



11-10-2017

# Age Differences in the Desirability of Narcissism

Kathy R. Berenson  
*Gettysburg College*

William D. Ellison  
*Trinity University*

Rachel L. Clasing  
*Gettysburg College*

**Roles**

**Student Author:**  
Rachel L. Clasing '15

Follow this and additional works at: <https://cupola.gettysburg.edu/psyfac>

 Part of the [Personality and Social Contexts Commons](#), and the [Quantitative Psychology Commons](#)

**Share feedback about the accessibility of this item.**

---

Berenson, K.R., W.D. Ellison, & R. Clasing, R. "Age differences in the desirability of narcissism." *Journal of Individual Differences* 38 (2017). 230-240.

This is the author's version of the work. This publication appears in Gettysburg College's institutional repository by permission of the copyright owner for personal use, not for redistribution. Cupola permanent link: <https://cupola.gettysburg.edu/psyfac/68>

This open access article is brought to you by The Cupola: Scholarship at Gettysburg College. It has been accepted for inclusion by an authorized administrator of The Cupola. For more information, please contact [cupola@gettysburg.edu](mailto:cupola@gettysburg.edu).

---

# Age Differences in the Desirability of Narcissism

## **Abstract**

Young adult narcissism has been the focus of much discussion in the personality literature and popular press. Yet no previous studies have addressed whether there are age differences in the relative desirability of narcissistic and non-narcissistic self-descriptions, such as those presented as answer choices on the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979). In Study 1, younger age was associated with less negative evaluations of narcissistic (vs. non-narcissistic) statements in general, and more positive evaluations of narcissistic statements conveying leadership/authority. In Study 2, age was unrelated to perceiving a fictional target person as narcissistic, but younger age was associated with more positive connotations for targets described with narcissistic statements and less positive connotations for targets described with non-narcissistic statements, in terms of the inferences made about the target's altruism, conscientiousness, social status, and self-esteem. In both studies, age differences in the relative desirability of narcissism remained statistically significant when adjusting for participants' own narcissism, and the NPI showed measurement invariance across age. Despite perceiving narcissism similarly, adults of different ages view the desirability of NPI answer choices differently. These results are important when interpreting cross-generational differences in NPI scores, and can potentially facilitate cross-generational understanding.

## **Keywords**

narcissism, modesty, age, measurement invariance, Narcissistic Personality Inventory

## **Disciplines**

Personality and Social Contexts | Quantitative Psychology

Age differences in the desirability of narcissism

Kathy R. Berenson, Gettysburg College, Gettysburg PA, USA

William D. Ellison, Trinity University, San Antonio, TX, USA

Rachel Clasing, Gettysburg College, Gettysburg PA, USA

Keywords: narcissism, modesty, age, measurement invariance, Narcissistic Personality Inventory

CORRESPONDING AUTHOR:

Kathy R. Berenson, Department of Psychology, Gettysburg College, Gettysburg, PA 17325.  
kberenso@gettysburg.edu

DECLARATION OF CONFLICT OF INTEREST:

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

FINANCIAL DISCLOSURE/FUNDING:

The author(s) disclosed receipt of the following financial support for the research and/or authorship of this article: Gettysburg College internal support for new faculty.

AUTHOR NOTE:

We thank Tess M. Anderson and Jillian V. Glazer for their assistance.

This is version of the manuscript accepted for publication in *Journal of Individual Differences*.  
This paper is not the copy of record, which is available at DOI: 10.1027/1614-0001/a000240

## **Age differences in the desirability of narcissism**

### **Abstract**

Young adult narcissism has been the focus of much discussion in the personality literature and popular press. Yet no previous studies have addressed whether there are age differences in the relative desirability of narcissistic and non-narcissistic self-descriptions, such as those presented as answer choices on the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979). In Study 1, younger age was associated with less negative evaluations of narcissistic (versus non-narcissistic) statements in general, and more positive evaluations of narcissistic statements conveying leadership/authority. In Study 2, age was unrelated to perceiving a fictional target person as narcissistic, but younger age was associated with more positive connotations for targets described with narcissistic statements and less positive connotations for targets described with non-narcissistic statements, in terms of the inferences made about the target's altruism, conscientiousness, social status, and self-esteem. In both studies, age differences in the relative desirability of narcissism remained statistically significant when adjusting for participants' own narcissism, and the NPI showed measurement invariance across age. Despite perceiving narcissism similarly, adults of different ages view the desirability of NPI answer choices differently. These results are important when interpreting cross-generational differences in NPI scores, and can potentially facilitate cross-generational understanding.

key words: *narcissism, modesty, age, measurement invariance, Narcissistic Personality Inventory*

### **Age differences in the desirability of narcissism**

Substantial literature has focused on the relatively high narcissism of today's young adults (e.g., Roberts, Edmonds, & Grijalva, 2010; Trzesniewski, Donnellan, & Robins, 2008; Twenge & Foster, 2008; Twenge, Konrath, Foster, Campbell & Bushman, 2008), with a great deal of debate about the magnitude, generalizability, and causal explanations of this phenomenon. However, a little-discussed caveat of this literature is that nearly all of the research on young adult narcissism has measured it in terms of endorsement of narcissistic (versus non-narcissistic) self-descriptions on the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979). Concluding that age differences in scores on the NPI reflect differences in narcissism implicitly assumes that the NPI answer choices are evaluated the same way by older and younger people; however, no prior research has tested this assumption.

At the heart of the literature on the observed elevation in young adult narcissism is conflicting evidence about its magnitude and generalizability, with some studies reporting no increase in narcissism (Trzesniewski et al., 2008), and others finding age differences to be small (Foster, Campbell, & Twenge, 2003), limited to particular racial/ethnic groups (Twenge & Foster, 2008), or limited to particular aspects of narcissism (Twenge & Foster, 2010). The other emphasis of this literature is on whether the level of narcissism observed in today's young adults is healthy and normative, or problematic. Some researchers have argued that elevated young adult narcissism reflects a developmental trend found in every generation, because narcissism typically peaks during late adolescence and emerging adulthood (Arnett, 2010; Foster et al., 2003; Roberts et al., 2010). Other researchers have argued that birth-cohort differences are contributing to especially high narcissism in recent generations, at least among white college students in the U.S. For example, advances in

technology and social media increasingly allow individuals' experiences of the world to be tailored to their own preferences on demand, while providing unprecedented opportunities for self-expression and self-promotion to a nearly constant audience. In addition, trends in parenting and education may be contributing to narcissism through their increased emphasis on encouraging young people to develop high self-esteem, a sense of uniqueness, individualism, and a competitively impressive-looking resume (e.g., Campbell, Miller, & Buffardi, 2010; Foster et al., 2003; Luthar, Barkin, & Crossman, 2013; Twenge et al., 2008). However, no previous research has considered how developmental and/or generational changes might contribute to age differences in perceiving narcissism as a desirable or undesirable trait to have.

