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## Narcissism through the ages: What happens when narcissists grow older?

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## ABSTRACT

Three types of adult narcissism, as assessed with Wink's (1991) observational rating method, were studied over a period of 25 years, with participants from the Intergenerational Studies of the Institute of Human Development, UC Berkeley. Narcissism was assessed on three occasions, from age 34 to age 59. Hypersensitive narcissism was found to decrease, Autonomous narcissism increased, and Willfulness narcissism did not change with age. At age 34, both Willfulness and Autonomous narcissism were related to agentic personality characteristics, but only Autonomous narcissism was related to the communal personality characteristic of empathy. Change in narcissism between age 34 and age 59 was shown to predict change in personality at age 71. The agentic personality characteristics that had been associated with Willfulness narcissism at age 34 were no longer characteristic of those individuals at age 71. In addition, in contrast to Autonomous narcissism, at age 34 Willfulness and Hypersensitivity were associated with emotional maladjustment, and predicted continuing maladjustment and less favorable life outcomes in later life.

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**When I get older losing my hair,  
 Many years from now  
 Will you still be sending me a valentine  
 Birthday greetings, bottle of wine.**

.....  
**Will you still need me, will you still feed me,  
 When I'm sixty-four.**

**The Beatles  
 When I'm Sixty-Four**

Narcissism is generally defined as having a highly positive or inflated self-concept, a strong need to be admired by others, fantasizing about fame or power, responding to criticism with self-enhancing attribution, being condescending toward others, and lacking commitment and caring in interpersonal relationships (e.g., Campbell, Rudich, & Sedikides, 2002; Morf & Rhodewalt, 2001). Narcissists must continuously ascertain whether others admire them and will meet their egotistic needs (Morf & Rhodewalt, 2001). The central question for the narcissist, as in the lyrics above, is "will you provide me with the positive recognition that I require, and will you (metaphorically) feed me the admiration I desire?" The lyrics raise the additional question, "Will you continue to treat me this way as I grow old(er)?"

Although the characteristics indicated above may lead to a clinical diagnosis of Narcissistic Personality Disorder (American Psychiatric Association, 2000), narcissism may also exist at a sub-

clinical level, sometimes characterized as "normal" narcissism (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004). It is this type of narcissism that we study in this paper.

Narcissists tend to be characterized as rather unpleasant people – selfish, overly dominant, hostile and arrogant (e.g., Colvin, Block, & Funder, 1995; Morf & Rhodewalt, 2001). However, some narcissists fare quite well, have successful careers and are lauded by the public. They convey an aura of charm and social facility, making them initially attractive (Morf & Rhodewalt, 2001). Narcissists are likely to be drawn to high pressure, high profile professions where their self-confidence and wish for admiration serves them well (Wallace & Baumeister, 2002). Indeed, research shows that many sought after celebrities from the entertainment world are more narcissistic than the general population (Young & Pinsky, 2006), and it has been suggested that narcissism underlies the behavior that draws crowds to admire them (Grigoriadis, 2005). For example, narcissists perform better in public than non-narcissists, when they can be admired for their achievements (Campbell et al., 2002; Wallace & Baumeister, 2002). Thus, in early adulthood, narcissism is often associated with desirable self-enhancing personality characteristics, and these features contribute to the initial likeability of narcissistic individuals (e.g., Oltmanns, Friedman, Fiedler, & Turkheimer, 2004; Sedikides & Gregg, 2001).

Moreover, recent research has shown that narcissism is associated with popularity at first sight, before any interpersonal interaction has taken place. This immediate popularity of narcissists is based on several observable characteristics, including charming

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facial expression, self-assured body movements, humorous verbal expression, and wearing attractive attire (Back, Schmukle, & Egloff, 2010; Vazire, Naumann, Rentfrow, & Gosling, 2008). The admiration received from others, which is based on these behavioral characteristics, likely reinforces both the attractive characteristics of dominance, leadership and authority, and the other less desirable characteristics of narcissism (e.g., exploitation and entitlement). However, in the long run, the negative features of narcissism are likely to result in interpersonal rejection (Campbell & Foster, 2002; Paulhus, 1998; Sedikides & Gregg, 2001; Vazire & Funder, 2006).

## 1. Narcissism and aging

The majority of studies of narcissism have been carried out with young adults.

Little is known about narcissism in older age, and there have been no longitudinal published studies examining the development of narcissism from early adulthood to older age. Roberts, Edmonds, and Grijalva (2010) suggested that narcissism should decrease with age, since the narcissistic characteristic of not making commitments to others runs counter to normative pathways. Supporting this, a large scale, *cross-sectional* study of NPI narcissism found a steady decrease in narcissism between age 15 and 54, with a small increase after age 55 (Foster, Misra, & Reidy, 2009). The present study tracks the *longitudinal* developmental trajectory of narcissism from age 34 to age 59.

Since clinical evidence indicates that beneath the surface grandiosity of the narcissistic personality, these individuals often have an underlying sense of low self-worth (Freud, 1957; Kohut, 1977; Millon, 1981),<sup>1</sup> there is reason to think that the underlying self-doubts and insecurities may fail to support the continuation of the early personality characteristics that contribute to the attractiveness of narcissists. Thus, the present study also focuses on whether the personality traits associated with narcissism at age 34 continue to characterize these narcissists at an older age, or whether the early “bloom” has faded as these individuals grow older.

