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Individual differences in narcissism: Inflated self-views across the lifespan and around the world[☆]

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Abstract

The present investigation examined associations among narcissism, age, ethnicity, world region, and gender, using a large ($n = 3445$) sample of participants representing several different world regions and ethnicities. The results suggest that (1) reported narcissism declines in older participants, (2) consistent with previous findings, males report being more narcissistic than females, (3) that ethnic differences in reported narcissism are generally comparable to those found in the self-esteem literature, and (4) that world region appears to exert influence on narcissism, with participants from more individualistic societies reporting more narcissism. The results are discussed in terms of how age and culture might impact narcissism and how future research might address this topic.

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1. Introduction

Culture and development across the lifespan play crucial roles in shaping the self. Personality and general character sometimes change as people age, especially as they

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move through adolescence and young adulthood (e.g., Ozer & Gjerde, 1989). Culture also exerts a great deal of pressure on the shaping of personality. For example, the DSM-IV TR notes that people who have recently immigrated may appear to have diagnosable personality disorders when, in fact, they are simply expressing personality traits common to their country of origin (American Psychiatric Association, 2000). Indeed, many authors have argued that culture strongly influences our personalities and views of self (e.g., Heine & Lehman, 1997; Markus & Kitayama, 1991). Even within a single country, culture may influence people to define themselves quite differently (Plaut, Markus, & Lachman, 2002).

In the present investigation, we examined how age and culture influence the personality construct of narcissism. In order to collect data from as diverse a sample as possible, we used the Internet. The Internet is fast becoming recognized as a valid and reliable tool for data collection and has been utilized in several large-scale projects that collected data from thousands of participants worldwide. For example, Robins, Trzniewski, Tracy, Gosling, and Potter (2002) collected self-esteem reports from a worldwide sample of participants. Another set of researchers used the Internet to collect self-report personality questionnaires from a large set of respondents representing different ages (Srivastava, John, Gosling, & Potter, *in press*). The results of investigations such as these may yield valuable insight into the effects of age and culture on personality.

The goal of the present investigation was twofold. First, we wanted to collect data on narcissism from a larger and more inclusive sample of participants compared to what one typically finds in the narcissism literature. Specifically, we wanted to gather data on narcissism from people who represented various age and ethnic identity categories as well as different regions of the world. Second, we wanted to test several specific hypotheses and conduct exploratory analyses with narcissism on this large and inclusive sample. Specifically, we wanted to determine whether age, ethnic identity, and country of residence are related to narcissism. We also wanted to replicate previous research showing that men usually report more narcissism than women (e.g., Bushman & Baumeister, 1999; Farwell & Wohlwend-Lloyd, 1998; Joubert, 1998; Ladd, Welsh, Vitulli, Labbe, & Law, 1997). Before we state our specific predictions we briefly address the general issue of narcissism and how it relates to other psychological constructs.

Narcissism has a brief but rich history of psychological investigation. Early research in this area centered on narcissism as a personality disorder. The DSM-IV TR defines narcissistic personality disorder (NPD) as lack of empathy, need for admiration, and a pattern of grandiosity (American Psychiatric Association, 2000). Personality/social psychological researchers, however, focus on “sub-clinical” or “normal” narcissists—those who display some of the characteristics of NPD, but not necessarily enough to be diagnosed with NPD. In the present paper, when we refer to the term “narcissist,” we are using the personality/social psychological definition.

Narcissism is correlated with several undesirable traits and behaviors. For example, narcissists tend to be less agreeable (Bradlee & Emmons, 1992), tend to be motivated less by intrinsic and more by extrinsic desires (Kasser & Ryan, 1996), and

tend to brag about their accomplishments and display a relatively arrogant attitude (Paulhus, 1998). However, there are many positive aspects to narcissism as well. For example, narcissists tend to be highly extraverted (Bradlee & Emmons, 1992), socially bold (Emmons, 1984), less depressed, and less socially anxious (Watson & Biderman, 1993).

In addition, narcissism is positively correlated with self-esteem (e.g., Emmons, 1984; Jackson, Ervin, & Hodge, 1992; Raskin, Novacek, & Hogan, 1991; Rhodewalt & Morf, 1995; Watson & Biderman, 1993; Watson, Hickman, & Morris, 1996). Using meta-analytic techniques, Campbell (1999) found an average correlation of .29 between narcissism and self-esteem (as measured by the Rosenberg (1965) self-esteem scale), using the results of 11 studies with a total of 2963 participants. Many researchers view high self-esteem as a positive trait (however, see Twenge & Campbell, 2001; for a more tempered evaluation of the benefits of possessing high self-esteem). Or perhaps more accurately stated, possessing low self-esteem is frequently viewed as a negative trait (e.g., Cutrona, 1982; Kanfer & Zeiss, 1983; Leary, 1983). Thus, despite their negative qualities, narcissists do appear to maintain several positive characteristics, including high self-esteem.

As stated previously, the present investigation sought to answer several questions related to narcissism, age, and culture. The initial focal point of this investigation centers upon narcissism and its possible relation to age. Specifically, we wanted to answer the question: are younger people more narcissistic than older people? One might predict that narcissism is unlikely to change with age, especially after early adulthood. Although there is some change in personality during adolescence, a large body of research finds that personality is very stable, based primarily on analyses of correlational consistency, after the age of 30 (Costa & McCrae, 1988; Costa, McCrae, & Arenberg, 1980; Costa et al., 1986). Some cross-sectional research, on the other hand, reveals significant mean-level personality change with age (Srivastava et al., in press). In fact, a recent review of the research documented evidence that personality fluctuates across the lifespan in theoretically meaningful ways (Helson, Kwan, John, & Jones, 2002).