Given that millennials rank modesty/humility among the *least* important personality traits (Karris & Craighead, 2012), it seems likely that young adults might view narcissism as less inherently problematic than older adults do. Such an age difference in the desirability of narcissism would not, in itself, imply age differences in the components people perceive to comprise the construct of "narcissism" or in the behaviors that people label as "narcissistic." We can think about this in terms of the difference between the connotative meaning of the construct (what positive/negative things narcissism is believed to be associated with) and its denotative meaning (what is narcissism). Indeed, in the current research, we predicted that narcissism would show measurement invariance across age, and that adults of various ages would not differ in their ability to recognize and label narcissistic traits when they encounter them. But in spite of defining narcissism the same way as their elders, we predicted that young adults would feel differently about it. Specifically, we expected that compared to older participants, young adult participants

would view narcissistic self-statements as more desirable, and view non-narcissistic self-statements as less desirable.

To test these hypotheses, we conducted two internet-based studies that used narcissistic and non-narcissistic answer choices from the NPI as stimuli. Our goal was to examine age differences in the positive/negative evaluations that participants *explicitly* assign to these stimuli (in Study 1), and to examine age differences in the positive/negative connotations that these stimuli *implicitly* evoke when presented about a fictional target person in an experimental design (in Study 2). What we aimed to establish was whether age differences in the desirability of narcissism exist independent of age differences in participants' own narcissism, and independent of age differences in understanding and applying the construct of narcissism.

### **Study 1**

Participants completed an internet survey in which they rated the desirability of each narcissistic and non-narcissistic answer choice from the NPI for a person of their own gender. Afterwards, they completed the NPI-40 for an assessment of their own narcissism and reported their age. We predicted that age would be inversely associated with the relative desirability of narcissistic (versus non-narcissistic) self-statements and that age differences in evaluation of narcissism would not be better explained by age differences in participants' own levels of narcissism. We also tested for measurement invariance of the NPI across age. Although the lack of a clear consensus about the factor structure of the NPI has led many researchers to consider only the total NPI score, we also examined the three NPI subscales identified by Ackerman et al. (2011): Leadership/Authority (LA), Grandiose Exhibitionism (GE), and Entitlement/Exploitativeness (EE).

## Method

**Participants.** Study 1 included 869 participants (449 females, 420 males) with a mean age of 33.4 ( $SD = 10.4$ , range 18-60). Participants identified themselves as White (77.0%), Asian (7.4%), Black (4.6%), Hispanic (3.8%), Multiracial and Other (7.3%); all were from the United States. Participants were recruited through Mechanical Turk, a system that pays workers to complete online tasks. An additional 131 participants who completed the study were excluded from analyses: 32 were excluded because they were older than 60 years, and 99 were excluded for scores above the cutoff on our invalidity index (described below).

**Procedure.** After providing informed consent, participants indicated their gender. On the next screen, instructions read: *Below you will find a list of beliefs people may have about themselves and the world. Please rate the extent to which each belief would reflect a negative or positive quality in a man/woman* (matched to the participant's gender). Each answer choice from the NPI was presented separately, in quotation marks, in a random order (e.g., *"I am an extraordinary person"*). Beneath each statement was an 8-point Likert scale, with the poles marked *Extremely negative quality in a man/woman* and *Extremely positive quality in a man/woman*, respectively (matched to the participant's gender).

Internal consistency for desirability of the 40 NPI answer choices was  $\alpha = .94$  for narcissistic statements and  $\alpha = .89$  for non-narcissistic statements. We also computed scales for the desirability of answer choices for the three factors identified by Ackerman et al. (2011). For the 11-item LA scale,  $\alpha = .88$  for the desirability of narcissistic statements and  $\alpha = .76$  for the desirability of non-narcissistic statements. For the 10-item GE scale, desirability ratings had  $\alpha = .84$  for narcissistic and  $\alpha = .82$  for non-narcissistic statements.



For the 4-item EE scale,  $\alpha = .62$  and  $\alpha = .50$  for the desirability of narcissistic and non-narcissistic statements, respectively.

**Invalidity index.** Interspersed with the NPI answer choices to be rated were three statements intended to identify invalid responses. These items were designed to be normatively low in desirability: *I enjoy seeing other people suffer; I enjoy using people just for the heck of it; I don't care when other people suffer*. Participants with average ratings of these items higher than three were excluded from our sample. Although this exclusion may have eliminated some people with a genuinely high appreciation of psychopathic traits, we felt this was warranted to reduce the presumably more common phenomenon of careless responding.

**Narcissistic Personality Inventory.** Next, participants completed the NPI-40. This questionnaire consists of 40 forced-choice questions, in which participants select which of two statements characterizes their personality best, and one statement is clearly more narcissistic than the other (e.g. *I am an extraordinary person* or *I am much like everyone else*; Raskin & Hall, 1979). In this sample, internal consistency was  $\alpha = .91$ . For the three subscales (Ackerman et al., 2011): LA,  $\alpha = .85$ ; GE,  $\alpha = .83$ ; EE,  $\alpha = .44$ .

**Demographics.** Finally, participants reported their age and race/ethnicity.

## Results and Discussion

**Age differences.** Consistent with previous research, we found a negative correlation between NPI scores and age ( $r = -.13, p < .001$ ). But of greater interest was whether the relative desirability of narcissistic NPI answer choices would also vary with age.

Regression analyses were conducted to address this question, as shown in Table 1. The dependent variables were difference scores (narcissistic minus non-narcissistic) that

indexed the relative desirability of narcissistic answer choices for the NPI as a whole and for the three subscales.<sup>1</sup> In model 1, the predictors were age (centered) and gender (centered such that woman = .48, man = -.52). Then in model 2, we also included the participant's own score on the NPI or relevant subscale (centered). Because gender showed no significant interactions with age, we present results for men and women combined.

Model 1 shows that as predicted, there was a significant inverse association between age and the relative desirability of narcissistic statements for the NPI as a whole and for all three subscales. Model 2 shows that the effects of age became weaker when participant narcissism was added to the model, indicating that levels of participant narcissism partially explained age differences in the relative desirability of narcissistic versus non-narcissistic statements. Nevertheless, only for the EE subscale was the age effect better explained by the participants' own level of EE. For the NPI as a whole and for the LA and GE subscales, the inverse association between age and the relative desirability of narcissism remained statistically significant even after the participant's own narcissism was taken into account.

The mean levels of each desirability index, shown by the values of the constants in the previously described regression models, reveal that for the NPI as a whole, as well as the GE and EE subscales, participants rated narcissistic NPI statements as significantly less desirable than non-narcissistic NPI statements. Indeed, even for the youngest participants in our sample, the predicted mean of the desirability index was negative and its confidence interval did not include zero. The LA subscale, however, showed a different pattern.