## 2. Types of narcissism

There is considerable research showing that there are different types, or manifestations of narcissism, depending on whether the narcissism is maladaptive or adaptive (Cramer & Jones, 2008; Pincus & Lukowitsky, 2010; Raskin, Novacek, & Hogan, 1991; Russ, Shedler, Bradley, & Westen, 2008; Wink, 1992). Narcissism may impede psychological growth (e.g., Colvin et al., 1995; Paulhus, 1998; Wallace & Baumeister, 2002) or may contribute to positive psychological development (e.g., Sedikides et al., 2004; Smalley & Skyke, 1996).

Regarding maladaptive narcissism, Cain, Pincus, and Ansell (2008) note that although more than 50 different labels have been used to describe different manifestations of narcissism, a conceptual analysis of these variations reveals two broad themes of dysfunction. One theme focuses on the grandiose aspect of narcissism; the other reflects the vulnerable aspects (see also Bosson et al., 2008). These two types of narcissism have been characterized as “Willful” and “Hypersensitive”, respectfully (Wink, 1991, 1992). *Willful* narcissism is characterized by an open expression of grandiosity, self-confidence, condescension, dominance and extraversion, in which there is willful manipulation and exploitation of others (Miller et al., in press; Raskin & Novacek, 1989; Wink,

1992; Zeigler-Hill, Clark, & Piekard, 2008). This grandiose type of maladaptive narcissism is positively related to scores on the self-report Narcissistic Personality Inventory (Miller et al., in press), which also includes scales that assess adaptive narcissism (NPI: Raskin & Hall, 1979; Raskin & Terry, 1988). *Hypersensitive* narcissism is characterized by oversensitivity to perceived slight or failed appreciation on the part of others, based on the need to maintain an underlying grandiose self-image, and is accompanied by chronic feelings of humiliation and rejection (Cain et al., 2008; Miller et al., in press; Rhodwalt & Morf, 1995; Wink, 1992; Zeigler-Hill, et al., 2008). The characteristics of Willful narcissists are evidenced in their manifest behavior, while for Hypersensitive narcissists they are more concealed “beneath a façade of inhibition” (Bosson et al., 2008, p. 1428). Because Hypersensitive narcissists tend to keep the grandiosity hidden, they are sometimes referred to as “closet” narcissists (e.g., Masterson, 1993). This Hypersensitive type of narcissism is unrelated to total scores on the CPI Narcissism scale (Miller et al., in press).

In addition to these two dysfunctional, maladaptive forms of narcissism, Pincus and Lukowitsky (2010) have discussed how narcissism may also be manifest in an adaptive personality organization. Adaptive narcissism is characterized by healthy ambitions, feelings of vitality, creativity and empathy in adulthood (Kohut, 1971; Pincus & Lukowitsky, 2010; Russ et al., 2008; Wink, 1992). Adaptive narcissism may also be associated with overly high ambitions, but in addition is characterized by having sufficient interpersonal sensitivity so as not to suffer the eventual interpersonal rejection that is often experienced in association with maladaptive narcissism. Pincus and Lukowitsky (2010) indicate that both Wink’s *Autonomy* scale (Wink, 1991, 1992) and the High Functioning/Exhibitionistic type identified by Russ et al. (2008) assess the adaptive type of narcissism.

Adaptive narcissism supports striving toward and achievement of goals and successful careers (Wink, 1991). In contrast, maladaptive narcissism is characterized by self-aggrandizement, power seeking and condescension (Raskin et al., 1991) in which an inflated sense of self masks underlying feelings of vulnerability and insecurity, of which the individual is generally unaware, except in time of crisis or failure (Kernberg, 1975; Kohut, 1976). A critical difference between adaptive narcissism and maladaptive narcissism is that the explicit personality dispositions of adaptive narcissism are supported by an underlying implicit sense of self that is firm and cohesive, whereas the explicit personality of maladaptive narcissists covers an implicit sense of self that is poorly integrated, unstable, and vulnerable (Bosson et al., 2008). An important difference between Willful and Hypersensitive narcissists is that the former regulate their self-esteem through behavioral strategies, whereas Hypersensitive narcissists fail to engage in overt self-enhancement behaviors and rely primarily on the approval of others (Zeigler-Hill et al., 2008).

## 3. Narcissism and emotional maladjustment

Several studies (e.g., Campbell, 2001; Raskin & Novacek, 1989; Sedikides et al., 2004; Zuckerman & O’Loughun, 2009) have found NPI Narcissism to be associated with psychological well-being. Pincus et al. (2009) have suggested that the positive relation of the NPI to psychological well-being is likely due to the NPI assessing primarily adaptive narcissism. When NPI scores were divided into adaptive and maladaptive narcissism, Watson and Biderman (1993) found that whereas the Adaptive scores were negatively related to depression and anxiety, the Maladaptive scores showed positive relations with depression and anxiety. More recently, Rosenthal and Hooley (2010) have demonstrated that the positive relation between the NPI and psychological health is a result of the overlap of the NPI with self-reported self-esteem.

<sup>1</sup> This finding is also shown in experimental studies in which the most highly narcissistic individuals are those with high explicit Self-esteem (SE) but low implicit SE (e.g., Zeigler-Hill, 2006).

However, the studies that have shown a positive relation between NPI and well-being tend to rely on self-report (e.g., Zuckerman & O'Loughun, 2009), which taps into the narcissistic proclivity to self-enhance. Narcissists are likely to self-report that they feel fine – they report that they are not anxious, not depressed. Due to this possibility of self-report bias, Sedikides et al. (2004) have suggested that, to determine the relation of narcissism to well-being, observer reports, rather than self-report measures should be used in longitudinal studies. This is the approach used in the present study.

