the Self*[25] and *The Restoration of the Self*.[26] Here, the pathology of the self, leading to various narcissistic symptoms, was also evoked as a major psychopathology of the period. As we can see, the narcissism epidemic hypothesis was formulated, to a certain extent, in the second half of the twentieth century; the next section showcases the initial attempts to statistically test this hypothesis.

Narcissism Epidemic and the Work of Twenge and Colleagues

The books *Generation Me*[1] (first published in 2006 and revised in 2014), written by Twenge, and *The Narcissism Epidemic*,[2] written by Twenge and Campbell, were instrumental in bringing the concept of the narcissism epidemic to the mainstream. The books attempted to not only bring arguments showcasing a significant rise in narcissism levels in US Millennials (see Figure 2 for an overview of generations and their years of birth) but also provide a clear warning about the alleged consequences of this phenomenon. The books aim to sensitize the reader about the apparent narcissism epidemic, utilizing phrases such as "Like a disease,

DOI: https://doi.org/10.70389/PJSS.100010 | Premier Journal of Social Science 2025;3:100010

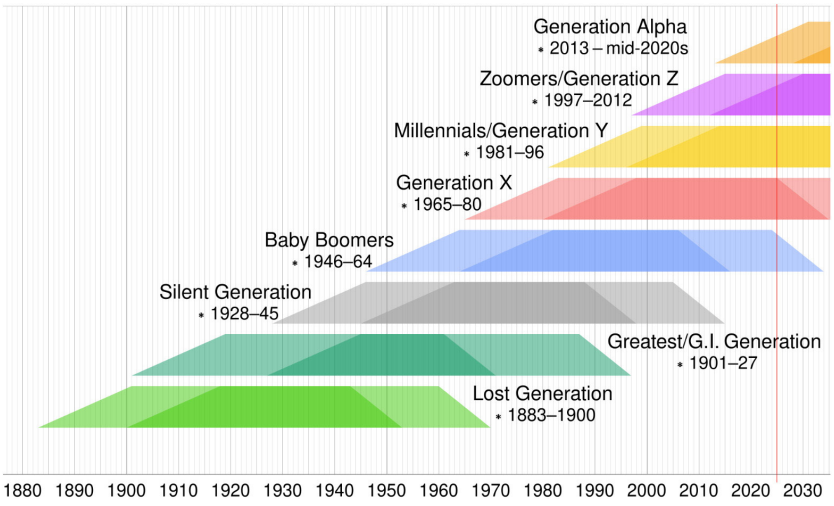

Fig 2 | Generations of the nineteenth, twentieth, and twenty-first centuries. Different colors represent the lifespans of different generations. Public Domain. By Cmglee - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=91612069

narcissism is caused by certain factors, spreads through particular channels, appears as various symptoms, and might be halted by preventive measures and cures."[2(p10)] Furthermore, Twenge and Campbell compared the narcissism epidemic with other epidemics "Like the obesity epidemic, the narcissism epidemic has not affected everyone in the same way."[2(p10)]

These books also make it clear that they represent products, summaries, and colorful representations of years of study with millions of participants: "This book presents the results of more than 30 studies on generational differences, based on data from 11 million young Americans."[8(p17)] Statements such as this one aim to provide a scientific basis for the claims made in the books. Twenge and colleagues indeed conducted a number of studies in an attempt to showcase an apparent rise in narcissism among younger people in the United States.

Twenge et al.[4] conducted a cross-temporal meta-analysis encompassing a sample of 16,475 college students across 85 samples for the period between 1979 and 2006. The authors found that the NPI scores of students increased significantly during this period (0.33 standard deviation increase). When focusing on student samples from California, this trend was not observed.[5] It was suggested that California experienced a significant increase in the number of Asian American students, masking the increases in NPI scores. When Twenge and Foster[3] looked into NPI changes in specific ethnic groups, they found the expected increase in narcissism.