To better understand how the desirability index for the LA subscale varies with age, we computed the predicted mean value of this index from the regression model, for hypothetical older and younger participants defined as 1.25 SDs above and below the mean

age, (approximately ages 46 and 21, respectively). Whereas for older participants there was no significant difference in the desirability of narcissistic versus non-narcissistic answer choices on the LA subscale,  $M = .005$ ,  $SE = .072$ , 95% CI [-.037, +.148], younger participants rated the narcissistic answer choices as significantly more desirable than the non-narcissistic ones,  $M = .400$ ,  $SE = .072$ , 95% CI [+ .258, +.542]. So even though younger participants evaluated narcissism as a whole less negatively than older participants did, leadership/authority is the only aspect of narcissism for which young adults explicitly and directly reported that it was more desirable to be narcissistic than to be non-narcissistic.

**Gender differences.** On average, narcissistic statements were rated as relatively more desirable by female participants than male participants, for the total NPI-40 and both the LA and GE subscales. Moreover, these effects became stronger when participants' own narcissism scores were included (in model 2) than when they were not (in model 1). In fact, for the total NPI and the LA subscale, model 2 shows a gender effect that is larger than the effect of age. No significant gender differences were found for relative desirability of narcissistic versus non-narcissistic answer choices on the EE subscale.

The observed gender differences in evaluation of NPI statements are particularly interesting in light of the consistent evidence over several decades showing that men have higher NPI scores than women across the lifespan (Foster et al., 2003; Grijalva et al., 2015; Tschanz, Morf, & Turner, 1998; Wright, O'Leary, & Balkin, 1989), especially for the LA and EE factors (Grijalva et al., 2015). Indeed, men  $M (SD) = 11.65 (8.53)$  showed higher narcissism than women  $M (SD) = 9.80 (7.24)$  in the current sample as well,  $t (867) = 3.463$ ,  $p = .001$ . Our data suggest that relative to the men in our sample, the women particularly

valued traits indicating leadership/authority in people of their own gender, above and beyond the extent to which they saw these traits in themselves.<sup>2</sup> Because participants only rated each trait with respect to a person of their own gender, however, we cannot draw any conclusions about the extent to which women find narcissistic traits desirable in men or vice-versa.

**Participants' own narcissism.** As previously noted, comparisons of model 1 and model 2 demonstrated that effects of age became weaker, and effects of gender became stronger, when participant narcissism was taken into account. In addition, the participant's own level of narcissism was associated with rating narcissistic statements as relatively more desirable than non-narcissistic statements, for the NPI as a whole and for all three subscales. Given that participants always rated the desirability of the NPI statements shortly before completing the NPI about themselves, it is likely that the strength of the correlations between these measures may be inflated by participants' motivation to describe themselves in a manner consistent with their stated preferences.

**Measurement invariance of the NPI.** We investigated the measurement invariance of the NPI across younger and older participants using a median split of the age variable. We tested invariance in a stepwise fashion, starting with "configural invariance" and proceeding to equality of factor loadings ("weak factorial invariance"; Horn & McArdle, 1992) in Mplus software, version 7.4 (Muthén & Muthén, 2015) according to the specifications of Millsap and Yun-Tein (2004). Because of the binary response scale for the NPI, we used the WLSMV estimator with the DIFFTEST procedure (Asparouhov & Muthén, 2006). As a preliminary step, we tested the configural invariance of the NPI to determine whether a common factor model, with the same number of factors and the same pattern of factor loadings, showed good fit for each group (Horn

& McArdle, 1992). The three-factor model of Ackerman et al. (2011) showed good fit for both younger ( $\chi^2[272] = 563.81, p < .001, CFI = .95, TLI = .95, RMSEA = .051$ ) and older ( $\chi^2[272] = 584.46, p < .001, CFI = .95, TLI = .94, RMSEA = .051$ ) participants, and a multigroup model also showed good fit. A chi-square difference test suggested that the two groups also showed invariance of factor loadings across groups,  $\Delta\chi^2(22) = 27.76, p = .18$ . This equality of factor loadings suggests that age differences in the evaluation of narcissistic and non-narcissistic statements from the NPI are not explained by age differences in the constituents of the construct of narcissism as measured by the NPI.

## Study 2

The results of Study 1 showed that despite measurement invariance of the NPI across age, younger participants' evaluations of narcissistic (versus non-narcissistic) self-statements were less negative overall and were especially positive for narcissistic statements about leadership/authority, relative to older participants. Moreover, age differences in evaluations of the relative desirability of narcissism remained significant even after controlling for participants' own narcissism (with the exception of age differences in evaluation of the EE subscale). Nevertheless, social desirability pressures limit what we can learn from directly asking people to evaluate narcissistic and non-narcissistic statements, and Study 1 does not tell us in what ways the narcissistic and non-narcissistic statements seemed more or less desirable with age. In Study 2 we therefore examined some of the qualities that older and younger participants may differentially associate with narcissistic and non-narcissistic NPI answer choices, using a less direct, experimental approach. Specifically, we tested whether the interaction between participant age and a manipulation of narcissistic (versus non-narcissistic) descriptions of a target

person influences the evaluatively-laden inferences participants make about that person. Although we did not expect age to moderate the effect of target narcissism on perceiving the target as narcissistic, we expected age to moderate the effect of target narcissism on perceiving the target as altruistic, conscientious, high in social status, and high in self-esteem.

## Method

**Participants.** Study 2 included 960 participants (480 females, 480 males). Their mean age was 34.5 ( $SD = 10.8$ , range 18-59). Participants identified themselves as White (76.6%), Asian (5.8%), Black (5.1%), Hispanic (4.2%), Multiracial and Other (8.3%). All were recruited through Mechanical Turk and were from the United States.

**Procedure.** After providing informed consent, participants reported their gender. Next, participants read a description of a fictitious target person (matched to their gender), and gave their impression of this person by rating a series of statements.

The target person (Eric or Erica) was described as follows: *Eric is 5'9" and of average weight. His grades were just above the average for his college class. He goes to work most weekdays; evenings and weekends he spends time with friends and family.* (The description of Erica was the same, except that she was 5'4"). A final sentence in the description was randomized to characterize the target with either a narcissistic or non-narcissistic answer choice derived from the NPI. The stimulus sentences used to manipulate the presence of the three NPI factors in the target are shown in Table 2. To summarize, each participant was randomly assigned to one of 12 different statements (6 narcissistic and 6 non-narcissistic) as a manipulation. Statements were ultimately combined within each category (i.e., narcissistic versus

non-narcissistic) after ensuring that results showed no significant interactions with the NPI factor that the particular statement was derived from, as described below.

Participants rated a series of statements about the target person on 6-point Likert scales ranging from *strongly disagree* to *strongly agree*. Perceived altruism, conscientiousness, social status, and self-esteem were assessed, along with several items to identify invalid responses and a manipulation check item, as described below. All items were randomly intermixed.

