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It Is Developmental Me, Not Generation Me: Developmental Changes Are More Important Than Generational Changes in Narcissism—Commentary on Trzesniewski & Donnellan (2010)


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Abstract

In this article, we make two points about the ongoing debate concerning the purported increase in narcissistic tendencies in college students over the last 30 years. First, we show that when new data on narcissism are folded into preexisting meta-analytic data, there is no increase in narcissism in college students over the last few decades. Second, we show, in contrast, that age changes in narcissism are both replicable and comparatively large in comparison to generational changes in narcissism. This leads to the conclusion that every generation is Generation Me, as every generation of younger people are more narcissistic than their elders.

Keywords

narcissism, personality development, cohort, Generation Me, meta-analysis

I see no hope for the future of our people if they are dependent on the frivolous youth of today, for certainly all youth are reckless beyond words. When I was a boy, we were taught to be discrete and respectful of elders, but the present youth are exceedingly wise and impatient of restraint

—Hesoid, 700 BC

Arguments for and against the generation-to-generation increase in narcissism have lately spilled out over a number of articles across a variety of different journals. In the initial salvo, year-to-year scores on the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) were compiled to estimate whether college undergraduates were growing more narcissistic with each passing decade since the early 1980s (Twenge, Konrath, Foster, Campbell, & Bushman, 2008). This meta-analytic review pointed to an increase in narcissism of approximately one third of a standard deviation from the early 1980s to 2006. The apparent increase in narcissism, coupled with other indicators of increasing self-focus, formed the basis of the attribution that Americans born after 1970 should be described as “Generation Me” (Twenge, 2006). This publication was followed with one describing new data on the NPI showing little or no change in very large samples from 1996 to

2006 (Trzesniewski, Donnellan, & Robins, 2008) and the subsequent arguments over these new data (Donnellan, Trzesniewski, & Robins, 2009; Twenge & Foster, 2008).

We have followed the arguments over the secular trends in narcissism with great curiosity. Generational changes in personality are intrinsically interesting because they have the potential to demonstrate the effect of culture on personality development (Schaie, 1965). In fact, generational or cohort differences are an important element of developmental science. Our interest in secular changes in narcissism was especially high, as we had shown similar effects of increasing narcissistic qualities in generations coming of age in the 1960s and 1970s (Roberts & Helson, 1997).

As the exchange has proceeded, we felt that two simple points have not been emphasized enough. First, the discourse started with the publication of a meta-analysis and has since migrated to arguments over new data (Donnellan et al., 2009, Twenge & Foster, 2008). Although meta-analyses are far from

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perfect, we believe that if used responsibly, they can lead to stronger, more defensible conclusions (Roberts, Walton, & Viechtbauer, 2006). Meta-analyses are intrinsically more efficient because they use more information. Rather than arguing over the features of new data, an overlooked alternative is to simply fold new data reported in papers such as Donnellan et al. (2009) into the old meta-analysis and see what comes of it. We do this later in this article.

Second, generational or cohort differences in personality address a developmental question: How does growing up in a different context affect the personalities of people experiencing that context? The assumption behind cohort differences is that pervasive cultural values and practices change over time. If the arguments behind *Generation Me* (Twenge, 2006) are correct, these changes in cultural values mean that the youth of today are brought up in a more permissive and self-serving culture. Experiencing a culture that serves the needs of the individual over society is presumed to lead young people of recent history to be more narcissistic than the young people of previous generations.

For our second point, we would like to highlight an issue seemingly forgotten in this debate, which is that personality development is broader in scope than the study of cultural changes and their potential effect on development. Development includes the patterns of continuity and change in personality over the life course and the potential factors that might influence those patterns. Changes in culture are but one of many potential factors that may influence levels and changes in narcissism. Moreover, if we are to understand and appreciate the meaning of changes in narcissism from generation to generation, the most relevant comparison context is a developmental one—how much does narcissism change across the life course, for example? To this end, we compare generational shifts in narcissism with age-graded role differences in narcissism.