Of course, it is possible that personality may demonstrate both correlational consistency and mean-level fluctuations. For example, it is possible that throughout the lives of two people, person A is always more agreeable than person B, but that they both become more agreeable as they age. To examine correlational consistency, longitudinal designs must be employed. Mean-level changes, however, may be investigated using cross-sectional paradigms. Because the primary measure of narcissistic personality (the focus of the present examination), the NPI (Raskin & Terry, 1988), has only been in use in its current form for a relatively short period of time, longitudinally based analyses of correlational consistency will have to wait. We can and we do, however, in the present investigation, assess mean-level fluctuations in narcissism across the lifespan.

Thus we return to the issue that has generated considerable debate in personality research: is personality set in plaster after a certain age, or can it change? As for the personality construct of narcissism, we believe that it does change across the lifespan. There are at least three reasons to suggest why this assertion might be true: (1) what

some clinicians call “disorder burnout,” (2) the incorporation of objective failure into one’s self-concept (which we label the “reality principle model”), and (3) cultural changes that may produce birth cohort effects.

Our first reason to suspect age differences in narcissism is labeled “disorder burnout.” Clinicians have noted that certain personality disorders tend to “mellow” with age. For example, the DSM-IV TR suggests that many of the characteristics associated with antisocial personality disorder may become less evident as one grows older (American Psychiatric Association, 2000), and borderline personality disorder shows a similar pattern. This pattern fits NPD as well; the DSM-IV TR suggests that some common adolescent behaviors might even be mistaken for NPD. Thus, it seems likely that narcissism will decrease with age because as people age, some of the characteristics they possess that are associated with narcissism should assuage.

We also speculate that as one grows older one will experience more frequent opportunities for failure (and, in fact, fail more frequently), which we label the “reality principle model.” For example, few children have experience with failing a test or being objectively compared with others before they enter school. As one progresses through life, however, the frequency of objective failure should increase simply because the number of instances when one might objectively succeed or fail increases. The challenge presented by these encounters also increases. In many ways, adolescence and young adulthood present evaluations with progressively higher stakes: college admissions, dating experiences, and job interviews may lead people to doubt their self-esteem in a way they never did as children. Continuing through the lifespan, problems associated with family and general health provide further evidence on one’s lessened ability. We believe that the more failure people experience, the less narcissistic they are likely to be. Young people have simply not had the opportunity to experience much failure. Older people have, and thus they should be less narcissistic.

The disorder burnout and reality principle models suggest true age differences in narcissism. However, age differences in a cross-sectional study might also be due to birth cohort (Schaie, 1965; Twenge, 2002). Because people born at different times are exposed to different cultures, birth cohort is a useful proxy for the overall socio-cultural environment (Twenge, 2002). Several pieces of evidence suggest that recent cohorts and environments might be more narcissistic. Christopher Lasch’s well-known 1979 book, *The Culture of Narcissism*, argued that the United States became progressively more individualistic and self-focused during the 1970s. Other authors found that this trend toward individualism was pervasive and long-standing (Baumeister, 1987; Gough, 1991). In addition, college students reported progressively higher self-esteem between 1968 and 1994 (Twenge & Campbell, 2001), even though objective measures such as SAT scores and divorce rates would suggest a decrease in self-esteem. The correlation between self-esteem and narcissism suggests that narcissism scores might have risen as well (especially because the self-esteem rise was disconnected from true improvement or achievement). Thus, younger people (who were born more recently) grew up in a culture focused more on self-esteem and individualism. Older people, raised in more collectivistic eras (e.g., the 1950s), might be less likely to harbor narcissistic traits. This again suggests that narcissism should

decrease with age, though this model predicts that the difference would lie in birth cohort rather than in development.

Thus far, we have discussed the reasoning behind our hypothesis that reported narcissism will decline in older participants. We now continue and present evidence for our second and third predictions, that narcissism will show world regional and ethnic differences. A growing body of recent research suggests that self-concept variables differ among ethnic groups. Gray-Little and Hafdahl (2000) first identified a self-esteem advantage for Black Americans versus White Americans. This result was confirmed and extended by Twenge and Crocker (2002) in a meta-analysis of self-esteem and ethnic identity. Specifically, they tested potential differences in self-esteem among Whites, Blacks, Hispanics, Asians, and American Indians.¹ They found what amounts to a self-esteem continuum, with Blacks reporting the highest self-esteem, followed by Whites. Hispanics, Asians, and American Indians reported the lowest self-esteem. These results corresponded exactly to the comparative levels of individualism among these groups (Oyserman, Coon, & Kimmelmeier, 2002), suggesting that narcissism might show a similar pattern. We therefore predict that a similar continuum will be evident for narcissism. The basis for this prediction is the reliable association between narcissism and self-esteem, which should translate into a result for narcissism that is similar to the result for self-esteem found by Twenge and Crocker (2002). Further, because individualistic thinking is probably positively associated with increased narcissism, the fact that the ethnic differences in self-esteem correspond directly to levels of individualism should mean that narcissism will follow a similar pattern.

This prediction, however, may mask important cultural and regional differences in narcissism. For example, Fukunishi et al. (1996) found that the Chinese are more narcissistic than Americans, but the Japanese are less narcissistic than Americans. Thus even within Asia there appears to be some variance as to how narcissistic people are. Plaut et al. (2002) found regional differences in self-description within the United States. For example, people from the West South Central region (e.g., Texas, Oklahoma) report being more outspoken and self-confident, compared to other regions of the country. People from the New England area report being particularly concerned with being softhearted and caring. One might infer from such results, then that if different regions of the United States produce self-concepts laden with either self or other-focused ideologies one might expect a construct such as narcissism to also vary from region to region.