**Target altruism.** To measure perceptions of target altruism, we adapted the 4-item scale from the HEXACO-100 observer form (Lee & Ashton, 2004), e.g., *Eric tries to give generously to those in need*,  $\alpha = .71$ .

**Target conscientiousness.** Perceptions of the target's conscientiousness were measured by adapting the 10-item conscientiousness scale from the HEXACO-60 observer form (Ashton & Lee, 2009), e.g., *Eric often pushes himself very hard when trying to achieve a goal*. Items covered the domains of prudence, perfectionism, organization, and diligence,  $\alpha = .88$ .

**Target social status.** Eight items were created to measure perceptions of the target's overall social status across various domains: *Eric is popular and admired by people who meet him; Eric is likely to have career success; Eric is considered physically attractive; Eric is very good at what he does; Eric is weak; Eric is viewed as a loser; Eric has trouble finding people interested in dating him; Eric has trouble getting ahead, even when he tries the best he can*. Internal consistency ( $\alpha$ ) for this scale was .84.

**Target self-esteem.** Perceptions of the target's self-esteem were measured using four items. Three of these items were derived from the HEXACO-60's self-esteem scale

(Ashton & Lee, 2009), and we also included an additional item, *Eric has low self-esteem*. Internal consistency ( $\alpha$ ) was .73.

**Invalidity index.** Three statements explicitly contradicted by the description of the target were interspersed with the other rated statements in order to identify careless responding: *Eric is unemployed*; *Eric is exceptionally thin*; *Eric hates interacting with people and spends his time alone*. Participants with an average rating of these items at 3 or above were excluded from the sample.

**Target narcissism.** To check whether our manipulation of target narcissism was equally effective for participants of all ages, we asked participants to rate the following statement: *Eric is narcissistic*.

**Narcissistic Personality Inventory-16.** At the end of the study, participants completed the NPI-16 (Ames, Rose, & Anderson, 2006). This measure includes 16 of the NPI's forced-choice questions and is strongly correlated with the full NPI ( $r = .90$ ; Ames et al., 2006),  $\alpha = .81$ .

**Demographics.** Finally, participants reported their age and race/ethnicity.

**Data preparation.** In order to create balanced groups, we collected the first 40 responses for each of the twelve stimulus conditions for each gender (eliminating 47 individuals who were over 60 years old and 94 individuals with invalidity scores above our cutoff).

## Results and Discussion

As expected, NPI-16 scores were negatively correlated with age,  $r = -.15$ ,  $p < .001$ . To test our hypotheses about age differences in connotations of narcissistic vs. non-narcissistic statements, we examined the interaction between condition and age in predicting ratings of the



target person in the multiple regression analyses shown in Table 3. For each dependent variable, the analysis included age (centered), gender (centered, such that male = -.5 and female = .5), condition (0 = non-narcissistic and 1 = narcissistic), the interaction between age and condition, and participants' own NPI-16 scores (centered). Because there was no significant 3-way interaction of NPI factor x age x condition, we report the analyses for the three NPI factors combined, but separate analyses for each factor are available upon request.

Gender did not significantly interact with the age x condition effect, so we report the analyses for men and women combined. Interestingly, women rated both narcissistic and non-narcissistic targets as more altruistic, more conscientious, and higher in social status than men did, though there were no gender differences in inferences about target self-esteem.

As described below, significant interaction effects were examined by testing simple slopes (Aiken & West, 1991). We also used the regression models to compute the predicted values of the dependent variables for hypothetical older and younger participants 1.25 SDs above and below the mean age (approximately ages 47 and 21, respectively).

**Target altruism.** Figure 1 portrays ratings of target altruism as predicted by the significant interaction between age and target narcissism. With every year increase in age, ratings of target altruism significantly increased in the non-narcissistic condition ( $B = .010$ ,  $SE = .003$ ,  $\beta = .168$ ,  $p < .001$ ), whereas in the narcissistic condition the slope associated with age was not significant ( $B = .001$ ,  $SE = .003$ ,  $\beta = .010$ ,  $p = .826$ ). Although all participants perceived the non-narcissistic target as more altruistic than the narcissistic target, this difference was greater with age, suggesting that young adults do not associate altruism with modesty/humility as strongly as somewhat older adults do.

**Target conscientiousness.** Ratings of target conscientiousness were predicted by a significant interaction between age and target narcissism, as portrayed in Figure 2. With every year increase in age, ratings of target conscientiousness in the narcissistic condition significantly decreased ( $B = -.010$ ,  $SE = .003$ ,  $\beta = .146$ ,  $p = .002$ ), whereas in the non-narcissistic condition the slope associated with age was not significant ( $B = .002$ ,  $SE = .003$ ,  $\beta = .029$ ,  $p = .516$ ). Younger participants perceived the non-narcissistic target  $M = 3.990$ ,  $SE = .050$ , 95% CI [3.891 – 4.088] as significantly less conscientious than the narcissistic target  $M = 4.100$ ,  $SE = .055$ , 95% CI [3.992 – 4.208]. For older participants, the reverse was true: Participants rated the non-narcissistic target as significantly more conscientious  $M = 4.042$ ,  $SE = .052$ , 95% CI [3.939 – 4.144] than did participants exposed to the narcissistic target  $M = 3.832$ ,  $SE = .053$ , 95% CI [3.728 – 3.935].

**Target social status.** The interaction between age and our manipulation of target narcissism significantly predicted ratings of target social status, as depicted in Figure 3. Simple slope analyses showed that with every year increase in age, ratings of target social status in the narcissistic condition significantly decreased ( $B = -.009$ ,  $SE = .003$ ,  $\beta = -.158$ ,  $p = .001$ ), whereas in the non-narcissistic condition the slope associated with age was not significant ( $B = .003$ ,  $SE = .002$ ,  $\beta = .057$ ,  $p = .186$ ). Younger participants rated the non-narcissistic target as having lower social status  $M = 4.333$ ,  $SE = .042$ , 95% CI [4.250 – 4.416] than the narcissistic target  $M = 4.557$ ,  $SE = .045$ , 95% CI [4.467 – 4.646]. By contrast, older participants perceived the non-narcissistic target as having significantly higher social status  $M = 4.422$ ,  $SE = .044$ , 95% CI [4.336 – 4.509] than the narcissistic target  $M = 4.315$ ,  $SE = .044$ , 95% CI [4.229 – 4.401].

**Target self-esteem.** Figure 4 displays ratings of target self-esteem as predicted by the significant interaction between age and target narcissism. Ratings of target self-esteem significantly increased with every year increase in age in the non-narcissistic condition, ( $B = .012$ ,  $SE = .003$ ,  $\beta = .178$ ,  $p < .001$ ), whereas the slope associated with age was not significant in the narcissistic condition ( $B = .002$ ,  $SE = .003$ ,  $\beta = .035$ ,  $p = .458$ ). Younger participants rated the non-narcissistic target as having significantly lower self-esteem  $M = 4.300$ ,  $SE = .050$ , 95% CI [4.202 – 4.397] than the narcissistic target  $M = 4.629$ ,  $SE = .053$ , 95% CI [4.525 – 4.733], whereas older participants showed no significant difference in their perceptions of self-esteem in the non-narcissistic target  $M = 4.611$ ,  $SE = .051$ , 95% CI [4.510 – 4.712] versus the narcissistic one  $M = 4.690$ ,  $SE = .051$ , 95% CI [4.590 – 4.790].