Theoretically, one might expect adaptive and maladaptive narcissism to be differentially related to emotional maladjustment. Given the fragile, vulnerable self that underlies maladaptive narcissism (Kernberg, 1975; Kohut, 1976), this type of narcissism is likely to be associated with anxiety and depression (e.g., Sedikides & Gregg, 2001). Adding to this is the likelihood that maladaptive narcissism will be associated with failure to achieve unrealistic, grandiose goals, and with failure in interpersonal relations, resulting in negative consequences for emotional well-being. In contrast, we would not expect adaptive narcissism, based on a stable and cohesive sense of self, to be associated with anxiety or depression.

#### 4. Personality characteristics associated with narcissism

A critical difference between maladaptive and adaptive narcissism occurs in the behavioral manifestation of agentic and communal traits. Maladaptive Willful narcissism is characterized by a direct expression of dominance, confidence, power, positive self-opinion, and persistent goal seeking, dispositions that may be considered 'agentic' (e.g., Bosson et al., 2008; Campbell & Foster, 2002; Campbell et al., 2002; Collins & Stukas, 2008; Holtzman, Vazire, & Mehl, 2010; Luhtanen & Crocker, 2005; Paulhus & John, 1998). In this way, Willful narcissists are similar to adaptive narcissists. However, only adaptive narcissism may be expected to be associated with 'communal' dispositions such as sociability and empathy (Campbell et al., 2002; Paulhus & John, 1998). Although both adaptive and Willful narcissism may be associated with desire for success, for Willful narcissism success means being admired by others without regard for their well-being, and without interest in affiliation or intimacy (Campbell & Foster, 2002; Collins & Stukas, 2008; Emmons, 1989; Luhtanen & Crocker, 2005; Paulhus & John, 1998). Thus Willful narcissism may be expected to be associated with low scores on communal traits (Bosson et al., 2008; Campbell et al., 2002). In contrast to adaptive and maladaptive Willful narcissism, we do not expect that maladaptive Hypersensitive narcissism would be associated with either agentic or communal behavioral dispositions, because the behavior associated with Hypersensitive narcissism is inhibited and the narcissistic characteristics tend to be hidden (Bosson et al., 2008; Wink, 1991).

#### 5. Personality as associated with aging

If changes in personality occur as the narcissist ages, these should be considered in the larger context of how, or if, these characteristics generally change with age. In a previous longitudinal study, Jones, Livson, and Peskin (2003) studied personality change in the participants from the Institute of Human Development Inter-generational Studies, based on the California Psychological Inventory (CPI; Gough & Bradley, 1996). For the seven personality scales used in the present study, five (Social Presence, Self acceptance, Capacity for Status, Empathy and Sociability) were best described by linear decrease from age 33 to age 75; one (Dominance)

showed linear increase, and one (Independence) was best characterized as showing negative curvilinear change, with a zenith at age 53. Direction of change (slope) was not related to gender or subgroup (Oakland Growth Study, OGS; Berkeley Guidance Study, BGS) for any of the seven scales. Individual variability in personality change, as this might relate to other variables, was not explored in that study.

#### 6. Emotional adjustment and aging

Regarding changes in emotional adjustment as related to aging, analysis of *longitudinal* studies suggests a linear increase in emotional health, and a decrease in depression and anxiety from late adolescence to late middle adulthood (age 50) (e.g., Aldwin, Spiro, Levenson, & Bosse, 1989; Charles, Reynolds, & Gatz, 2001; Mroczek & Spiro, 2003; Roberts, Walton, & Viechtbauer, 2006). After this age, longitudinal study has found an increase in mental health problems. *Cross-sectional* studies also support the finding of a linear decrease in psychological problems such as anxiety and depression from age 25 to age 50/60, followed by an increase (Butcher et al., 1991; Carstensen, Pasupathi, Mayr, & Nesselroade, 2000; Kessler, Foster, Webster, & House, 1992; Newman, 1989; Teachman, 2006). However, other evidence does not support the idea that depression or anxiety increase in older age, except as associated with specific circumstances, such as ill-health (Beekman, 2008; Vink, Aartsen, & Schoevers, 2008).

In general then, both cross-sectional and longitudinal data show a decrease in depression and anxiety between young adulthood and late middle adulthood, followed by an increase in older age. Evidence is lacking regarding possible change in narcissism, as related to aging.

#### 7. The present study

In a recent review of the narcissism literature, Cain et al. (2008) concluded that, since the majority of narcissism research has relied on the NPI, the focus has been on the grandiose type of narcissism reflected in that measure. They recommended that future research should include measures that assess the vulnerable type of narcissism, such as the Wink measure of Hypersensitivity. Accordingly, the present research studies both types of maladaptive narcissism (Willfulness, Hypersensitivity), as well as the adaptive type of narcissism discussed by Pincus and Lukowitsky (2010).

The plan of this study is to show, first, that the different types of narcissism have different implications for personality dispositions and for emotional adjustment. It is expected that, of the two types of maladaptive narcissism, Willfulness will be related to personality measures that are behaviorally based, but Hypersensitivity will not. This is because Willful narcissism is characterized by an open expression of grandiosity, self-confidence, dominance and extraversion, whereas for Hypersensitive narcissism, these behavioral characteristics tend to be concealed beneath a façade of inhibition (Bosson et al., 2008); Hypersensitive narcissists fail to engage in *overt* self-enhancement behaviors (italics mine; Zeigler-Hill et al., 2008). However, underlying emotions, such as anxiety and depression, when these are assessed by non-self-report measures, are expected to be characteristic of both Willful and Hypersensitive narcissism.