¹ Twenge and Crocker (2002) used the terms “Black” to denote Black non-Hispanic, “White” to denote White non-Hispanic, “Hispanic” to denote people of Hispanic origin, “Asian” to denote people of Asian or Pacific Island decent, and “American Indian” to denote people of American Indian, Eskimo, or Aleut decent. We do so as well for simplicity and because the sample we rely upon for the present investigation includes participants of various ethnic identities, who reside in various countries. Thus, for example, to label all Black non-Hispanic participants as African-Americans would not accurately reflect the actual makeup of our sample, which includes Black participants from parts of the world other than the United States of America. We also use the terms “ethnic identity” and “ethnicity” in place of such characterizations of racial makeup. We realize, however, that none of these characterizations fully describes the social-identities of the groups under investigation.

There is also a tremendous amount of literature suggesting that self-conceptualization varies across international boundaries. Much of this research focuses on differences stemming from collectivistic versus individualistic cultures. In a recent meta-analytic review, Oyserman et al. (2002) reported consistent differences in collectivistic and individualistic orientations when comparing Americans with Europeans, Asians, Africans, and Middle-Easterners. Other researchers have reported the cross-cultural effects of these social orientations on behaviors and perceptions. For example, Kitayama, Markus, and Matsumoto (1997) examined how collectivistic and individualistic culture shapes situational perceptions. American participants were more likely to identify situations where self-esteem enhancement was likely whereas Japanese participants were more likely to identify situations where self-criticism was the likely outcome. Other research suggests that people from individualistic cultures, in comparison to people from collectivistic cultures, agree more strongly with self-relevant positive emotions (Lee, Jones, & Mineyama, 2002), are less modest (Kurman & Sriram, 2002), are more likely to project their own feelings onto others and recall personal situations from their own perspective as opposed to the perspective of others (Cohen & Gunz, 2002), are more likely to engage in agentic self-enhancement (Kurman, 2001), and tend to report well-being as more closely associated with emotions that are interpersonally distancing (e.g., pride) (Kitayama, Markus, & Kurokawa, 2000).

These findings all point to a clear delineation between collectivistic and individualistic cultures in terms of self-concept and perception. As the research suggests, individualism encourages greater focus on the self whereas collectivism promotes greater focus on the group. Thus, individualistic promotion of self-focus over other-focus should be reflected in greater narcissism being expressed in people from more individualistic cultures. This leads us to our third prediction: regional world differences in narcissism will reflect differences in individualism across world regions. Therefore, we expect to find that people from countries with increased individualism will also report being more narcissistic.

Our remaining prediction is a replication of previously reported results, which find that men are more narcissistic than women (e.g., Bushman & Baumeister, 1999; Farwell & Wohlwend-Lloyd, 1998; Joubert, 1998; Ladd et al., 1997). In fact, Campbell (1999) found an average correlation of .18 (males higher than females) between gender and narcissism across 20 samples with 3668 participants. Thus, our final hypothesis is that male participants in the present investigation will report more narcissism compared to female participants. The data in the present article, obtained from a large and diverse sample, should help increase the generalizability of this already reliable finding.

Previous research has neglected the potentially crucial roles that age and culture play on narcissism. Thus, our knowledge of potential developmental and cultural influences is lacking. The present investigation will for the first time demonstrate the efficacy of these predictors on the personality construct of narcissism, employing a sample that is larger than any previously found in the narcissism literature. To summarize, the present research sought to test four hypotheses concerning narcissism, age, and culture. First, we predict that narcissism will be negatively related to age. Second, we predict that ethnic differences in reported narcissism will fit the same

pattern as ethnic differences in self-esteem (Blacks highest, followed by Whites, Hispanics, and then Asians; Twenge & Crocker, 2002). Third, we predict that people from world regions that are more individualistic will also report being more narcissistic. Finally, we predict that men will be more narcissistic than women. We tested each prediction using a sample of participants who completed Internet versions of a narcissism and demographic questionnaire.

2. Method

2.1. Participants

A total of 3445 participants [average age of 24.5 years ($SD = 9.1$ years)] participated in this study. Participant ages ranged from 8 to 83 years, with at least 10 participants representing each age from 13 to 50 years and at least 20 participants representing each age from 14 to 42 years. Consistent with popularly quoted demographic characteristics of internet users, the majority of the participants ranged in age from 16 to 26 years, with at least 100 participants representing each of these ages. Finally, the most popular age range of participants in this study was 17–22 years, with at least 175 participants representing each of these ages. An examination of age by gender revealed that males ($M = 25.4$ years; $SD = 9.2$ years) were slightly, but significantly older than females ($M = 24.2$ years; $SD = 9.1$ years), $t(3443) = 3.2, p < .01$.

Of these participants, approximately 75% were female. Approximately 74% of the participants were White, though all other sampled ethnicities were represented (7% Hispanic, 7% Asian, 6% Black, 1% Native American, 1% Middle Eastern, and 4% “Other”). Though a majority of the participants reported that they resided in the United States (74%), participants also reported living in Europe (9%), Canada (6%), Asia (5%), the Middle East (3%), Africa (2%), South America (1%), and Australia (0.2%). More than half of the participants (61%) reported that they earned less than \$20,000 (US\$) per year, with 20% reporting that they earned between \$20,000 and \$40,000 annually, 9% reporting yearly incomes between \$40,000 and \$60,000, and 11% reporting that they earned more than \$60,000 per year.

2.2. Materials and procedure

An Internet website was constructed for this study (www.psycdawgs.com) that was advertised at various Internet search engines and a social psychology themed website. The advertisement solicited potential participants to complete a questionnaire study on personality across the lifespan. All participant data were collected between July 2001 and June 2002.

When participants visited the website, they were first presented with a consent form that gave the option to either proceed to the questionnaire or to leave the website. All participants were assured that no attempt would be made to associate any identifying information (e.g., IP address) with their responses, and no identifying information was requested in the questionnaire. Following the completion of the

questionnaire, participants were directed to a debriefing page that explained the purpose of the study and directed them to one of several appropriate Internet websites for further information regarding the topic of the investigation. Participants were also given the opportunity to email the investigators with any questions or concerns.