**Target narcissism manipulation check.** To examine whether our manipulation of target narcissism was equally effective in signaling narcissism across age, we examined the single manipulation check item “Eric(a) is narcissistic” in the same regression models described previously. A significant main effect of condition ( $B = 1.134$ ,  $SE = .071$ ,  $\beta = .456$ ,  $p < .001$ ), indicated that targets in the narcissistic condition were viewed as more narcissistic than targets in the non-narcissistic condition, as anticipated, and neither the main effect of age, nor the age x condition interaction effect, were statistically significant. Moreover, including the rating of target narcissism as a covariate in supplementary analyses of target altruism, conscientiousness, social status, and self-esteem did not change the previously reported significant results. There did not appear to be significant age differences in recognizing traits as “narcissistic,” and age differences in evaluative connotations of narcissism were not better explained by age differences in conceptualizations of what narcissism entails.

**Measurement Invariance of the NPI-16.** We tested the measurement invariance of the NPI-16 using identical methods as in Study 1. The unidimensional model of Ames et al., (2006) showed near acceptable fit for the younger participants ( $\chi^2[104] = 462.77, p < .01, CFI = .89, TLI = .87, RMSEA = .089$ ) and acceptable fit for the older participants ( $\chi^2[104] = 469.25, p < .01, CFI = .94, TLI = .93, RMSEA = .082$ ). As in Study 1, a chi-square difference test suggested that the NPI-16 is characterized by equal factor loadings across younger and older groups,  $\Delta\chi^2(15) = 19.47, p = .19$ .

### Summary and Concluding Discussion

In two studies, we found that relative to older participants, younger participants evaluated narcissistic self-descriptions as more positively, and non-narcissistic self-descriptions more negatively. In Study 1, younger age was associated with rating narcissistic (versus non-narcissistic) statements from the NPI as less undesirable, and with rating narcissistic statements about leadership/authority as especially desirable. In Study 2, interactions between age and our manipulation of the target's narcissism significantly predicted inferences about the target's attributes. These interactions were not significantly different for the three factors that we examined, suggesting that age differences in positive/negative connotations of narcissism are not limited to specific aspects of the construct.

The interactions found when predicting perceived target conscientiousness and social status appeared to be due to age differences in inferences about narcissistic targets (as no significant age differences were found for inferences made about non-narcissistic targets with respect to these dependent variables). Whereas younger participants associated narcissism with *higher* conscientiousness and social status, older participants associated narcissism with *lower* conscientiousness and social status. Such a cross-generational

disagreement could clearly lead to misunderstanding if young adults choose narcissistic behaviors in an effort to impress their older employers or professors.

At the same time, the interactions found when predicting perceived target altruism and self-esteem appeared to be due to age differences in inferences about non-narcissistic targets (with neither of these dependent variables showing any age differences in inferences about narcissistic targets). Relative to those a few decades older, young adult participants were less likely to associate non-narcissistic targets with high altruism, and were more likely to associate non-narcissistic targets with low self-esteem. Hence, in addition to seeing more benefits of narcissistic traits than older participants did, younger participants also saw less benefits and more disadvantages to being modest/humble.

Age differences in the direct evaluation and positive/negative connotations associated with narcissism were not better explained by age differences in what participants think narcissism means – the NPI showed measurement invariance across age in both studies, and in Study 2 our manipulation of target narcissism was equally effective across all age groups. Moreover, age differences in evaluating narcissism were not better explained by age differences in levels of narcissism itself (with the exception of the EE scale in Study 1).

### **Limitations**

Our use of cross-sectional designs prevents us from drawing conclusions as to whether the observed age differences are related to developmental stage, birth cohort, or both; moreover, we cannot discern whether there is any causal relationship between age differences in the desirability of narcissism and age differences in narcissism scores. Our ability to draw conclusions about gender differences is also limited by having matched

target gender to the gender of the participant in both studies. Our use of internet samples limits generalizability, and racial/ethnic diversity in our samples was low. We also did not consider participant income, which can be important in studies of narcissism (Foster et al., 2003).

Because Study 1 required participants to rate each of the NPI response options apart from its usual paired option, it is possible that some statements were not understood the way that they would have been if presented in context. This limitation is especially applicable to the non-narcissistic answer choices from the EE scale, which do not clearly express modesty when presented apart from their more narcissistic counterparts (e.g., *I don't like it when I find myself manipulating people, I usually get the respect that I deserve*). Indeed, this issue is likely to have contributed to the low internal consistency of the EE scale's desirability ratings, and results focusing on this scale ought to be interpreted especially cautiously. Also, the index of careless responding used in Study 1 is a limitation in that it may have excluded some valid participants, as previously noted.

The target description that participants rated in Study 2 is most consistent with a relatively young adult; hence, we cannot assume that participants would have responded the same way to the presence of narcissistic versus non-narcissistic traits in someone somewhat older. Moreover, because we created our manipulations using only two statements from each NPI factor, we cannot assume responses would be the same for all of the statements on the measure. We did not assess the full range of personality traits that may be associated with perceived narcissism in a target, but only a few positive traits that seemed particularly salient to us. Future studies should conduct broader assessments that also include negative traits and also attempt to assess *why* participants made particular

inferences about the target. For example, open-ended follow-up questions to assess how participants of different ages explain perceiving narcissism as either positively or negatively associated with conscientiousness may help young adults and the older individuals in their lives better understand one another.

### **Implications and conclusions**

Our results imply that NPI scores may be differentially influenced by response biases in younger and older people, given that there are significant age differences in the relative desirability of the answer choices. Moreover, if younger and older people differ in their positive/negative evaluations and connotations of NPI answer choices, this is important to keep in mind when interpreting age differences in endorsement of these answer choices, (as is common in this body of research, e.g., Trzesniewski, et al., 2008; Twenge et al., 2008). Our work also suggests that age differences in the relative desirability of narcissism exist above and beyond age differences in narcissism itself. Shifting the focus of research attention in this direction may be helpful for inter-generational communication, in that it places less emphasis on labeling or judging the personalities of young adults and more emphasis on understanding their perspective.