Meta-Analysis: Having Faith in the Data

Having done a few meta-analyses, we are predisposed to prefer the technique for a variety of reasons. Certain features of a meta-analytic approach are just good science. Replication is intrinsic to the meta-analytic process as one cannot do a meta-analysis unless the same question has been addressed across multiple studies. Replication is the bedrock of science. If findings fail to replicate across time and different labs, then it is appropriate to discount the original results. Also, given the right circumstances a meta-analysis can provide a more objective perspective on research findings as it is inclusive of data from different labs. In the absence of a meta-analysis, there is a propensity to prioritize one's own data over those of other researchers (Luborsky et al., 1999). A meta-analysis is a cruel arbiter of conflict across labs as it aggregates findings among researchers who are often motivated by different reasons to do the same research.

Finally, and most importantly, meta-analysis protects researchers from "sampling error syndrome." This is the propensity to believe one's own data over others' and put

disproportionate faith in the results of studies based on small groups (Schmidt, 1992). It has been said that psychologists do not sample from populations, rather psychologists study small unrepresentative groups that have little or no generalizability (Cohen, 1990; Sears, 1986). The findings that derive from these groups are often too particular to our samples, and of course, we tend to believe these results more than they deserve. By leveraging across many studies, a meta-analytic approach can help to diminish the symptoms of sampling error syndrome.

This is not to say that meta-analyses are without flaw or beyond reproach. Meta-analyses, like many other approaches, are subject to the garbage-in/garbage-out phenomena. They are only as good as the data on which they are based. If one meta-analyzes a set of small studies of particular groups, then the meta-analysis may simply reify sampling error. Likewise, no meta-analysis is so definitive so as to nullify the importance of new data, which may provide distinctly new perspectives on existing issues because of methodological or conceptual improvements.

As noted above, new data on cohort differences in narcissism, or the lack thereof, have been pored over in a series of studies (Donnellan et al., 2009; Trzesniewski et al., 2008; Twenge & Foster, 2008). These new data have spawned more debates, but they have not been used in a way that makes sense to us, such as adding them to the meta-analytic database rather than arguing over their merits. We believe that a closer approximation to the truth can be gained by folding the new data on narcissism into the existing meta-analytic database rather than arguing over the particular make-up of the samples contained in these new data. Therefore, we reanalyze the meta-analytic findings reported in Twenge et al. (2008) by using the data as published and adding the new data presented by Donnellan et al. (2009) and data that we collected recently in our lab.

First, we analyzed the original data reported in Twenge et al. (2008) to replicate their findings. We reanalyzed the data multiple ways, including the techniques reported in the original article and in the reanalysis reported in Donnellan et al. (2008).¹ But to better show the effects in the original data and the effects of adding new data, we adopted a simpler approach to the analyses. Specifically, we aggregated data within year or clusters of years depending on the amount of data available. If there were only one or two samples for a given year, we simply aggregated that year's data with the next (i.e., aggregating the 1995 data with the 1996 data). We then weighted the means within each grouping by the inverse of the variance (n/SD squared) to determine a population estimate of the mean, variance, effect size, and confidence interval for each period. We also computed Q , the standard index of effect size heterogeneity, to test whether there was statistically significant variability within each period.

The results are shown in Figure 1 and Table 1. In Figure 1, the dashed line depicts the reanalysis of the original meta-analysis, which closely tracks the estimates provided by the regression equation predicting narcissism scores from year of assessment originally reported in Twenge et al. (2008). Mean

Table 1. Meta-Analytic Estimates of NPI Scores From 1982 to 2006

Year	Twenge effect size	Updated effect size	k (total = 94)	CI	n (total = 46,782)
1982–1990	15.44	15.44	5	15.15–15.74	1,975
1992–1993	15.56	15.56	5	15.19–15.94	1,268
1994–1995	16.77	16.77	5	16.29–17.25	746
1996	16.50	15.95	12	15.66–16.23	2,289
1997–1998	16.55	16.55	7	16.11–16.99	912
1999	16.86	16.86	11	16.54–17.19	1,607
2000	16.71	16.71	4	16.15–17.28	572
2001	16.27	16.27	9	15.90–16.64	1,363
2002	16.92	15.57	8	15.38–15.77	4,788
2003	15.74	15.25	5	15.07–15.44	5,488
2004	18.22	15.48	6	15.29–15.66	5,401
2005	17.26	15.97	7	15.80–16.14	6,562
2006	17.65	15.63	7	15.45–15.80	6,094
2007–2009		15.65	3	15.49–15.80	7,717

Note. The Twenge effect size was estimated using the data from Twenge, Konrath, Foster, Campbell, and Bushman (2008). The updated effect size was estimated by adding the data from Donnellan, Trzesniewski, and Robins (2009) and the data on college students collected at the University of Illinois in 2009 ($M = 15.69$, $SD = 6.59$, $N = 234$). k = number of studies contributing to effect size estimate; CI = 95% confidence level interval.