Narcissism was assessed with the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988), which consists of 40 forced-choice items, each containing two alternative statements concerning the participant. Examples of the statements include “I will be a success” (narcissistic) and “I am not too concerned about success” (non-narcissistic) or “I find it easy to manipulate people” (narcissistic) and “I don’t like it when I find myself manipulating people” (non-narcissistic). Total scores on the NPI can range from 0 to 40 with higher scores indicating increased narcissism. Participants in the present study reported a mean NPI score of 15.2 ($SD = 6.7$). Also assessed in the questionnaire were age, gender, ethnicity, income level (in \$US), and the world region where the participant resided. Income level, specifically, was assessed in increments of US\$20,000 increments with options ranging from under \$20,000 to more than \$200,000 per annum.

3. Results

Is age related to narcissism? Recall that we anticipated a negative correlation between the two, hypothesizing that younger people would be more narcissistic than older people. We initially examined age differences by performing a simple regression analysis with age predicting NPI scores. The result revealed a significant negative correlation, $r = -.17, p < .001$ ($d = .35$), revealing that older participants reported being less narcissistic than did younger participants. Because both age ($r = .30, p < .001$) and NPI ($r = .08, p < .001$) were significantly correlated with reported annual income, we added income to the equation to assess the unique contribution of age. This increased the correlation between narcissism and age, $\beta = -.22, p < .001$ ($d = .42$). We then added gender to the equation, which resulted in a nearly identical correlation between narcissism and age, $\beta = -.22, p < .001$ ($d = .43$). Thus, our primary hypothesis, that age would be negatively related to narcissism was solidly confirmed by our data, particularly after we controlled for confounding variables.² As can be seen in Fig. 1, narcissism appears to be a personality trait that fluctuates a great deal depending on the age of the participant. In fact, the difference in reported NPI scores from our youngest participants to our oldest participants is nearly a full standard deviation.

Next, we compared NPI scores among the four ethnic identity groups with at least 100 participants: Whites ($n = 2564$), Blacks ($n = 222$), Asians ($n = 237$), and Hispanics ($n = 230$).³ There were significant differences among the four ethnic identity

² We also tested for potential curvilinear relations between age and narcissism. However, the results suggested that the pattern of association was linear in nature.

³ Twenge and Crocker (2002) also compared a sample of Native Americans. In our investigation, however, the Native American sample was too small to make any comparison feasible.

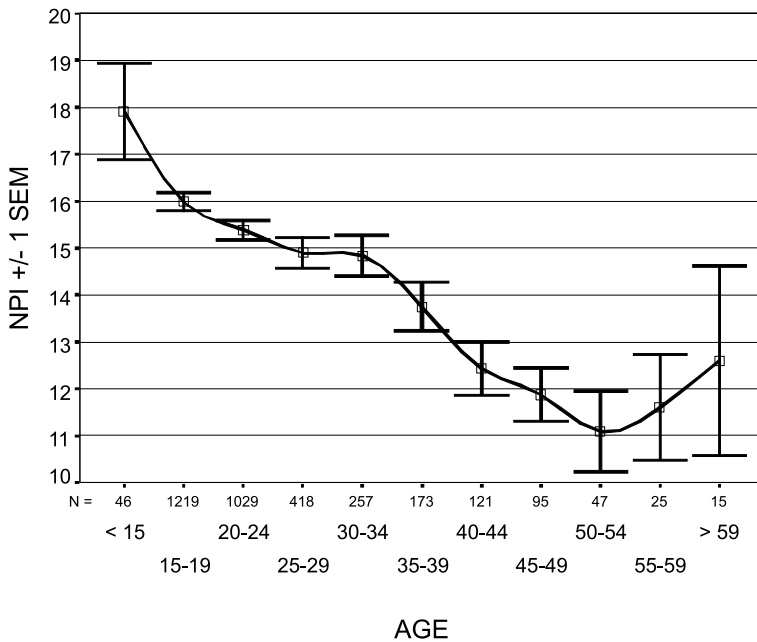


Fig. 1. The negative association between narcissism and age is shown. Ages are grouped into five year intervals beginning at less than 15 years of age and ending with more than 59 years of age. At each age interval, the mean NPI score is calculated and plotted. Error bars represent ± 1 standard error of the mean. Also reported is the number of total participants in each age grouping.

groups, $F(3, 3249) = 9.4, p < .001$ ($\eta_p^2 = .01$). A set of comparisons revealed that both White participants ($M = 14.8, SD = 6.8$) and Asian participants ($M = 14.9, SD = 6.5$) reported being slightly, but significantly (p 's $< .05$) less narcissistic than both Black participants ($M = 16.7, SD = 6.5$) and Hispanic participants ($M = 16.5, SD = 6.4$). No other ethnicity differences were revealed. These results reflect to some degree the pattern for ethnicity differences found in self-esteem research: in the self-esteem literature, Asians generally report the lowest self-esteem and Hispanics report lower self-esteem than do Whites, with Blacks reporting the highest self-esteem. Consistent with this, Blacks reported the highest levels of narcissism, though not significantly more than Hispanics. Whites, however, reported less narcissism than did Hispanics and equivalent narcissism with Asians.