Young adults apparently perceive narcissistic traits less negatively than older adults do, and even perceive them as more conducive to positive outcomes than non-narcissistic traits. The perceived benefit of narcissism is especially apparent for the leadership/authority aspect of the construct, for which young adults explicitly rated narcissistic statements more positively than their non-narcissistic alternatives. But young adults implicitly associated narcissistic targets with greater conscientiousness and higher social status than non-narcissistic targets, for all three narcissism factors, including the GE and EE factors that are less socially acceptable to explicitly

rate as desirable. They also implicitly associated modest/humble targets with insecurity. For them, then, narcissistic behavior may seem like an important skill to cultivate, and non-narcissistic behavior a relatively useless luxury that few can afford. Such a world-view could have important implications that call for greater research attention.

To the extent that it can promote speaking out and taking action for meaningful goals, young adults' relative freedom from motivations to be modest/humble may prove to be a strength. At the same time, reduced pursuit of modesty/humility could potentially impede some of the adaptive outcomes associated with these traits, such as relationship resilience (Davis et al., 2013; van Tongeren, Davis, & Hook, 2014) and reductions in existential anxiety (Kesebir, 2014). An additional question arising from our research is whether today's young adults view narcissistic behavior as not just more permissible/desirable than older adults do, but also more *necessary* for success and satisfaction in life. While the former may be consistent with benign increases in individual freedom and expressions of personal determination to succeed, the sense of pressure to maintain a confident front that is implied by the latter is more likely to be associated with increased risk for anxiety, distress, and other adverse outcomes (Flett, Nepon, Hewitt, Molnar, & Zhao, 2016; Luthar et al., 2013).



## References

- Ackerman, R.A., Donnellan, B., Roberts, R.W., & Fraley, R.C. (2016). The effect of response format on the psychometric properties of the Narcissistic Personality Inventory: Consequences for item meaning and factor structure. *Assessment*.
- Ackerman, R.A., Witt, E.A., Donnellan, B., Tresniewski, K.H., Robins, R.W., & Kashy, D.A. (2011). What does the Narcissistic Personality Inventory really measure? *Assessment*, *18*, 67-87.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage Publications.
- Ames, D. R., Rose, P., & Anderson, C. P. (2006). Brief report: NPI-16 as a short measure of narcissism. *Journal of Research in Personality*, *40*, 440-450.
- Arnett, J. (2010). Oh, grow up! Generational grumbling and the new life stage of emerging adulthood-commentary on Trzesniewski & Donnellan (2010). *Perspectives on Psychological Science*, *5*, 89-92.
- Ashton, M. C., & Lee, K. (2009). The HEXACO-60: A short measure of the major dimensions of personality. *Journal of Personality Assessment*, *91*, 340-345.
- Asparouhov, T., & Muthén, B. (2006). *Robust chi-square difference testing with mean and variance adjusted test statistics* (Mplus Web Notes: No. 10). Los Angeles: Muthén & Muthén. Retrieved from <http://statmodel.com/download/webnotes/webnote10.pdf>.
- Campbell, W. K., Miller, J. D., & Buffardi, L. (2010). The United States and the “culture of narcissism”: An examination of perceptions of national character. *Social Psychological and Personality Science*, *1*, 222-229.
- Davis, D. E., Worthington, E. L., Hook, J. N., Emmons, R. A., Hill, P. C., Bollinger, R. A., &

- van Tongeren, D. R. (2013). Humility and the development and repair of social bonds: Two longitudinal studies. *Self and Identity, 12*, 58-77.
- Flett, G.L., Nepon, T., Hewitt, P.L., Molnar, D.S., & Zhao, W. (2016). Projecting perfection by hiding effort: supplementing the perfectionistic self-presentation scale with a brief self-presentation measure, *Self and Identity, 15*, 245-261.
- Foster, J. D., Campbell, W. K., & Twenge, J. M. (2003). Individual differences in narcissism: Inflated self-views across the lifespan and around the world. *Journal of Research in Personality, 37*, 469-486.
- Grijalva, E., Newman, D.A., Tay, L., Donnellan, M.B., Harms, P.D., Robins, R.W., & Yan, T. (2015). Gender differences in narcissism: A meta-analytic review. *Psychological Bulletin, 141*, 261-310.
- Horn, J. L., & McArdle, J. J. (1992). A practical and theoretical guide to measurement invariance in aging research. *Experimental Aging Research, 18*, 117-144.
- Karris, M., & Craighead, W. (2012). Differences in character among U.S. college students. *Individual Differences Research, 10*, 69-80.
- Kesebir, P. (2014). A quiet ego quiets death anxiety: Humility as an existential anxiety buffer. *Journal of Personality and Social Psychology, 106*, 610-623.
- Lee, K. & Ashton, M. C. (2004). Psychometric properties of the HEXACO personality inventory. *Multivariate Behavioral Research, 39*, 329-358.
- Luthar, S.S., Barkin, S.H., & Crossman, E.J. (2013). “I can, therefore I must”: Fragility in the upper-middle classes. *Development and Psychopathology, 25*, 1529–1549.
- Millsap, R. E., & Yun-Tein, J. (2004). Assessing factorial invariance in ordered-categorical measures. *Multivariate Behavioral Research, 39*, 479-515.

- Muthén, B., & Muthén, L. K. (2015). Mplus (Version 7.4) [Computer software]. Los Angeles, CA: Muthén & Muthén.
- Raskin, R., & Hall, C. (1979). A narcissistic personality inventory. *Psychological Reports, 45*, 590.
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology, 54*, 890-902.
- Roberts, B.W., Edmonds, G., & Grijalva, E. (2010). It is developmental me, not generation me: Developmental changes are more important than generational changes in narcissism – Commentary on Trzesniewski & Donnellan, 2010. *Perspectives in Psychological Science, 5*, 97-102.
- Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2008). Do today's young people really think they are so extraordinary? *Psychological Science, 19*, 181-188.
- Tschanz, B.T., Morf, C.C., & Turner, C.W. (1998). Gender differences in the structure of narcissism: A multi-sample analysis of the Narcissistic Personality Inventory. *Sex Roles, 38*, 863-870.
- Twenge, J. M., & Foster, J. D. (2008). Mapping the scale of the narcissism epidemic: Increases in narcissism 2002-2007 within ethnic groups. *Journal of Research in Personality, 42*, 1619-1622.
- Twenge, J. M., & Foster, J. D. (2010). Birth cohort increases in narcissistic personality traits among American college students, 1982-2009. *Social Psychological and Personality Science, 1*, 99-106.

- Twenge, J. M., Konrath, S., & Foster, J. D., Campbell, W.K., Bushman, B.J. (2008). Egos Inflating Over Time: A Cross-Temporal Meta-Analysis of the Narcissistic Personality Inventory. *Journal of Personality, 76*, 875-901.
- van Tongeren, D. R., Davis, D. E., & Hook, J. N. (2014). Social benefits of humility: Initiating and maintaining romantic relationships. *Journal of Positive Psychology, 9*, 313-321.
- Wright, F., O'Leary, J., & Balkin, J. (1989). Shame, guilt, narcissism, and depression: Correlates and sex differences. *Psychoanalytic Psychology, 6*, 217-230.