Twenge et al.[8] argued that other sources of evidence also point to a narcissism epidemic in US society. The authors cited the nationally representative study conducted by Stinson et al.,[27] who found more pronounced symptoms of NPD in US youth in comparison to the elderly, although, as we will discuss later (in "Change in prevalence of NPD?"), this does not seem to be tenable evidence of the narcissism epidemic. Twenge et al.[6] also found that the use of singular, first-person pronouns (i.e., *I* and *me*) in Google Books was more common (relative to *we* and *us*) in the period leading up to the research in comparison to earlier periods. Twenge et al.[7] noted an increase in typical narcissistic traits such as "I am special" or "I'm the best" in books published shortly prior to the completion of their study, in comparison to older books.

In their best-selling book *The Narcissism Epidemic*,[2] Twenge and Campbell argued that the historic increase in narcissistic personality traits was affected by a change in parenting styles. Changes in parenting were interpreted as being driven by wide societal changes: "This sea change in parenting is driven by the core cultural value of self-admiration and positive feelings. Parents want their kids' approval, a reversal of the past ideal of children striving for their parents' approval."[2(p70)] Twenge and Campbell also noted that US parents showcased a reduction in the valuation of children's obedience in the second half of the twentieth century.

Twenge and colleagues conducted a number of studies showing significant and moderate increases in narcissism in younger US birth cohorts in the late twentieth and early twenty-first centuries; as we can see, this work culminated in the publishing of a set of pop psychology books, replete with oversimplifications, anecdotal evidence, and generalizing statements such as "Many children now make household decisions, something that was unheard of just a few decades ago."[2(p77)] The authors carefully developed a network of meanings around the term "narcissism epidemic," alluding, for instance, to the transmission of narcissism "The queen of narcissistic celebrity superspreaders just might be Paris Hilton."[2(p86)] Therefore, not only is the narcissism epidemic taken for granted, but the connotations of this concept are also brought to their logical conclusion. It is important to understand this line of work done in the field of the narcissism epidemic, which complements the more rigorous studies of Twenge and colleagues. Although the work of Twenge and colleagues has been influential, there have been a number of critics of the idea that Western culture, in general, experienced a significant increase in narcissism.

Critique of the Narcissism Epidemic

Donnellan et al.[28] gathered NPI scores of US students: Berkeley students were sampled in 1996, and UC Davis students were sampled between 2002 and 2008. Donnellan et al.[28] found weak increases in narcissism, suggesting that the "narcissism epidemic" hypothesis had little support. Wetzel et al.[29] conducted a study with more than 59,000 US students within three distinct birth cohorts (who enrolled at college in the 1990s, 2000s, and 2010s). They did not find a significant increase in NPI scores across different birth cohorts. Interestingly, Wetzel et al.[29] found *decreases* in narcissism in non-Asian ethnic groups, especially among African Americans. On the other hand, the Asian American students experienced an increase in narcissism.

Vater et al.[30] analyzed the changes in NPI scores in German individuals across different birth cohorts. This study took account of the political, societal, and cultural changes experienced by people in East and West Germany in the late twentieth century. Vater et al.[30] found that participants from West Germany, who arguably grew up in a more individualistic society in comparison to people in East Germany, exhibited more pronounced narcissism in comparison to people from East Germany. The difference was not significant in the youngest age cohort, who spent most of their lives in the unified Germany. The authors concluded that sociocultural factors played a role in the changes in the prevalence of narcissism in German society.[30]

It is evident that the narcissism epidemic hypothesis did not receive unequivocal research support. Although Vater et al.[30] found that societal changes in the late twentieth-century East and West Germany may have led to an increase in narcissism in certain birth cohorts, US studies that attempted to replicate the findings of Twenge and colleagues have either found small effects[28] or even *decreases* in narcissism.[29]

More recently, Oberleiter et al.[31] conducted a cross-temporal meta-analysis of NPI score changes with a total sample of 546,225 participants gathered across 1105 studies. These studies were conducted across 55 countries (for data between 1982 and 2023) in both student- and population-based samples. The authors did not find evidence of a global or region-specific narcissism epidemic; in fact, they found evidence of slight *reductions* in narcissism over time, similar to Wetzel et al.[29]