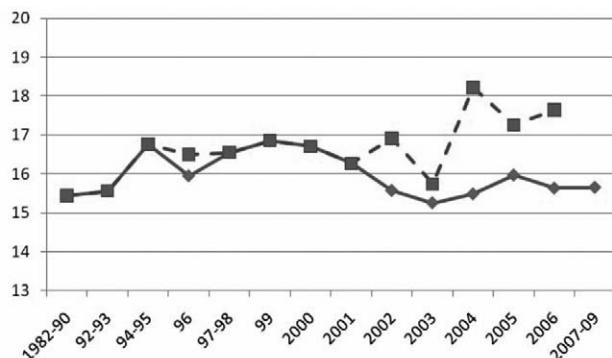


Fig. 1. College students Narcissistic Personality Inventory (NPI) scores from 1982 to 2009. Y axis represents one standard deviation on the NPI scale. Dashed line shows results based on data presented in Twenge et al. (2008). Solid line shows results when new data is added to the original meta-analysis.

narcissism scores show a clear increase across the 30-year period from 1982 to 2006. Consistent with the findings reported in the original article, the difference between the most recent estimates and the estimates drawn from the mid 1980s show an increase of approximately one third of a standard deviation. So, using the original data published in Twenge et al. (2008), it would be reasonable to conclude that narcissism has been on the increase over the last three decades, even when one uses a conservative approach with the data from the original meta-analysis.

The solid line on Figure 1 shows the effects of folding in data reported in Donnellan et al. (2009) and data from our recent survey of University of Illinois students (more details on this sample are given below). The results reported in Donnellan et al. (2009) were interesting for two reasons. First, they tracked NPI scores from 1996 to 2008, so multiple samples could be folded into the original data set reported by Twenge et al. (2008) across the last decade. Second, the

samples were rather large (e.g., over 4,000) in comparison to the samples compiled in the original data set. One key feature of meta-analytic estimates is that they weight large samples more heavily than small samples under the assumption that large samples provide a better approximation to the true population mean. The data from our most recent study are interesting because the overall mean score is only 15.7 ($SD = 6.6$), which is distinctly lower than many of the recent mean scores for the NPI reported in Twenge et al. (2008).

As can be seen by the plot of the revised means in Figure 1, incorporating these new data into the old meta-analysis had a profound effect on the estimates of narcissism scores across the last 30 years. In contrast to the steady increase shown in the original study, the new estimates show little or no trend over time. With the inclusion of more data, the evidence for Generation Me disappears. The ephemeral quality to the secular trends in NPI scores would appear to indicate that the apparent increase in narcissism is not very robust.

We believe that folding new data into the existing meta-analysis is a more compelling test of whether there are generational shifts in narcissism than quibbling over the features of new data. It is also a fair test of the original empirical article (Twenge et al., 2008), as this approach is perfectly consistent with the original approach: gather as much data as possible, regardless of the ethnic or gender composition of the participants, and compile the data. When this is done, there are no cohort effects on the NPI. Of course, this conclusion could be modified with more data. Nonetheless, it serves to make the point that the original meta-analytic approach is an excellent, and preferred, way of testing the idea that NPI scores change across generations.

Every Generation is Generation Me

Narcissism has been investigated with growing interest in personality, social, and clinical psychology. Much research has

focused on the measurement of narcissism (Emmons, 1987), its interpersonal consequences (Paulhus, 1998), and its relation to problematic behavior, like impulsivity (Vazire & Funder, 2006). Despite the renewed interest in narcissism very little attention has been paid to the developmental antecedents or patterns of change in narcissism over the life course (cf. Carlson & Gjerde, in press).