## Notes

1. Desirability ratings for narcissistic and non-narcissistic statements were also examined separately in the same series of regression analyses (available upon request). For the total NPI and for two of the three subscales (LA and GE), age was negatively associated with the desirability of narcissistic statements and positively associated with the desirability of non-narcissistic statements. For EE, the predicted negative association with age was found for narcissistic statements; yet a negative association with age was also unexpectedly found for non-narcissistic statements. We suspect that this anomaly is at least partly explained by changes in the psychometric properties of the EE scale when it is used in a single stimulus (rather than forced-choice) format (Ackerman, Donnellan, Roberts, & Fraley, 2016).

2. This idea was further supported by exploratory analyses of the correlations between participants' own narcissism scores and their index of the relative desirability of narcissistic (versus non-narcissistic) statements. For the NPI, LA, GE, and EE scales, respectively, these correlations were .67, .63, .64, .45 among men and .57, .47, .52, .40 among women. Gender differences in these correlations were statistically significant for the NPI, LA and GE scales, but not for the EE scale.

Table 1. Regression models predicting difference scores for desirability of NPI answer choices. (Higher scores indicate that the narcissistic statements were rated more desirable than the non-narcissistic statements).

	<u>Model 1</u>				<u>Model 2</u>			
	<u>B</u>	<u>(SE)</u>	<u><math>\beta</math></u>	<u>p</u>	<u>B</u>	<u>(SE)</u>	<u><math>\beta</math></u>	<u>p</u>
<b><u>NPI-40</u></b>								
(constant)	-.729	(.041)	.000	*	-.729	(.032)	.000	*
gender (centered)	.173	(.083)	.070	.037 *	.326	(.065)	.133	.000 *
age (centered)	-.022	(.004)	-.185	.000 *	-.014	(.003)	-.115	.000 *
NPI-40 (centered)					.096	(.004)	.619	.000 *
<b><u>Leadership/Authority</u></b>								
(constant)	.203	(.054)	.000	*	.203	(.045)	.000	*
gender (centered)	.212	(.110)	.066	.055	.443	(.092)	.137	.000 *
age (centered)	-.017	(.005)	-.111	.001 *	-.015	(.004)	-.098	.001 *
LA (centered)					.283	(.014)	.562	.000 *
<b><u>Grandiose Exhibitionism</u></b>								
(constant)	-1.139	(.056)	.000	*	-1.139	(.046)	.000	*
gender (centered)	.382	(.114)	.112	.001 *	.438	(.094)	.128	.000 *
age (centered)	-.036	(.005)	-.223	.000 *	-.024	(.005)	-.150	.000 *
GE (centered)					.394	(.019)	.557	.000 *
<b><u>Entitlement/Exploitativeness</u></b>								
(constant)	-2.730	(.050)	.000	*	-2.730	(.046)	.000	*
gender (centered)	-.071	(.102)	-.024	.486	.046	(.093)	.015	.622
age (centered)	-.015	(.005)	-.105	.002 *	-.006	(.004)	-.044	.165
EE (centered)					.714	(.053)	.423	.000 *

*Table 2. Statements used to manipulate target narcissism*

<u>Narcissistic</u>	<u>Leadership/Authority</u>	<u>Non-narcissistic</u>
1: He sees himself as someone who would prefer to be a leader.		1: He sees himself as someone to whom it makes little difference whether he is a leader or not.
2: He believes he is going to be a great person.		2: He hopes he is going to be successful.
	<u>Grandiose Exhibitionism</u>	
1: He sees himself as someone who likes to be the center of attention.		1: He sees himself as someone who prefers to blend in with the crowd.
2: He likes to look at his body.		2: He thinks his body is nothing special.
	<u>Entitlement/Exploitativeness</u>	
1: He sees himself as someone who will never be satisfied until he gets all that he deserves.		1: He sees himself as someone who takes his satisfactions as they come.
2: He expects a great deal from other people.		2: He likes to do things for other people.

Table 3. Regression models predicting ratings of the target

	<b><i>B</i></b>	<b><i>(SE)</i></b>	<b><i>β</i></b>	<b><i>p</i></b>
<b><u>Target altruism</u></b>				
(constant)	4.604	(.039)		.000*
gender (centered)	.356	(.044)	.240	.000*
age (centered)	.010	(.003)	.151	.000*
condition	-.465	(.043)	-.313	.000*
age x condition	-.011	(.004)	-.109	.008*
NPI-16 (centered)	-.024	(.006)	-.113	.000*
<b><u>Target conscientiousness</u></b>				
(constant)	4.073	(.042)		.000*
gender (centered)	.280	(.047)	.192	.000*
age (centered)	.002	(.003)	.034	.452
condition	-.050	(.046)	-.034	.280
age x condition	-.013	(.004)	-.135	.002*
NPI-16 (centered)	-.015	(.007)	-.069	.034*
<b><u>Target social status</u></b>				
(constant)	4.452	(.035)		.000*
gender (centered)	.293	(.039)	.236	.000*
age (centered)	.004	(.003)	.065	.137
condition	.058	(.038)	.047	.130
age x condition	-.014	(.004)	-.169	.000*
NPI-16 (centered)	-.019	(.006)	-.105	.001*
<b><u>Target self-esteem</u></b>				
(constant)	4.503	(.041)		.000*
gender (centered)	.060	(.046)	.042	.190
age (centered)	.012	(.003)	.176	.000*
condition	.204	(.045)	.144	.000*
age x condition	-.009	(.004)	-.101	.024*
NPI-16 (centered)	-.012	(.007)	-.059	.069



Figure 1. Ratings of target altruism predicted by age and condition (controlling for participant gender and narcissism). Error bars represent standard errors.