Oberleiter et al.[31] also discuss a number of relevant interpretations and attempts to make sense of the conflicting evidence on the narcissism epidemic. They showed, for instance, that contradictions cannot be fully accounted for by a purported increase in women's narcissistic traits and a relative stagnation of narcissism in men, which might explain why some studies found evidence of narcissism epidemic and others did not. This interpretation was offered by Twenge et al.,[4] but Oberleiter et al.[31] did not find evidence of increasing narcissism in women specifically. Twenge et al.[9] offered another interpretation along these lines, trying to show that while there was evidence of a narcissism epidemic before the Great Financial Crisis (GFC), this event led to subsequent reductions in narcissism. When Oberleiter et al.[31] segmented their analysis into pre-GFC and post-GFC, there were still no significant increases in narcissism in the pre-GFC period and only ambiguous evidence as to the decisive role of GFC in reducing narcissism.

Orth et al.[32] conducted a meta-analysis (n = 37,247, across 51 samples) of longitudinal studies assessing narcissism with a variety of tools, including NPI; these authors did not find a significant effect of birth cohort age on trajectories of development of narcissism over the lifespan. Considering that Orth et al.[32] gathered participants born from 1923 to 2002, this can be considered evidence that there are no significant differences between older and younger generations with respect to narcissism.

Change in Prevalence of NPD?

The articles we have discussed so far have mostly utilized the NPI and rarely assessed narcissism as a mental disorder. As mentioned, the NPI was designed to assess nonpathological narcissism. Although NPI is moderately strongly associated with clinician ratings of DSM-IV NPD (r = 0.54 to r = 0.59; around 30% of shared variance),[33] some authors found that patients diagnosed with NPD did not exhibit high NPI scores.[22] Pincus and Winkowitsky[34] suggested that NPI is not associated with psychological dysfunction. In fact, people who score high on the NPI may tend to have better adjustment to life circumstances, while people who are diagnosed with NPD tend to have poor adjustment.[34] Therefore, even if there was a significant increase in NPI scores, which, as we have seen, is strongly disputed, this may not have any real ramifications and, on the contrary, can actually be a sign of positive improvements. But what about pathological narcissism? Did scientists observe an increase in NPD in the last few decades?

There are a handful of studies focusing on the prevalence of NPD. Torgersen et al.[35] conducted one of the earliest studies in this area; these authors made a representative study of DSM-III personality disorders in the Norwegian population of Oslo, finding a fairly low prevalence of NPD (0.08%). Stinson et al.[27] conducted a representative US study on the lifetime prevalence of DSM-IV and found that NPD was fairly common in the US population (6.2%). Volkert et al.[36] conducted a systematic review and meta-analysis of DSM-IV/5 and ICD-10 personality disorder prevalence rates across the United States, Netherlands, the United Kingdom, Australia, Germany, and Sweden. Winsper et al.,[37] who performed a similar systematic review and meta-analysis assessing the global prevalence of personality disorders, unfortunately, did not focus specifically on NPD, finding relatively low rates of Cluster B personality disorders (borderline, narcissistic, antisocial, and histrionic) in global community samples.

While researchers are able to speculate about the overall prevalence of NPD in populations across the world, there is still very little research focusing on generational changes in prevalence rates of NPD. Currently, there may not be enough evidence to assert that the rates of NPD across birth cohorts changed or did not change in recent decades. While the study of Stinson et al.[27] did point to somewhat higher rates of NPD in the US population, particularly among younger people, which has been cited as evidence of the narcissism epidemic by Twenge et al.,[8] Stinson et al.[27] did not have a longitudinal or cross-temporal design. Thus, their findings could not prove or disprove a hypothesis that younger generations are, on average, more narcissistic than older generations.

Synthesis

Methodological Issues Behind the Alleged Narcissism Epidemic

This review showed that there is not enough evidence to speculate about increases or decreases in the

DOI: https://doi.org/10.70389/PJSS.100010 | Premier Journal of Social Science 2025;3:100010

prevalence of NPD. Most studies focusing on the narcissism epidemic utilized the NPI, an instrument for the assessment of nonpathological narcissism. Although a reliable and valid instrument, NPI is not necessarily the most appropriate instrument to use if one's goal is to prove that there is an increase in narcissism among younger people and that this increase has very negative real-world consequences, as suggested by Twenge[1] and Twenge and Campbell.[2]

Even though some aspects of NPI, such as its leadership/authority subscale, may point to less positive manifestations of narcissism,[38] NPI, taken as a whole, is associated with self-esteem, which is a positive trait associated with solid mental health.[39] This means that even the studies showing an increase in NPI scores in recent generations do not necessarily point to a real narcissism epidemic with all its pathological connotations. What the works of Twenge and colleagues[1–9] may point to is a circumscribed increase in nonpathological narcissism in some niches of US society (i.e., university students in certain regions) and only in certain periods (i.e., the early 2000s).