Next, we investigate how different types of narcissism may predict change in personality and adjustment with age, considering especially whether the attractive personality features of the younger narcissist continue as the narcissist ages. Finally, we determine the longitudinal trajectory of narcissism in adulthood, and explore how change in narcissism with age is related to change in personality, emotional adjustment, and to life outcome variables.

**Hypothesis 1a.** It is expected that, at age 34, adaptive narcissism and maladaptive Willful narcissism will both be associated with self-assurance and agentic personality characteristics that contribute to the attractiveness of these types of narcissism.

**Hypothesis 1b.** Adaptive and Willful narcissism will differ for those characteristics reflecting sociability and concern for others. Only adaptive narcissism is expected to be associated with these communal personality characteristics.

**Hypothesis 2a.** It is predicted that as participants age, maladaptive Willful narcissism becomes less characterized by agentic characteristics. Lacking a firm sense of self and interpersonal support, the agentic characteristics cannot be sustained over time.

**Hypothesis 2b.** Further, it is predicted that the decreased relation between early Willful narcissism and agentic characteristics at older age will be especially true for those individuals who increase in Willful narcissism with age.

**Hypothesis 2c.** In contrast, adaptive narcissism is expected to continue to be related to agentic characteristics in older age, in that there is a cohesive, stable sense of self, and social support to sustain these characteristics. It is unclear whether communal traits will continue to be related to adaptive narcissism at older age, in that these have been shown to decrease for the total group of participants in this sample.

**Hypothesis 3a.** Both types of maladaptive narcissism will be associated with emotional maladjustment (high anxiety and high depression) in the participants' earlier life. It is also expected that early maladaptive narcissism will continue to be associated with maladjustment at later adulthood. It is not expected that adaptive narcissism, when assessed by a non-self-report measure, will be either positively or negatively related to anxiety or depression. Some, but not all, adaptive narcissists may experience disappointments and failures, with the result that some experience emotional upset, and others not.

**Hypothesis 4a.** Finally, it is expected that early adaptive and maladaptive narcissism will predict different life outcomes. It is hypothesized that maladaptive narcissism will be associated with lack of success in interpersonal relationships, lack of occupational success, and low socio-economic status.

**Hypothesis 4b.** In contrast, it is hypothesized that adaptive narcissism will be associated with stability in interpersonal relationships and high occupational and social levels.

## 8. Method

### 8.1. Participants

Participants in this study come from the longitudinal samples of the Oakland Growth Study (OGS) and the Berkeley Guidance Study (GS). These participants have been followed from childhood to late adulthood as part of the Intergenerational Studies, conducted by the Institute of Human Development of the University of California, Berkeley.

The OGS began in 1931 when the participants were approximately 11 years old and were scheduled to attend the same Junior

High School ( $N = 212$ ). The GS began in 1928 and included every third child born in Berkeley from January of that year to June of 1929 ( $N = 248$ ). All participants were studied intensively during childhood and adolescence. During adulthood, data are available at Adult 1 (A1: age 33 GS, age 35 OGS, mean = 34 years); Adult 2 (A2: age 42 GS; age 49 OGS, mean = 45.5 years); Adult 3 (A3: age 55 GS; age 62 OGS, mean = 58.5 years); and Adult 4 (Age 68 GS; age 75 OGS, mean = 71.5 years).

Although the two groups differ somewhat in age at the adult times of testing, they have typically been combined in research studying adult personality change (e.g., Cramer, 2003, 2004; Haan, Milsap, & Hartka, 1986; Helson, Jones, & Kwan, 2002; Jones et al., 2003; Jones & Peskin, 2010; Wink, Dillon, & Fay, 2005). The sample is predominantly White, representative of the population in the San Francisco Bay Area at the time the studies were begun, with an approximately equal number of men and women.

As is inevitable in longitudinal studies, not all individuals participated at all ages, and not all participants had both CPI and Q-sort data at each age. CPI scores were available for 230 participants at A1, 198 at A2, 194 at A3 and 136 at A4. Q-sort data were available for 232 participants at A1, 233 at A2, and 233 at A3.

### 8.2. Measures

#### 8.2.1. California Adult Q-sort (CAQ; Block, 1961)

On the basis of intensive clinical interviews, each participant was assessed with the CAQ by two or more judges at A1, A2 and A3. The 100 CAQ items describe a wide range of cognitive, emotional, social and physical behaviors that can be used to characterize an individual. Each judge, working independently, sorted the CAQ items into a forced-choice, nine-point distribution for each participant, ranging from "extremely characteristic" to "extremely uncharacteristic". The Q-sort requires a forced-choice distribution, such that only five items can be rated as "extremely characteristic" (rating of 9) and five as "extremely uncharacteristic" (rating of 1). Less extreme scores (rating of 8–2) are allotted greater, but still specified, frequencies. Such ipsative scoring requires the rater to consider the target individual only in terms of his or her own unique personality, not in terms of how s/he compares to others of a similar age (Ozer, 1993). The Q-item scores were then averaged across the raters to obtain final ratings for each item for each participant. These Q-item ratings were used for the present analyses.<sup>2</sup>

#### 8.2.2. Narcissism

In the present research, Maladaptive narcissism is assessed with the Willfulness and the Hypersensitivity narcissism scales (Wink, 1991, 1992). Adaptive narcissism is assessed with the Autonomy narcissism scale (Wink, 1991, 1992). These measures are based on the CAQ.