How then does narcissism develop across the life course? Conceptually and empirically, narcissism is a construct that bridges pathological and normal functioning (Miller, Gaughan, Pryor, Kamen, & Campbell, 2009). As a form of pathology, narcissism reflects an unrealistic sense of entitlement and grandiosity combined with a tendency to be hostile toward others (Kernberg, 1975). Narcissism is a syndrome that is distinctly difficult to overcome (Kernberg, 1975). Individuals who think highly of themselves and are unimpressed with other people have, by definition, a difficult time taking feedback. In contrast, Kohut (1971) viewed narcissism both as a form of pathology and as a normal stage of development. Conceptualized as a normative issue of development, Kohut argued people gradually move away from overt narcissism across the life course. Children are, by nature, self-focused and narcissistic according to adult standards of behavior. In the natural course of development, the narcissistic self is slowly dismantled and reintegrated into a healthy mature self that includes transformed components derived from the early narcissistic self (Kohut, 1971).

Seen from the lens of social investment theory (Roberts & Wood, 2006; Roberts, Wood, & Smith, 2005), narcissism should decrease with age because the normative paths people follow entail making commitments to other people, such as friends, family, and coworkers. Being hostile to the interests of others, which is a key element of narcissism, would preclude successful investment in the interpersonal roles of adulthood. To the extent that making commitments to others is normative across the life span, one would expect decreases in narcissism as these commitments run contrary to the modal mind set of the narcissist (Kernberg, 1986).

To our knowledge, there are only two studies that have tracked narcissism across age groups using either longitudinal or cross-sectional designs. Just recently, the first longitudinal study of the development of narcissism was reported (Carlson & Gjerde, in press). Consistent with expectations, narcissistic adults were found to be more impulsive, histrionic, active, and self-focused as children. Mean levels of observer-rated narcissism actually increased in adolescence before reaching a plateau in the transition from adolescence to young adulthood. In contrast, a large, Internet-based study of a wide range of age groups showed a robust decrease in narcissism across the life course (Foster, Twenge, & Campbell, 2003). In fact, the magnitude of change from adolescence to old age was approximately 1 entire standard deviation.

Like the putative secular trends in narcissism, robust age differences would be more convincing if they replicated across samples. Ironically, it is also important to replicate effects across different cohorts to rule out the potential confounding

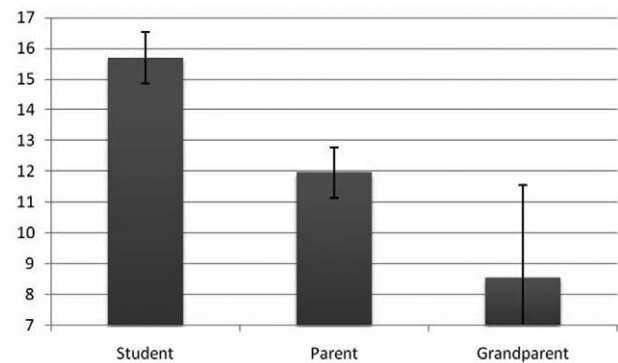


Fig. 2. Age-graded role differences in narcissism. Y axis represents 1.5 standard deviations on the NPI. Error bars are 95% confidence intervals. Sample sizes for the groups were as follows: students, $N = 234$; parents, $N = 226$; grandparents, $N = 16$.

effect of secular trends in narcissism. To this end, we report data taken from a recent study conducted on the topic of family resemblance in our introductory personality course. The study was designed to test the average correlation between children and their relatives, including parents and grandparents. As part of the assessment battery, we included the NPI (Raskin & Terry, 1988). Inadvertently, we performed a direct replication of Foster et al. (2003), with a cohort born approximately a decade later. More interestingly, we could also categorize individuals by their age-graded role (e.g., student, parent, grandparent), in addition to age, to see if age or role were more strongly related to NPI scores.

Figure 2 shows the mean scores for the age-graded roles of student, parent, and grandparent. The age trend in NPI scores in our sample replicated the mean scores reported in Foster et al. (2003) almost perfectly.² More interestingly, when stratified by the age-graded role, the magnitude of the decrease across age was even more pronounced. The mean difference between the typical college student and their grandparents was greater than 1 standard deviation, which constitutes one of the largest effect sizes found in psychological science (Cohen, 1992). Clearly, Generation Me is a developmental, not a generational, phenomenon. Every generation of young people is substantially more narcissistic than their elders, not because of cultural changes, but because of age-related developmental trends.