Nonscientific Factors and Interests

The work of Twenge and colleagues culminated in the publishing of two best-selling books that showcased not only their scientific studies but also their speculations about the narcissism epidemic and all its pathological connotations. US society was presented as plagued by pathological narcissists, the future uncertain in light of the ever more egoistic and self-indulging youth.

It is apparent from the evidence gathered in this review that such formulations are entirely uncalled for, their aim likely being to intrigue and draw a wider audience to purchase the books by showcasing a very dangerous "narcissism epidemic." Ultimately, the "narcissism epidemic" hypothesis fails to account for the sheer complexity of narcissism, indulging in oversimplifications and sensationalism in an attempt to reach a wider audience.

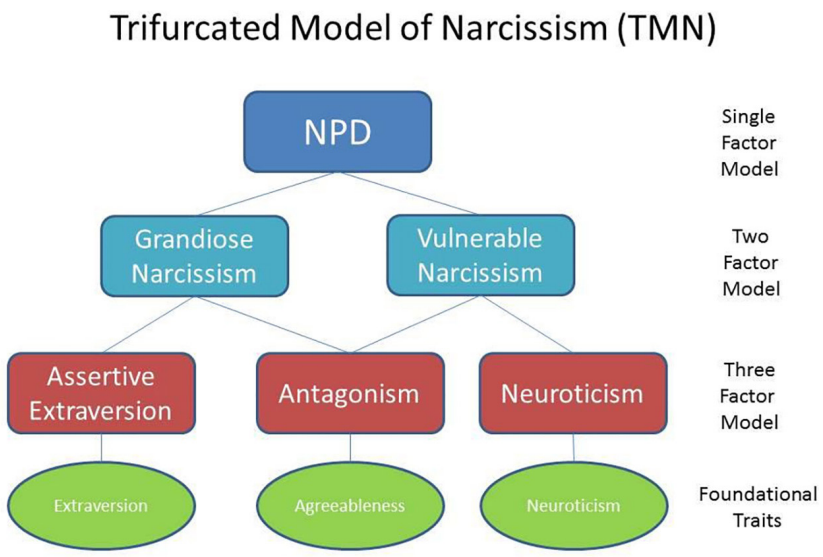

Fig 3 | The trifurcated model of narcissism. Illustration provided by Campbell, W. K., & Miller, J.[45] The image is free to use under CC BY Attribution 4.0 International

A Way Forward

Instead of focusing on the alleged "narcissism epidemic" and its ramifications, we should try to understand the complex nature of narcissism. An important breakthrough has been made in this field with the rise of the trifurcated model of narcissism[40,41] as well as the Narcissism Spectrum Model.[42,43] These models present a convergence of decades of research on both pathological and nonpathological narcissism, subsuming the influential grandiose/vulnerable narcissism distinction as well as the prominent five-factor model of personality.[44] The trifurcated model (see Figure 3) defines narcissism via extraversion, neuroticism, and antagonism.