Previously, nine expert judges sorted the 100 items of the CAQ to represent a highly narcissistic person, based on the DSM-III criteria for a Narcissistic Personality Disorder and their clinical intuition. The alpha reliability of the aggregate judgments was .91. The Q-ratings for each item (1 through 9) were then averaged across judges, and the resulting value was used to create a CAQ template, or prototype, measure of narcissism.

The 13 CAQ items most characteristic of this narcissism prototype were then factor analyzed, yielding three factors: Willfulness, Hypersensitivity, and Autonomy. The three factor scores were then correlated with the total set of 100 CAQ items. CAQ items that

<sup>2</sup> For more detail on the Q-sort procedure, see Eichorn, 1981.

correlated plus or minus .50 or greater with one of the factors,<sup>3</sup> and not with the other two factors, were kept to form a scale to represent that factor. This itemmetric technique maximizes internal consistency while minimizing unwanted correlations with other scales (Wink, 1992). Based on these correlations, Wink (1992) constructed three new CAQ Narcissism scales: Willfulness (10 items), Hypersensitivity (12 items), and Autonomy (11 items). Internal consistency of the three scales ranged from .87 to .92 in the criterion sample of 105 middle aged college women, and from .87 to .89 in a cross-validation sample of 350 community residents and college sophomores. In the present sample, Cronbach's alpha for Willfulness is .83; for Hypersensitivity .88; for Autonomy .85. It should be noted that each participant can receive a score for each of the three types of narcissism. The inter-correlations of the three scales in the original samples ranged from  $-.16$  to  $+.28$ . In the present sample, the Willfulness and Hypersensitivity scales are positively related at each age ( $r_s = .22$ – $.36$ ,  $p_s < .001$ ), but they are unrelated or negatively related to Autonomy ( $r_s = -.04$  to  $-.38$ ,  $p_s = .50$ – $.001$ ). Because some of the scale items are negative predictors of narcissism, the sum of the CAQ item values (item values range from 1 to 9), could have a negative value. To avoid negative numbers, a constant of 30 has been added to each Narcissism score.

Validity of the scales has been demonstrated through significant correlations with established measures of narcissism and selected personality inventory scales; these include independent observer ratings of Narcissism, the California Psychological Inventory (CPI) Narcissism scale (Wink & Gough, 1990), relevant Minnesota Multiphasic Personality Inventory scales (MMPI; Hathaway & McKinley, 1940), and partner ratings on the Adjective Check List (Gough & Heilbrun, 1983) for 14 traits associated with each type of Narcissism – e.g., Aggressive (Willful), Lack of trust (Hypersensitivity), Self-confident (Autonomy), in ways that would be predicted from theory (Wink, 1992).

For example, the scale for Willfulness, which is characterized by external grandiosity and exhibitionism, correlated positively with observer DSM-III ratings of narcissism, with the self-report CPI Narcissism scale, with measures of pathology, and with partner ratings of 'tendency to show off' (Wink, 1992). This scale is characterized as "overt narcissism" (Wink, 1992). CAQ items include *Characteristically pushes and tries to stretch limits and rules; sees what s/he can get away with: Is self-indulgent; tends to "spoil" or pamper himself or herself.*

The scale for Hypersensitivity, which is characterized by resentment, depletion and sense of entitlement, correlated positively with MMPI scores indicating social inhibition, lack of self-confidence, rebelliousness and hostility, with observer ratings of pathology, and with partner ratings of 'lack of trust' and 'withdrawn'. However, Hypersensitivity was not correlated with any of the agentic or communal scales of the CPI. The Hypersensitivity scale is characterized as "covert narcissism" (Wink, 1992). CAQ items include *Is thin-skinned; sensitive to anything that can be construed as a criticism or slight or insult; takes offense easily; Tends to be self-defensive; unable to acknowledge personal shortcomings or failures; quick to defend self from criticism.*

In contrast, the Autonomous scale correlated positively with inventory measures of self-assurance, confidence, empathy, and energy, with partner ratings of 'self-confidence', 'persevering' and 'resourceful', and did not correlate with measures of pathology (Wink, 1992). This scale is characterized as "healthy narcissism" (Wink, 1992). CAQ items include *Values own independence and autonomy; emphasizes his/her freedom to think and act without interference or help from others; Has high aspiration level for self; is ambitious; sets high personal goals.*

<sup>3</sup> That is, items that were indicative of that type of narcissism (positive  $r = /> .50$ ) and items that were contraindicative (negative  $r = /> .50$ ) of that type of narcissism were kept.

### 8.2.3. California Psychological Inventory (CPI: Form 434, Gough & Bradley, 1996)

Participants completed the 434 true–false items of the CPI at A1, A2 A3 and A4.<sup>4</sup> The CPI consists of 20 scales that describe a broad range of interpersonal and intrapersonal behaviors. The items and scales were created and retained based on behaviorally established criterion groups (Jones & Peskin, 2009). Each scale has extensive evidence for good reliability and construct validity (Gough & Bradley, 1996; Groth-Marnat, 1984).

Previous research has shown that seven of these scales form a category that assesses self-assurance, poise, and interpersonal proclivities (Gough & Bradley, 1996). At age 34, four of these dispositions – Dominance (36 items), Social Presence (38 items), Self-acceptance (28 items) and Independence (30 items) are expected to be associated with Willfulness and Autonomous narcissism – i.e., these agentic characteristics are manifest in behavior. A fifth agentic disposition – Capacity for Status (28 items) is more likely to be associated with Autonomous narcissism, in that this scale assesses ambition and the wish to be a success, whereas Willfulness narcissism is more oriented toward being admired than being a success (Morf & Rhodewalt, 2001). The two remaining CPI scales in this cluster – Empathy (38 items) and Sociability (32 items) may be considered 'communal', in that they assess a concern for the feelings of others and a liking to be with others. These dispositions are expected to be characteristic of Autonomous narcissism, but not of either Willfulness or Hypersensitivity narcissism. For a description of the implications of high and low scores on each of these scales, see Table 1.