The age differences in narcissism hold profound implications for interpreting the purported cohort changes in narcissism. If people decrease an entire standard deviation as they age, then it is not surprising that many middle-aged and older individuals would find younger people to be narcissistic. Comparatively speaking, they are. Furthermore, the age differences in narcissism may be easily confused with generational changes in narcissism. The distinction between younger people being more narcissistic than older people and younger people being more narcissistic than previous generations is probably too subtle to detect (Ozer, 1993). In turn, when older people are told that younger people are getting increasingly narcissistic,

Table 2. Sex and Ethnic Differences on the Narcissistic Personality Inventory by Role

Subjects	<i>M</i>	<i>SD</i>	<i>N</i>
Men			
Students	16.4	6.8	80
Parents	12.9	6.9	93
Women			
Students	15.3	6.5	153
Parents	11.4	5.6	134
Caucasians			
Students	15.5	6.7	153
Parents	11.6	6.3	171
Asians			
Students	15.9	6.9	46
Parents	12.9	6.5	35
African Americans			
Students	17.9	5.4	15
Parents	14.7	4.9	10

they may be prone to agree because they confuse the claim for generational change with the fact that younger people are simply more narcissistic than they are. The confusion leads to an increased likelihood that older individuals will agree with the Generation Me argument despite its lack of empirical support.

Conclusion

In this comment on Trzesniewski & Donnellan's (2010) article in this issue, we sought to make two points. Our reanalysis of the original meta-analysis served the point of showing that more data is actually better than less data. By simply adding new data to that reported in the original meta-analysis we find that the apparent effect of changing cultural values on narcissism disappears. One could quibble about the composition of the samples integrated into the meta-analysis, but doing so would simultaneously call into question the original meta-analysis as the composition of the samples in the original study was not broken down by ethnicity or sex. Using the same approach as the original study, we find that the core evidence for the Generation Me effect is missing. Younger cohorts are apparently not suffering from an increasing epidemic of narcissism.

We would, however, like to comment about the potential effect of sample composition on the changes, or lack thereof, in narcissism over time. As a case in point, Table 2 shows the NPI scores from our recent sample broken down by sex and ethnicity within student and parent roles. None of the differences are large by effect size standards, yet there are several striking consistencies across the student and parent groups and between this sample and other studies that also report differences across demographic groups (e.g., Donnellan et al., 2009). Specifically, men are more narcissistic than women regardless of age. And African American groups score higher on narcissism than other ethnic groups. In contrast to previous

research, the Asian groups in our study did not score conspicuously lower on the NPI than did the remaining ethnic groups.

Two points can be inferred from these demographic differences in narcissism. First, the consistencies in demographic differences in narcissism point to the fact that factors such as sex and ethnicity are potential moderators of the differences originally reported in Twenge et al. (2008) that should be examined explicitly in future meta-analytic work on this topic. If the sex and ethnic composition of samples varied over time, then this might have influenced the reported means on the NPI enough to make it look like there were generational changes in narcissism. Second, the inconsistencies across our samples—the Caucasians in our sample scored substantially lower than did the Caucasians in most of the samples reported in Twenge et al. (2008), whereas the Asians in our sample scored higher than did those reported in Donnellan et al. (2009)—points to the fact that sex and ethnic differences are often particular to our specific samples. This only serves to emphasize our point that a meta-analytic approach using more data is both more conservative and potentially useful in determining the potential effects of factors such as generation.

The second point we sought to make was that other aspects of development were potentially more important than cohort or generational changes. And, when it comes to the development of narcissism, the effect of age and age-graded roles are far more important than the effect of generation. This conclusion would hold, even if the original findings of a small increase in narcissism over the last few decades were true. This leads to the obvious conclusion that finding young people to be narcissistic is an aging phenomenon, not a historical phenomenon. The fact that one can find complaints about the younger generation being more narcissistic going back to Hesiod helps make the point that every generation is Generation Me. That is, until they grow up.

Notes

1. We replicated the original findings from Twenge et al. (2008) by using SPSS syntax to weight the data by sample size ($B = .53$, $p < .001$, $k = 85$). A more common approach to meta-analysis would be to weight the results by the inverse of the sampling error variance (Lipsey & Wilson, 2001).
2. The correlation between age and overall scores on the NPI was $-.32$ ($p < .05$, $N = 591$).

Declaration of Conflicting Interests

The authors declared no conflicts of interest with respect to the authorship and/or publication of this article.

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