Antagonism (e.g., low agreeableness, lack of empathy) is considered the core of narcissism, while neuroticism (e.g., emotional instability, negative emotions) and extraversion (e.g., sociability, confidence) determine the manifestations of narcissism, namely vulnerable and grandiose, respectively.[40,41] The Narcissistic Spectrum Model utilizes different terminology to describe the same sort of dynamics, with entitled self-importance being the core dimension of narcissism and boldness/reward motivation and emotional reactivity/avoidance motivation as dimensions that, in combination with the core narcissism trait, produce grandiose and vulnerable manifestations, respectively.[42,43]

The study conducted by Orth et al.[32] approaches narcissism from this viewpoint, finding that all three dimensions of narcissism reduce in intensity over the lifespan. Importantly, there is a significant degree of rank-order stability of narcissistic traits, meaning that within a single birth cohort, the most narcissistic persons will tend to retain this status over their lifetime in comparison to their peers. This study is a good example of an objective and nuanced understanding of narcissism and points to new directions in the systematic research of narcissism, such as wide-scale, longitudinal research of the trifurcated model of narcissism in non-Western samples.[32]

There is a need for conducting more longitudinal and cross-cultural studies on the trifurcated model of narcissism. While the simpler models of narcissism (e.g., the model underlying the NPI) have seen a widespread application around the world, employed in a number of longitudinal and cross-temporal studies, the widespread testing of the trifurcated model of narcissism, especially in longitudinal studies, is still due.

Conclusion

The narcissism epidemic hypothesis has not been validated, with a significant amount of evidence going against the conclusion that younger generations (e.g., Millennials) are more narcissistic in comparison to older generations. It is possible that initial findings showing an increase in NPI scores in US university students have been taken out of context and presented unjustifiably as evidence of an epidemic of pathological narcissism.

Narcissism is a complex variable, and the most recent attempts to account for this complexity converged

in a trifurcated model of narcissism (antagonism, neuroticism, and extraversion). Future studies focusing on the prevalence of narcissism should make use of this model, replacing the NPI that may oversimplify narcissism, tapping into some aspects of the old DSM-III definition of NPD, and mainly encompassing the non-pathological part of the narcissism spectrum.