### 8.2.4. Emotional maladjustment: anxiety and depression

Based on factor analyses of items from the Center for Epidemiological Studies-Depression (CES-D) scale (Radloff, 1977) and on items from a self-report anxiety scale, Kremen (1996) created a "depressive tendencies" scale and a "susceptibility to anxiety" scale, taking care to avoid the problems of psychometric overlap. Both scales had good reliability: Cronbach's alpha for Depression  $>.82$  and for Anxiety  $>.72$ . Subsequently, Kremen (1996) determined the correlation between each factor scale (Depression, Anxiety) with each of the 100 CAQ items, after partialling out the variance due to the other dimension.

The CAQ items that Kremen had found to be significantly correlated with his specific Anxiety scale (21 CAQ items) and with his specific Depression scale (31 CAQ items) were used in the present study to create criterion-keyed scales for Anxiety and Depression.<sup>5</sup> For the Anxiety scale, four CAQ items that overlapped with the Narcissism scales were omitted. The internal consistency reliability for the reduced Anxiety scale was:  $\alpha = .80$ , and the reduced scale was strongly correlated with the original scale,  $r = .96$ . For the Depression scale, ten CAQ items that overlapped with the Narcissism scales were omitted. The internal consistency reliability of the reduced Depression scale was:  $\alpha = .81$ , and the reduced scale was strongly correlated with the original scale,  $r = .96$ . Because some of the CAQ items were negative predictors of (i.e., negatively correlated with) the criterion Anxiety and Depression scales, the sum of the CAQ item values could be a negative value. For this reason, a constant of 30 was added to each score.

## 8.3. Life outcome measures

### 8.3.1. Marital relationship

On the basis of information obtained from the participant at Adult 3, both number of marriages and number of divorces were

<sup>4</sup> At each adult assessment period, participants completed the CPI. Since different versions of the CPI were used over the years, all item data were rescored to create a version equivalent to the current CPI version (CPI-434; Gough & Bradley, 1996).

<sup>5</sup> These scales have been used successfully in previous research (Cramer, 2002; Cramer & Tracy, 2005).

**Table 1**  
Implications of high and low scores on CPI scales.

Scale	High score	Low score
Dominance	Confident, assertive	Cautious, hesitant to take initiative
Social Presence	Self-assured, spontaneous	Reserved, self-denying
Self-acceptance	Has good opinion of self	Self-doubting; often thinks others are better
Independence	Self-sufficient, persistent goal seeking	Lacks self-confidence
Capacity for Status	Ambitious, wants to be a success	Unsure of self, dislikes direct competition
Empathy	Understands how others feel	Unempathic
Sociability	Sociable, likes to be with people	Shy, often inhibited

From CPI manual, Gough and Bradley (1996).

determined. These data give an indication of success in maintaining intimate partner relationships.

### 8.3.2. Hollingshead occupational rating (Hollingshead & Redlich, 1958)

On the basis of information obtained at Adult 3, each participant was assigned a score on the Hollingshead Occupational rating scale, ranging from 1 to 7. Scores of 1 indicate high level executives and professions; scores of 4 indicate clerical and sales workers; scores of 7 indicate unskilled employees. Participants who were not in the labor market – e.g., women who were homemakers – are not included in the Hollingshead Occupational rating. These data provide an indication of life success in reaching higher level occupational goals.

### 8.3.3. Hollingshead Social Class rating (Hollingshead & Redlich, 1958)

On the basis of information obtained at Adult 3, each participant was assigned a score on the Hollingshead Social Class rating scale, ranging from 11–77. Scores of 11–17 indicate Social Class I (Upper class), 32–47 indicate Social Class III (Middle class) and 64–77 indicate Social Class V (Lower class). These data provide an indication of life success in reaching higher social levels.

## 9. Results

The first part of the results presents the relation of three types of A1 Narcissism to the A1 CPI dimensions and to the A1 measures of emotional maladjustment. Then, to determine if the characteristics associated with Narcissism at A1 continue in later life, we determine the relation of A1 Narcissism to the CPI dimensions at A4 and to Maladjustment at A3.

Next, hierarchical linear modeling (HLM) is used to assess *change* in all variables, from A1 to later adulthood. Then, I determine whether A1 Narcissism predicts *change* in the CPI and Malad-

justment variables. If so, I determine if this change is associated with *change* in A1 Narcissism.

### 9.1. Descriptive statistics

Table 2 presents the means and standard deviations for the three Narcissism scales, at A1, A2 and A3, for all participants and for participants with scores at all three ages (see also Fig. 1). An Age (3) × Gender (2) repeated measures ANOVA was carried out for each of the three Narcissism scales. For Willfulness, there was a significant Age effect,  $F(2,350) = 10.13$ ,  $p < .001$ ,  $\eta^2 = .22$ , reflecting the fact that Willfulness at A2 was greater than at A1,  $t(176) = 3.42$ ,  $p < .001$ , and greater than at A3,  $t(176) = 4.63$ ,  $p < .001$ . Gender was not significant, but there was a significant Age × Gender interaction,  $F(2,350) = 2.98$ ,  $p = .05$ ,  $\eta^2 = .14$ . At A3, men (Mean = 22.04, SD = 8.73) scored higher than women (Mean = 18.16, SD = 8.27),  $t(175) = 3.03$ ,  $p < .003$ . Men and women did not differ at A1 or A2.