Black and Hispanic participants reported slightly lower ages and income levels compared to White and Asian participants, r 's = $-.05$ and $-.04$, p 's $< .01$ and $.05$, respectively.⁴ We controlled for these differences in a regression analysis that

⁴ For this set of zero-order correlation and regression analyses, we coded all participants who reported to be either White or Asian as “-1” and all participants who reported to be either Black or Hispanic as “1.” Thus, a positive association between this ethnic variable and narcissism would indicate greater reported narcissism for Black/Hispanic participants compared to White/Asian participants.

compared NPI scores for White/Asian participants versus Black/Hispanic participants. The result revealed a small, yet significant difference between the two ethnicity groupings even after reported age and income level were controlled, $\beta = .09, p < .001$ ($d = .19$). Finally, we examined any potential interaction between ethnic identity group and gender, but found none. In summary, the results for narcissism were generally comparable to those found by self-esteem researchers (e.g., Gray-Little & Haf-dahl, 2000; Twenge & Crocker, 2002) with a few notable exceptions.

We then examined whether NPI scores were associated with world region. Recall that we predicted that people from world regions that are more individualistic would report more narcissism compared to people from world regions that are less individualistic. We examined NPI scores for participants from each of five world regions with at least 100 participants: the United States ($n = 2546$), Canada ($n = 190$), Europe ($n = 304$), Asia ($n = 162$), and the Middle East ($n = 104$). The result revealed a significant difference among the five regions, $F(4, 3301) = 2.7, p < .05$ ($\eta_p^2 = .003$). An examination of the mean NPI scores revealed that participants from the United States produced the highest levels of reported narcissism with an average NPI score of 15.3 ($SD = 6.8$). This was followed by Europe [$M = 15.0$ ($SD = 6.3$)], Canada [$M = 14.8$ ($SD = 6.9$)], Asia [$M = 14.3$ ($SD = 6.7$)], and the Middle East [$M = 13.9$ ($SD = 6.9$)]. Statistical comparisons revealed that participants from the United States reported significantly (i.e., p 's $< .05$) greater narcissism compared to participants from either Asia or the Middle East. We also tested for any potential interaction between world region and gender, but found none (i.e., $F < 1$).

To more directly test the influence of individualism on narcissism, we grouped together participants from the United States, Canada, and Europe to create a group of participants that we refer to as high individualists ($n = 2898$). We also created a group, which we refer to as low individualists, consisting of participants from Asia and the Middle East ($n = 408$). The decision of whether to include each region in the "high individualist" or "low individualist" group was based on international individualism score data reported by Diener and Diener (1995). We compared these two groups in terms of NPI scores and found that they differed significantly from one another, $r = -.05, p < .01$ ($d = .11$). The high individualist group reported an average NPI score of 15.3 ($SD = 6.7$) compared to 14.2 ($SD = 6.7$) for the low individualistic group. We then assessed whether gender interacted with our individualism variable and found that it did not (i.e., $F = 1.2$). Therefore, the result for world region falls in line with our general prediction that narcissism would be associated positively with individualism. World regions that generally display higher individualism also reported somewhat greater narcissism.

Are males more narcissistic than females? We compared NPI scores of male and female participants. Males reported a significantly higher average NPI score [16.5 ($SD = 6.9$)] compared to the female average of 14.7 ($SD = 6.6$), $r = -.12, p < .001$ ($d = .24$). Because gender and income level were significantly related, $r = -.05, p < .01$ (males reported earning higher incomes), reported income was controlled in a second regression model. The result revealed that males still reported greater narcissism compared to females, $\beta = -.12, p < .001$ ($d = .23$). Finally, gender was also significantly related to age, $r = -.06, p < .01$ (males reported being

older than females). Thus, we also controlled for age (in addition to income) in a third regression model. The result, once again, revealed that males reported greater narcissism than did females, $\beta = -.12, p < .001$ ($d = .26$). This result is consistent with our prediction and served to replicate the general finding that males report being somewhat more narcissistic than females. Further, our result suggests that even when age and reported income levels are simultaneously controlled, the gender difference remains.

An intriguing possibility is that some of the NPI subscales might have influenced the reported associations more than others. For example, vanity scores may be much lower among older individuals, and that may lead to the lower overall NPI composite scores. To examine this possibility, we regressed each of the seven NPI subscales onto the predictor variables of interest (along with any variables that we controlled for in the previous analyses). Table 1 shows a summary of these analyses. When we assessed age (controlling for gender and income) in relation to the seven NPI subscales, the results were all consistent with those that used the composite measure. That is, all subscales of the NPI decrease with age. Some of the subscales, however, were more highly correlated with age than others. Specifically, exhibitionism, exploitativeness, vanity, and entitlement were most highly related to age. Self-sufficiency, in particular, demonstrated a relatively weak relation to age. Authority and superiority were more moderately related to age.

We next assessed how ethnic identity related to the NPI subscales. Specifically, we compared Black and Hispanic participants to White and Asian participants. The results were again mostly consistent with what we reported when using the composite measure. The ethnic identity groups differed on five of the seven subscales (i.e., Black and Hispanic participants reported more authority, superiority, entitlement, self-sufficiency, and vanity than did White and Asian participants). They did not differ in terms of exhibitionism or exploitativeness. It is also important to note that these final

Table 1

	Age	Ethnic identity (1)	World region (2)	Gender (3)
NPI Composite	-.22*	.09*	.05*	-.12*
NPI Subscales				
Authority	-.10*	.09*	.07*	-.09*
Exhibitionism	-.21*	-.02	-.02	-.02
Superiority	-.11*	.07*	.07*	-.06*
Entitlement	-.15*	.08*	.01	-.16*
Exploitativeness	-.18*	.03	.02	-.11*
Self-sufficiency	-.07*	.07*	.08*	-.08*
Vanity	-.16*	.09*	.03	.01

Notes. Numbers represent standardized regression coefficients.

(1) Ethnic identity coded so that positive association indicates that Black/Hispanic participants higher than White/Asian participants.

(2) World region coded so that positive association indicates that individualistic country higher than collectivistic country.

(3) Gender coded so that negative association indicates that males higher than females.

*Significantly (i.e., $p < .05$) different from zero.

two subscales of the NPI are often considered to represent the elements most detrimental to interpersonal functioning.