References

1 Twenge JM. Generation Me: Why Today's Young Americans Are More Confident, Assertive, Entitled—and More Miserable Than Ever Before. Free Press. 2006.
2 Twenge JM, Campbell WK. The Narcissism Epidemic: Living in the Age of Entitlement. Simon and Schuster. 2009.
3 Twenge JM, Foster JD. Mapping the scale of the narcissism epidemic: Increases in narcissism 2002–2007 within ethnic groups. J Res Pers. 2008;42(6):1619–22. https://doi.org/10.1016/j.jrp.2008.06.014
4 Twenge JM, Konrath S, Foster JD, Campbell WK, Bushman BJ. Egos inflating over time: A cross-temporal meta-analysis of the Narcissistic Personality Inventory. J Pers. 2008;76(4):875–902. https://doi.org/10.1111/j.1467-6494.2008.00507.x
5 Twenge JM, Konrath S, Foster JD, Campbell WK, Bushman BJ. Further evidence of an increase in narcissism among college students. J Pers. 2008;76(4):919–28. https://doi.org/10.1111/j.1467-6494.2008.00509.x
6 Twenge JM, Campbell WK, Gentile B. Changes in pronoun use in American books and the rise of individualism, 1960–2008. J Cross-Cult Psychol. 2013;44(3):406–15. https://doi.org/10.1177/0022022112455100
7 Twenge JM, Campbell WK, Gentile B. Increases in individualistic words and phrases in American books, 1960–2008. PLoS One. 2012;7(7):e40181. https://doi.org/10.1371/journal.pone.0040181
8 Twenge JM, Miller JD, Campbell WK. The narcissism epidemic: Commentary on modernity and narcissistic personality disorder. 2014;5(2):227–9. https://doi.org/10.1037/per0000008
9 Twenge JM, Konrath SH, Cooper AB, Foster JD, Campbell WK, McAllister C. Egos deflating with the Great Recession: A cross-temporal meta-analysis and within-campus analysis of the Narcissistic Personality Inventory, 1982–2016. Pers Individ Differ. 2021;179:110947. https://doi.org/10.1016/j.paid.2021.110947
10 Wood AD, Borja K, Hoke L. Narcissism for fun and profit: An empirical examination of narcissism and its determinants in a sample of generation Z business college students. J Manag Educ. 2021;45(6):916–52. https://doi.org/10.1177/1052562920965626
11 Bagraim J, Hardenberg N. Generational differences in leadership preferences and levels of narcissism: An initial investigation of popular assumptions. EDULEARN24 Proceedings. IATED 2024;(pp. 7171–7). https://doi.org/10.21125/edulearn.2024.1698
12 Foster JD, Shiverdecker LK, Turner IN. What does the narcissistic personality inventory measure across the total score continuum? Curr Psychol. 2016;35:207–19. https://doi.org/10.1007/s12144-016-9407-5
13 Watson PJ, Sawrie SM, Greene RL, Arredondo R. Narcissism and depression: MMPI-2 evidence for the continuum hypothesis in clinical samples. J Pers Assess. 2002;79(1):85–109. https://doi.org/10.1207/S15327752JPA7901_06
14 American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed., text rev. American Psychiatric Association. 2022. https://doi.org/10.1176/appi.books.9780890425787
15 Raskin RN, Hall CS. A narcissistic personality inventory. Psychol Rep. 1979;45(2):590. https://doi.org/10.2466/pr0.1979.45.2.590
16 Weiss B, Miller JD. Distinguishing between grandiose narcissism, vulnerable narcissism, and narcissistic personality disorder. In Miller JD, Maples J, editors. Handbook of Trait Narcissism: Key Advances, Research Methods, and Controversies 2018;(pp. 3–13). Springer. https://doi.org/10.1007/978-3-319-92171-6_1
17 Braun S, Kempenaers C, Linkowski P, Loas G. French adaptation of the narcissistic personality inventory in a Belgian French-speaking sample. Front Psychol. 2016;7:1980. https://doi.org/10.3389/fpsyg.2016.01980
18 Kubarych TS, Deary IJ, Austin EJ. The Narcissistic Personality Inventory: Factor structure in a non-clinical sample. Pers Individ Differ. 2004;36(4):857–72. https://doi.org/10.1016/S0191-8869(03)00158-2
19 American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 3rd ed. American Psychiatric Association. 1980.
20 Miller BK, Nicols KM, Clark S, Daniels A, Grant W. Meta-analysis of coefficient alpha for scores on the Narcissistic Personality Inventory. PLoS One. 2018;13(12):e0208331. https://doi.org/10.1371/journal.pone.0208331
21 Del Rosario PM, White RM. The Narcissistic Personality Inventory: Test–retest stability and internal consistency. Pers Individ Differ. 2005;39(6):1075–81. https://doi.org/10.1016/j.paid.2005.08.001
22 Vater A, Schröder-Abé M, Ritter K, Renneberg B, Schulze L, Bosson JK, et al. The Narcissistic Personality Inventory: A useful tool for assessing pathological narcissism? Evidence from patients with Narcissistic Personality Disorder. J Pers Assess. 2013;95(3):301–8. https://doi.org/10.1080/00223891.2012.732636
23 Battan JF. The "new narcissism" in 20th-century America: The shadow and substance of social change. J Soc Hist. 1983;17(2):199–220. http://www.jstor.org/stable/3786899
24 Lasch C. The Culture of Narcissism: American Life in an Age of Diminishing Expectations. W.W. Norton. 1979.
25 Kohut H. The Analysis of the Self: A Systematic Approach to the Psychoanalytic Treatment of Narcissistic Personality Disorders. University of Chicago Press. 1971.
26 Kohut H. The Restoration of the Self. University of Chicago Press. 1977.
27 Stinson FS, Dawson DA, Goldstein RB, Chou SP, Huang B, Smith SM. Prevalence, correlates, disability, and comorbidity of personality disorder diagnoses in a DSM–IV narcissistic personality disordered non-patient sample. Results from the wave 2 national epidemiologic survey on alcohol and related conditions. J Clin Psychiatry. 2008;69(7):1033–45. https://doi.org/10.4088/jcp.v69n0701
28 Donnellan MB, Trzesniewski KH, Robins RW. An emerging epidemic of narcissism or much ado about nothing? J Res Pers. 2009;43(3):498–501. https://doi.org/10.1016/j.jrp.2008.12.010
29 Wetzel E, Brown A, Hill PL, Chung JM, Robins RW, Roberts BW. The narcissism epidemic is dead; long live the narcissism epidemic. Psychol Sci. 2017;28(12):1833–47. https://doi.org/10.1177/0956797617724208
30 Vater A, Moritz S, Roepke S. Does a narcissism epidemic exist in modern Western societies? Comparing narcissism and self-esteem in East and West Germany. PLoS One. 2018;13(5):e0198386. https://doi.org/10.1371/journal.pone.0198386
31 Oberleiter S, Stickel P, Pietschnig J. A farewell to the narcissism epidemic? A cross-temporal meta-analysis of global NPI scores (1982–2023). J Pers. 2024. https://doi.org/10.1111/jopy.12982
32 Orth U, Krauss S, Back MD. Development of narcissism across the life span: A meta-analytic review of longitudinal studies. Psychol Bull. 2024;150(6):643. https://doi.org/10.1037/bul0000436
33 Miller JD, Gaughan ET, Pryor LR, Kamen C, Campbell WK. Is research using the narcissistic personality inventory relevant for understanding narcissistic personality disorder? J Res Pers. 2009;43(3):482–8. https://doi.org/10.1016/j.jrp.2009.02.001
34 Pincus AL, Lukowitsky MR. Pathological narcissism and narcissistic personality disorder. Annu Rev Clin Psychol. 2010;6(1):421–46. https://doi.org/10.1146/annurev.clinpsy.121208.131215
35 Torgersen S, Kringlen E, Cramer V. The prevalence of personality disorders in a community sample. Arch Gen Psychiatry. 2001;58(6):590–6. https://doi.org/10.1001/archpsyc.58.6.590
36 Volkert J, Gablonski TC, Rabung S. Prevalence of personality disorders in the general adult population in Western countries: Systematic review and meta-analysis. Br J Psychiatry. 2018;213(6):709–15. https://doi.org/10.1192/bjp.2018.202
37 Winsper C, Bilgin A, Thompson A, Marwaha S, Chanen AM, Singh SP, et al. The prevalence of personality disorders in the community: A global systematic review and meta-analysis. Br J Psychiatry. 2020;216(2):69–78. https://doi.org/10.1192/bjp.2019.166
38 Rosenthal SA, Hooley JM, Montoya RM, van der Linden SL, Steshenko Y. The Narcissistic Grandiosity Scale: A measure to distinguish narcissistic grandiosity from high self-esteem. Assessment. 2020;27(3):487–507. https://doi.org/10.1177/1073191119858410