For Hypersensitivity, there was a significant Age effect,  $F(2,350) = 33.46$ ,  $p < .001$ ,  $\eta^2 = .40$ , reflecting the fact that Hypersensitivity at A1 was greater than at A2 or A3,  $t(176) = 6.18$  and  $7.67$ ,  $ps < .001$ . Also, there was a tendency for Hypersensitivity to be greater at A2 than at A3,  $t(176) = 1.87$ ,  $p < .06$ . There was also a significant effect for Gender,  $F(1,175) = 7.04$ ,  $p < .009$ ,  $\eta^2 = .20$ . Men scored higher than women. The interaction was not significant.

For Autonomous narcissism, there was a significant effect for Age,  $F(2,350) = 18.91$ ,  $p < .001$ ,  $\eta^2 = .32$ , reflecting the fact that Autonomous at A2 was greater than at A1 or A3,  $t(176) = 6.16$  and  $3.44$ ,  $ps < .001$ , and A3 was greater than A1,  $t(176) = 3.03$ ,  $p < .003$ . Neither Gender, nor the Gender × Age interaction was significant.

The means and standard deviations for the seven CPI scales and the two Maladjustment scales are presented in Tables 3 and 4.

**Table 2**  
Narcissism scores: Adult 1, Adult 2, Adult 3: all participants, repeated participants: means, standard deviations.

	All participants			Repeated participants		
	A1	A2	A3	A1	A2	A3
<i>N</i>	232	233	233	177	177	177
<i>Narcissism scales</i>						
<i>Willfulness<sup>a</sup></i>						
Mean	21.40	23.03	20.02	20.23	23.15	19.89
S.D.	10.39	9.36	9.16	10.39	9.51	8.67
<i>Hypersensitivity<sup>b</sup></i>						
Mean	10.94	3.61	2.32	10.48	4.06	2.17
S.D.	11.81	11.27	12.70	12.76	11.51	12.45
<i>Autonomous<sup>c</sup></i>						
Mean	27.36	33.46	39.56	28.06	33.11	30.59
S.D.	11.01	11.63	11.04	11.77	11.53	10.91

<sup>a</sup> Maximum score = 67.

<sup>b</sup> Maximum score = 46.

<sup>c</sup> Maximum score = 66.

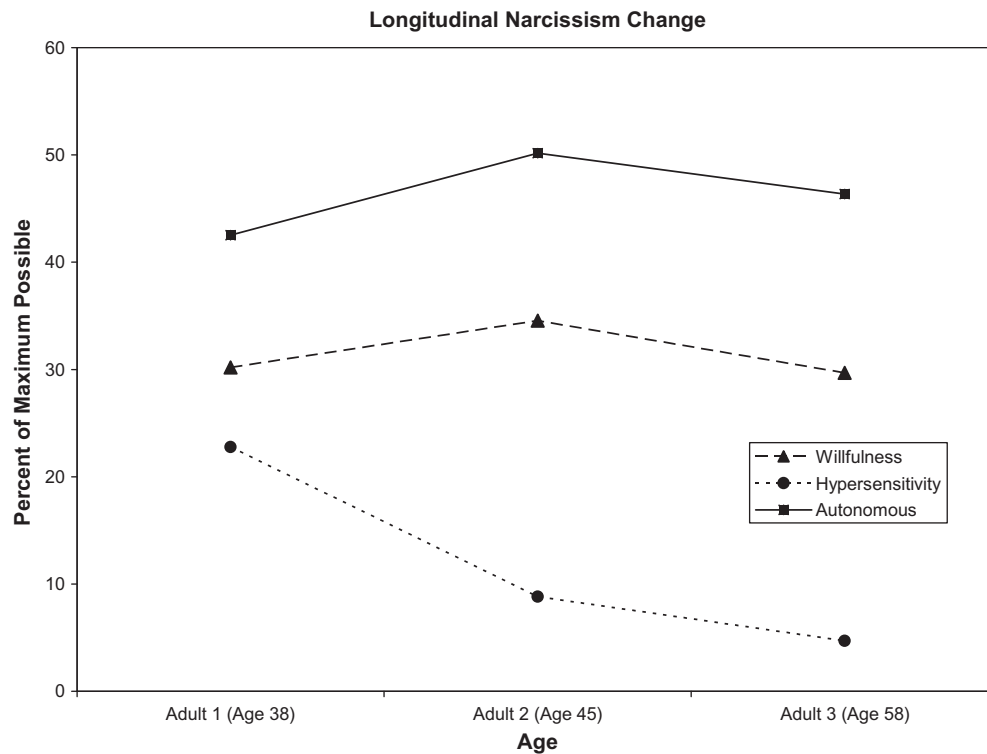


Fig. 1. Longitudinal narcissism change. Scales made equivalent by calculating scores as the percent of maximum possible score.

Change in these variables is tested subsequently with hierarchical linear modeling (HLM).