The results for world region (specifically, individualistic compared to collectivistic cultures) were somewhat less consistent. Significant differences were found on three of the seven NPI subscales. Each of these three differences were in the hypothesized direction. Specifically, participants from more individualistic countries reported greater authority, superiority, and self-sufficiency. The two cultures did not differ in terms of exhibitionism, entitlement, exploitativeness, or vanity.

Finally, the results for gender were fairly consistent, regardless of whether we assessed the NPI composite or subscales. Males reported greater authority, superiority, entitlement, exploitativeness, and self-sufficiency. The two genders did not differ significantly in terms of exhibitionism or vanity.

In summary, whether we correlated our relevant predictors with the NPI composite or its subscales, the results were generally in agreement. With the exceptions noted above, both overall narcissism and most of its components were correlated with age, ethnic identity, world region, and gender.

4. Discussion

This research examined associations between narcissism and age, gender, ethnic identity, and world region using a large sample of participants of many ages and from around the world. As predicted, narcissism was negatively related to age, especially after income level and gender were controlled. Further, we found ethnic differences in narcissism somewhat similar to those in self-esteem. These differences remained even after reported income level and age were controlled. We also found evidence that narcissism varies across world region, with Americans reporting the highest levels of narcissism, followed by Europeans, Canadians, Asians, and Middle Easterners. By grouping the world regions into those who display greater individualism compared to those who display less individualism we found that higher individualism was associated with more reported narcissism. Finally, males reported being more narcissistic than females even after age and income level were controlled. Below, we discuss potential explanations for the above results and how they relate to previous research and theory.

4.1. Narcissism and age

We found that younger people report more narcissism than older people. This finding is consistent with several of the theories we discussed in the introduction. Both the disorder burnout model and the reality principle model suggest that age should be negatively related to narcissism. Generational differences also predicted more narcissism in younger people, who grew up in eras characterized by high individualism and emergent narcissism (Lasch, 1979; Twenge & Campbell, 2001). As a cross-sectional study, however, our data cannot pinpoint the exact cause of the correlation between narcissism and age: it could be due to either lifespan development

or to birth cohort/culture. Future studies should explore this issue, possibly with the use of longitudinal designs (which would pinpoint developmental changes) or cross-temporal meta-analysis, (which would pinpoint birth cohort differences; e.g., Twenge & Campbell, 2001). Unfortunately, the (40-item) NPI was first published in 1988, making it difficult to address changes across many birth cohorts.

Our cross-sectional results are consistent with the findings of some researchers that many personality constructs appear to operate in a rather fluid manner across the lifespan, even beyond the age of 30 (see Helson et al., 2002; for review). As seen in Fig. 1, the drop in mean level narcissism did not cease at the age of 30. In fact, it appears to drop well into later adulthood. Of course, cross-sectional investigations, such as the present, cannot untangle the relationship between narcissism and age. Is the relationship due to culture or development? Though we know that narcissism appears to diminish with age, is the maintenance of individual differences preserved? We simply do not know at the present time. However, the results of this, as well as several other investigations, might challenge the notion that personality is essentially set in plaster beyond a certain age. At the very least, they provide the impetus for further examination of the role that age plays in regard to personality constructs, such as narcissism.

It should be noted that the correlation between age and narcissism, though reliable, is small. Age explains approximately 4% of the variance in reported narcissism, not a large amount by any measure (although it is about the same size as the age effect for self-esteem, which is between 2% and 6%; Twenge & Campbell, 2001). However, as Helson et al. (2002) alluded to, the ability of age to predict personality fluctuation at all is important given the enormous number other contributing factors. We therefore suggest that age is an important, yet one of many potential factors that reliably predict reported variations in narcissism.

4.2. Narcissism and culture

The differences in reported narcissism levels among the contrasted ethnic identities are similar to those in self-esteem (i.e., Gray-Little & Hafdahl, 2000; Twenge & Crocker, 2002). Though our results were not exactly the same, we did find evidence to support a similar association between narcissism and ethnic identity. Results for both narcissism and self-esteem show that Blacks score the highest and Asians either the lowest or near the lowest. The largest discrepancy between our results and those of self-esteem researchers is for Hispanic participants, who reported greater narcissism than Whites; the self-esteem analyses found that Hispanics scored slightly lower than Whites on self-esteem measures. Overall, however, the similarity of these results to those for self-esteem suggests that the two concepts share similar causes and roots. Twenge and Crocker (2002) concluded, that race differences in self-esteem stem primarily from cultural conceptions of individualism. Although the precise antecedents of self-esteem and narcissism are not known, the race and birth cohort differences in each imply a strong link with individualism. Cultures that emphasize individualism, independence, and “standing out from the crowd” are likely to produce more narcissism among their members. Our results showed the

highest reported narcissism among Blacks and more recent birth cohorts, both groups that display higher levels of individualism (Gough, 1991; Oyserman et al., 2002; Twenge & Campbell, 2001).

Keeping in line with the general conclusion that individualism is associated with narcissism, we found that world regions that generally display greater individualism also tend to display more narcissism. Indeed, when we contrasted the five world regions with one another, the only significant differences that emerged suggest that the United States displays significantly more narcissism than does either Asia or the Middle East. This result is consistent with the level of individualism displayed by these world regions (see Diener & Diener, 1995). The United States is generally considered to be one of the most individualistic nations while countries within Asia and the Middle East are relatively low in individualism. Therefore, it is not surprising that participants from the United States also reported more narcissism than participants from either Asia or the Middle East. Further, after grouping the world regions into either high or low individualism categories, we found that regional individualism differences appear related to regional differences in reported narcissism, with high individualism associated with greater reported narcissism. This result provides further evidence that higher levels of individualism appear to be associated with higher levels of narcissism.