39 Rosenthal SA, Hooley JM. Narcissism assessment in social–personality research: Does the association between narcissism and psychological health result from a confound with self-esteem? J Res Pers. 2010;44(4):453–65. https://doi.org/10.1016/j.jrp.2010.05.008
40 Crowe ML, Weiss B, Lynam DR, Campbell WK, Miller JD. Narcissism and narcissistic personality disorder: Moving toward a trifurcated model. In Widiger, TA, editor. The Oxford Handbook of Personality Disorders. 2nd ed. 2019. New York, NY: Oxford University Press.
41 Weiss B, Campbell WK, Lynam DR, Miller JD. A trifurcated model of narcissism: On the pivotal role of trait antagonism. In Miller JD, editor. The Handbook of Antagonism. 1st ed. 2019;(pp. 221–35). Academic Press. https://doi.org/10.1016/B978-0-12-814627-9.00015-3
42 Krizan Z. The narcissism spectrum model: A spectrum perspective on narcissistic personality. In: Miller JD, editor. Handbook of Trait Narcissism: Key Advances, Research Methods, and Controversies.1st ed. 2018;(pp. 15–25). Springer. https://doi.org/10.1007/978-3-319-92171-6_2
43 Krizan Z, Herlache AD. The narcissism spectrum model: A synthetic view of narcissistic personality. Pers Soc Psychol Rev. 2018;22(1)3–31. https://doi.org/10.1177/1088868316685018
44 Sleep CE, Lynam DR, Miller JD. A comparison of the validity of very brief measures of the Big Five/Five-Factor Model of personality. Assessment. 2021;28(3):739–58. https://doi.org/10.1177/1073191120939160
45 Campbell WK, Miller J. Trifurcated Model of Narcissism. PsyArXiv. 2017. https://doi.org/10.31234/osf.io/8nd95