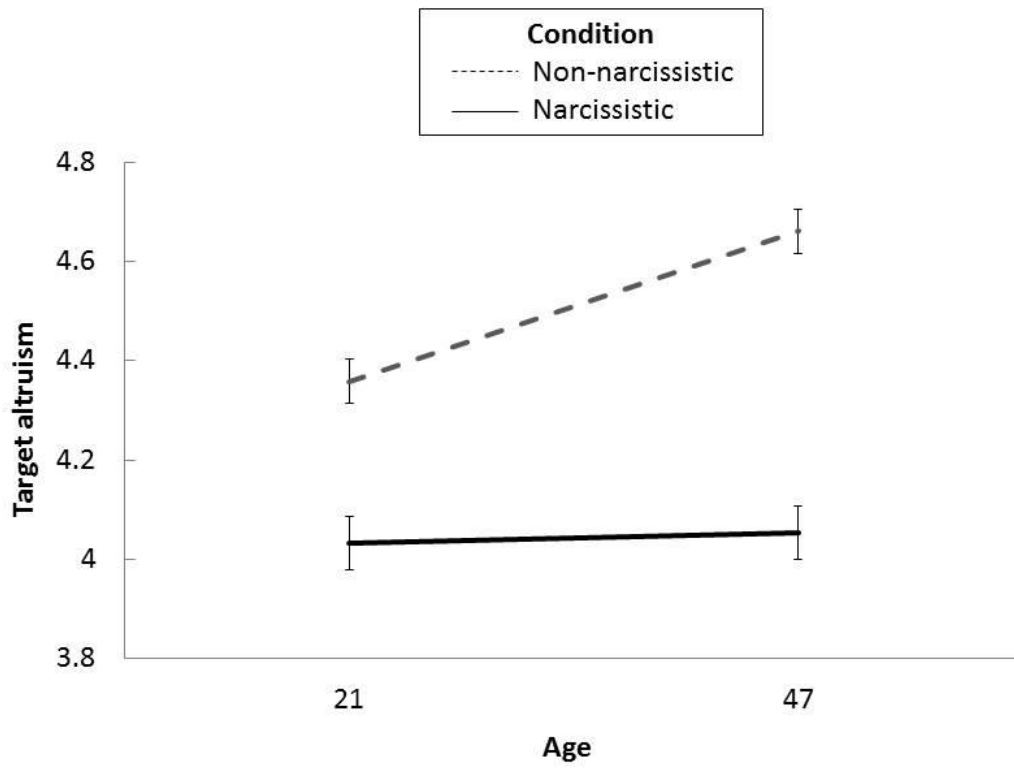


Figure 2. Ratings of target conscientiousness predicted by age and condition (controlling for participant gender and narcissism). Error bars represent standard errors.

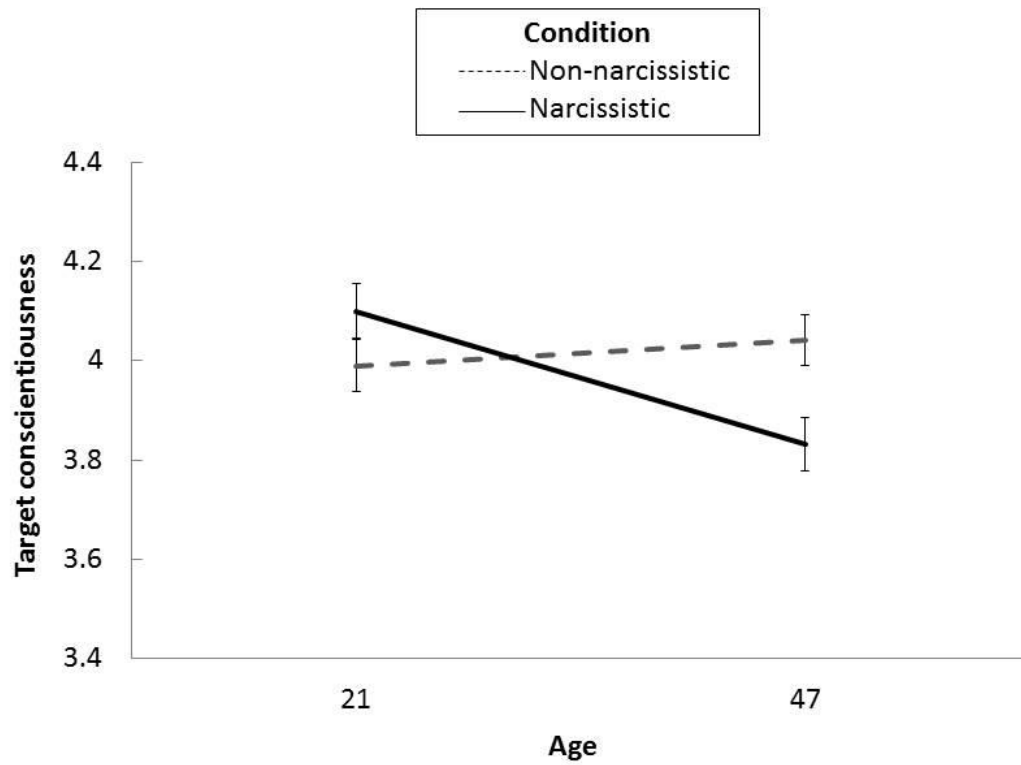


Figure 3. Ratings of target social status predicted by age and condition (controlling for participant gender and narcissism). Error bars represent standard errors.

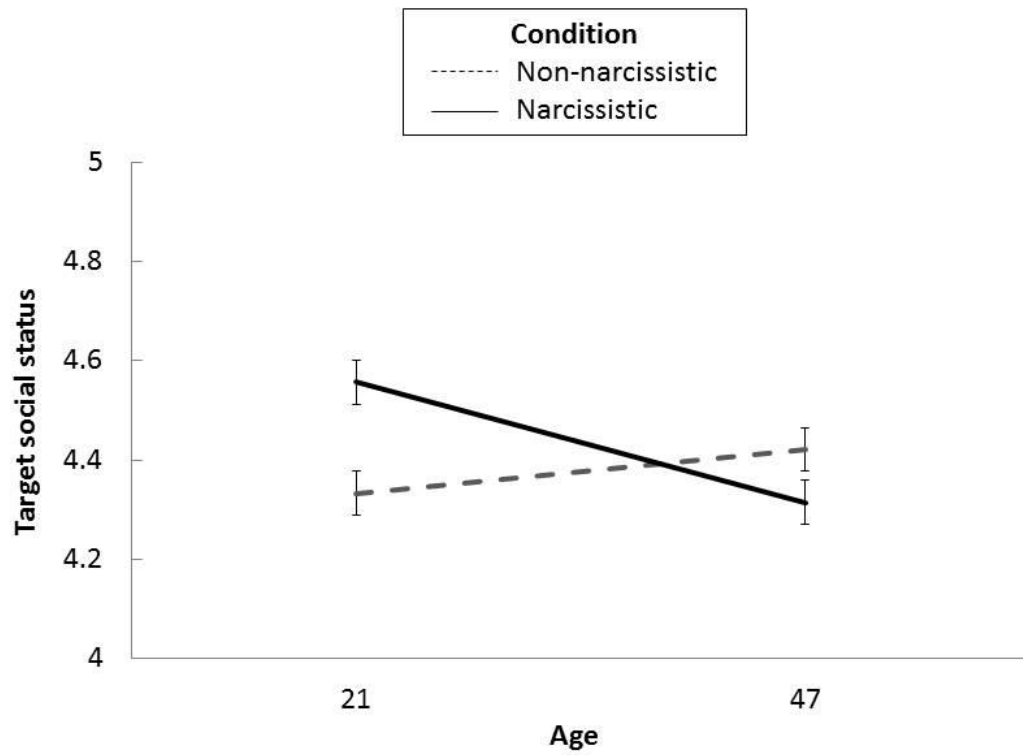


Figure 4. Ratings of target self-esteem predicted by age and condition (controlling for participant gender and narcissism). Error bars represent standard errors.