Finally, we were able to report further evidence that men report more narcissism than women. This difference has been documented in prior research. However, this sample is larger and more inclusive than any previously used and thus can increase confidence in the direction and magnitude of the gender difference. Because of the large and inclusive sample utilized in the present investigation, the result should perhaps be given more credence. Previous research (see Cross & Madson, 1997; for review) suggests that males conceptualize the self more in terms of independence whereas females tend to be more interdependent. Therefore, it is possible that the difference in narcissism between the genders reflect another difference in self-concept with males being more individualistic and thus also more narcissistic.

4.3. General limitations and conclusions

It should first be reiterated that the associations reported (especially those related to ethnicity and world region) were quite small. Therefore, although theoretically meaningful, these results should not be interpreted as diagnostic in nature or as possessing significant predictive utility. In other words, the within-group variance is vastly larger than any between-group differences in narcissism. Just as the normal curves of most social psychological variables greatly overlap when one compares groups of people, those associated with narcissism are no different. One would be naïve to assume anything more than this on the basis of the present investigation.

As with all correlational research, no causal inferences can be made about the results reported in this article. However, we did not intend to provide causal evidence of the links among narcissism, age, and culture. Instead, we sought to report relations among these variables that stemmed from a sample that is larger and more inclusive than those used in prior investigations. Future research should examine these

relations to determine specific factors associated with age and culture that lead to variations in reported narcissism.

In general, one might question whether Internet respondents answer questionnaires honestly. However, this concern is present in the traditional survey method as well, and there is no reason to believe that people are more dishonest when completing an Internet questionnaire.

Another concern is the representativeness of a sample collected on the Internet. Recent studies have reviewed the literature and concluded that these samples are just as representative as college undergraduate samples, and possibly more representative (Srivastava et al., in press; Robins et al., 2002; Williams, Cheung, & Choi, 2000). We would be remiss, however, if we did not acknowledge the possibility that self-selection might have biased the results of some cultural groups more than others (this is especially true with regard to our cross-nationality comparisons). Our sample, though larger and more inclusive than most previously reported, still largely consists of white females from the United States who are college aged and middle-class. It is possible that those participants who do not fit into this demographic are less representative of their population. It would be advisable for future studies to investigate the issues outlined in this paper by assessing larger, potentially more representative samples of participants from multiple cultures. Studies that address cross-cultural differences in narcissism by administering the NPI to randomly selected samples will likely shed valuable insight into the nature of these potential differences.

With regard to the present investigation, it might speak to the generalizability of our results to compare the results we have attained with an Internet sample to those attained when using more conventional sampling methods. We are not aware of any collection of studies that specifically addressed the relatedness of narcissism, age, ethnicity, or world region. The vast majority of research on narcissism to date has been conducted on college student populations in the US. The data in the current research literature simply do not offer age or cultural comparisons of narcissism. There have been, however, several studies that have reported the link between narcissism and gender (at least within this limited demographic). As stated in the introduction of this paper, Campbell (1999), using meta-analytic techniques (20 independent samples, over 3500 participants), found an average correlation between narcissism and gender of .18 (males reported being more narcissistic). Our current study yielded a correlation of .12 (again, males reporting higher narcissism). Though not precisely identical, the present correlation is close and falls well within the range of those previously reported (r 's ranged from .00 to .32). This perhaps lends more confidence to the generalizability of the results reported herein, reducing the concerns associated with self-selection biases.

In conclusion, the present investigation demonstrates how age and culture are linked to narcissism. Although we cannot pinpoint the exact causes of these relations, differences in individualism across continent, ethnicity, birth cohort, and gender may provide the most parsimonious answer. Focusing on the self may lead to high self-esteem and high psychological well-being, but it can also lead to narcissism under certain conditions. Understanding this potential pitfall to unconditional positive regard for the self may shed light on sociological trends such as increasing

divorce rates and the recent influx of high profile violent acts. Perhaps future research can demonstrate how people can develop positive self-concepts without also displaying the negative behaviors associated with narcissism.

References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual* (4th ed.). Washington, DC: Text Revision.
- Baumeister, R. F. (1987). How the self became a problem: A psychological review of historical research. *Journal of Personality and Social Psychology*, *52*, 163–176.
- Bradlee, P. M., & Emmons, R. A. (1992). Locating narcissism within the interpersonal circumplex and the five-factor model. *Personality and Individual Differences*, *13*, 821–830.
- Bushman, B. J., & Baumeister, R. F. (1999). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology*, *76*, 367–376.
- Campbell, W. K. (1999). Narcissism in everyday life. Unpublished manuscript, Case Western Reserve University.
- Cohen, D., & Gunz, A. (2002). As seen by the other... Perspectives on the self in the memories and emotional perceptions of Easterners and Westerners. *Psychological Science*, *13*, 55–59.
- Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. *Journal of Personality and Social Psychology*, *54*, 853–863.
- Costa, P. T., McCrae, R. R., & Arenberg, P. (1980). Enduring dispositions in adult males. *Journal of Personality and Social Psychology*, *38*, 793–800.
- Costa, P. T., McCrae, R. R., Zonderman, A. B., Barbano, H. E., Lebowitz, B., & Larson, D. M. (1986). Cross-sectional studies of personality in a national sample: 2. Stability in neuroticism, extraversion, and openness. *Psychology and Aging*, *1*, 144–149.
- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin*, *122*, 5–37.
- Cutrona, C. E. (1982). Transition to college: Loneliness and the process of social adjustment. In L. A. Peplau, & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research, and therapy* (pp. 291–309). New York: Wiley.
- Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, *68*, 653–663.
- Emmons, R. A. (1984). Factor analysis and construct validity of the narcissistic personality inventory. *Journal of Personality Assessment*, *48*, 291–300.
- Farwell, L., & Wohlwend-Lloyd, R. (1998). Narcissistic processes: Optimistic expectations, favorable self-evaluations, and self-enhancing attribution. *Journal of Personality*, *66*, 65–83.
- Fukunishi, I., Nakagawa, T., Nakamura, H., Li, K., Hua, Z. Q., & Kratz, T. S. (1996). Relationships between Type A behavior, narcissism, and maternal closeness for college students in Japan, the United States of America, and the People's Republic of China. *Psychological Reports*, *78*, 939–944.
- Gough, H. (1991). Scales and combinations of scales: What do they tell us, what do they mean? Paper presented at the 99th Annual Convention of the American Psychological Association, San Francisco, August 1991.
- Gray-Little, B., & Hafdahl, A. R. (2000). Factors influencing racial comparisons of self-esteem: A quantitative review. *Psychological Bulletin*, *126*, 26–54.
- Heine, S. J., & Lehman, D. R. (1997). The cultural construction of self-enhancement: An examination of group-serving biases. *Journal of Personality and Social Psychology*, *72*, 1268–1283.
- Helson, R. H., Kwan, V. S. Y., John, O. P., & Jones, C. (2002). The growing evidence of personality change in adulthood: Findings from research with personality inventories. *Journal of Research in Personality*, *36*, 287–306.

- Jackson, L. A., Ervin, K. S., & Hodge, C. N. (1992). Narcissism and body image. *Journal of Research in Personality*, 26, 357–370.
- Joubert, C. E. (1998). Narcissism, need for power and social interest. *Psychological Reports*, 82, 701–702.
- Kanfer, R., & Zeiss, A. M. (1983). Depression, interpersonal standard setting, and judgments of self-efficacy. *Journal of Abnormal Psychology*, 92, 319–329.
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22, 280–297.
- Kitayama, S., Markus, H. R., & Kurokawa, M. (2000). Culture, emotion, and well-being: Good feelings in Japan and the United States. *Cognition and Emotion*, 14, 93–124.
- Kitayama, S., Markus, H. R., & Matsumoto, H. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology*, 72, 1245–1267.
- Kurman, J. (2001). Self-enhancement: Is it restricted to individualistic cultures? *Personality and Social Psychology Bulletin*, 27, 1705–1716.
- Kurman, J., & Sriram, N. (2002). Interrelationships among vertical and horizontal collectivism, modesty, and self-enhancement. *Journal of Cross-Cultural Psychology*, 33, 71–86.
- Ladd, E. R., Welsh, M. C., Vitulli, W. F., Labbe, E. E., & Law, J. L. (1997). Narcissism and causal attribution. *Psychological Reports*, 80, 721–722.
- Lasch, C. (1979). *The culture of narcissism: American life in an age of diminishing expectations*. NY: Norton.
- Lee, J. W., Jones, P. S., & Mineyama, Y. (2002). Cultural differences in response to a Likert scale. *Research in Nursing and Health*, 25, 295–306.
- Leary, M. R. (1983). *Understanding social anxiety: Social, personality, and clinical perspectives*. Beverly Hills: Sage.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128, 3–72.
- Ozer, D. J., & Gjerde, P. F. (1989). Patterns of personality consistency and change from childhood through adolescence. *Journal of Personality*, 57, 483–507.
- Paulhus, D. L. (1998). Interpersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing? *Journal of Personality and Social Psychology*, 74, 1197–1208.
- Plaut, V. C., Markus, H. R., & Lachman, M. E. (2002). Place matters: Consensual features and regional variations in America well-being and self. *Journal of Personality and Social Psychology*, 83, 160–184.
- Raskin, R. N., Novacek, J., & Hogan, R. (1991). Narcissism, self-esteem, and defensive self-enhancement. *Journal of Personality*, 59, 19–38.
- Raskin, R. N., & Terry, H. (1988). A principle components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, 54, 890–902.
- Rhodewalt, F., & Morf, C. C. (1995). Self and interpersonal correlates of the narcissistic personality inventory. *Journal of Research in Personality*, 29, 1–23.
- Robins, R. W., Trzniewski, K. H., Tracy, J. L., Gosling, P. D., & Potter, J. (2002). Global self-esteem across the lifespan. *Psychology and Aging*, 17, 423–434.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Schaie, K. W. (1965). A general model for the study of developmental problems. *Psychological Bulletin*, 64, 92–107.
- Srivastava, S., John, O. P., Gosling, S. D., & Potter, J. (in press). Development of personality in adulthood: Set like plaster or persistent change? *Journal of Personality and Social Psychology*.
- Twenge, J. M. (2002). Birth cohort, social change, and personality: The interplay of dysphoria and individualism in the 20th century. In D. Cervone, & W. Mischel (Eds.), *Advances in Personality Science* (pp. 196–218). New York: Guilford.
- Twenge, J. M., & Crocker, J. (2002). Race and self-esteem: Meta-analyses comparing Whites, Blacks, Hispanics, Asians, and American Indians and Comment on Gray-Little and Hafdahl (2000). *Psychological Bulletin*, 128, 371–408.

- Twenge, J. M., & Campbell, W. K. (2001). Age and birth cohort differences in self-esteem: A cross-temporal meta-analysis. *Personality and Social Psychology Review*, 5, 321–344.
- Watson, P. J., & Biderman, M. D. (1993). Narcissistic Personality Inventory factors, splitting, and self-consciousness. *Journal of Personality Assessment*, 61, 41–57.
- Watson, P. J., Hickman, S. E., & Morris, R. J. (1996). Self-reported narcissism and shame: Testing the defensive self-esteem and continuum hypotheses. *Personality and Individual Differences*, 21, 253–259.
- Williams, K. D., Cheung, C. K. T., & Choi, W. (2000). CyberOstracism: Effects of being ignored over the Internet. *Journal of Personality and Social Psychology*, 79, 748–762.