## 9.2. Correlations between A1 Narcissism and CPI dimensions

Table 5 presents the correlations between the A1 Narcissism scales and the CPI scores at A1 and A4. At A1, Willfulness and Autonomous are both correlated with the A1 agentic CPI scales Dominance, Social Presence, Self-acceptance, and Independence. In addition, Autonomous is correlated with Capacity for Status and with the communal CPI scales Empathy and Sociability. The differences between A1 Willfulness and A1 Autonomous correlations with Capacity for Status, Empathy and Sociability were tested with Hotelling's  $t$ -test.<sup>6</sup> The results indicated that the two types of Narcissism did not differ for relation with the agentic traits of Dominance, Social Presence, Self-acceptance, or Independence, and they did not differ for Sociability. However, they were significantly different for A1 correlations with Capacity for Status,  $t(175) = 2.68$ ,  $p > .004$ , and for Empathy,  $t(175) = 2.20$ ,  $p < .02$ , but not for Sociability  $t(175) = .38$ ,  $p = .35$ .

In older age, A1 Autonomous continues to predict four of the seven CPI dimensions (Dominance, Self-acceptance, Independence, and Capacity for Status), but Willfulness does not. The difference between A1 Willfulness and A1 Autonomous correlations with the A4 CPI variables was tested using Hotelling's  $t$ -test. The two type of Narcissism were significantly different for Dominance,  $t(109) = 2.43$ ,  $p < .01$ , Social Presence,  $t(109) = 1.49$ ,  $p < .06$ , Self-acceptance,  $t(109) = 1.88$ ,  $p < .03$ , and Independence,  $t(109) = 2.66$ ,  $p < .004$ . Hypersensitivity was not related to any of the CPI variables, at either A1 or A4.

To check that these findings were not due to A4 dropouts, participants who did and did not have A4 CPI scores were compared by  $t$ -test for their scores on the A1 CPI scales. The results showed

no significant differences between the drop-outs and the continuers for their seven A1 CPI scores.

The results above show that the agentic personality characteristics associated with Willfulness at early adulthood are no longer associated at late adulthood. We next explore the basis for this change. The following three sections address three questions, designed to explain why the correlations between A1 Narcissism and CPI dispositions change between A1 and A4. (1) Is this due to CPI personality dispositions changing with age? (2) If so, does A1 Narcissism predict the magnitude of A4 CPI change? (3) If so, is the relation between A1 Narcissism and A4 CPI change also due to a change in Narcissism?

## 9.3. Do CPI dispositions change with age?

CPI change is assessed through the use of longitudinal hierarchical linear modeling (HLM; Bryk & Raudenbush, 1992), to detect individual CPI change from A1 to A4, in a sample of 284 individuals. HLM has the advantage of being able to include individuals with less than complete data and allows for different numbers of individuals at different time points. In addition, multiple waves of data can be considered simultaneously, and the actual growth function can be determined within a single model. The analysis from Level 1 describes intraindividual change for the longitudinal variable. That is, the Level 1 model represents the individual change in the CPI variable that we hypothesized will occur from age 34 to age 71 (Singer & Willett, 2003, p. 51). Once the overall change trajectory is determined, a second step (Level 2) describes inter-individual differences in the intraindividual change model (Bryk & Raudenbush, 1987). Even if the Level 1 change (slope) is not significant, if there are significant differences in growth trajectories between individuals, factors related to these differences can be explored.

At each wave (A1, A2, A3, A4), age was calculated as the average age of the two longitudinal groups (Oakland, Berkeley). These age-group values (34, 45.5, 58.5, 71.5) were centered at agegroup 34.

<sup>6</sup> All Hotelling's tests reported in the paper are one-tailed, based on predicted differences.

**Table 3**  
CPI scores: Adult 1, Adult 2, Adult 3, Adult 4: means, standard deviations.

	A1	A2	A3	A4
<i>N</i>	230	198	194	136
<i>CPI scale</i>				
<i>Dominance</i>				
Mean	21.47	21.52	22.29	21.74
S.D.	6.24	6.63	6.41	6.10
<i>Social Presence</i>				
Mean	25.53	24.97	24.68	24.29
S.D.	4.56	4.90	4.94	4.15
<i>Self-acceptance</i>				
Mean	16.69	16.62	16.69	15.75
S.D.	3.69	3.80	3.74	3.80
<i>Independence</i>				
Mean	17.13	17.82	18.00	17.41
S.D.	4.17	4.60	4.36	3.70
<i>Capacity for Status</i>				
Mean	17.87	17.21	17.34	17.47
S.D.	3.54	3.47	3.50	3.27
<i>Empathy</i>				
Mean	20.53	20.49	20.62	20.61
S.D.	4.45	4.67	4.47	4.73
<i>Sociability</i>				
Mean	21.27	20.59	20.99	20.56
S.D.	4.83	4.88	5.18	4.55

**Table 4**  
Personal adjustment scores: Adult 1, Adult 2, Adult 3: means, standard deviations.

	A1	A2	A3
<i>N</i>	232	233	233
<i>Anxiety<sup>a</sup></i>			
Mean	20.89	19.44	18.06
S.D.	11.53	11.92	10.03
<i>Depression<sup>b</sup></i>			
Mean	16.46	9.37	9.30
S.D.	13.40	13.38	15.01

<sup>a</sup> Maximum score = 56.

<sup>b</sup> Maximum score = 58.

Thus the intercepts represent the estimated CPI score at Adult 1 (agegroup 34) (for the use of agegroups, see Singer & Willett, 2003). The results of the CPI HLM analyses using agegroups did not differ from the earlier results using age as a continuous variable (Jones et al., 2003).

For each CPI disposition, an unconditional means model (intercept only) was tested first. Then, a linear growth model was tested. The relative fit of the two models was assessed using Bryk and Raudenbush's (1992) chi-square test of deviance. These tests, and AIC measures of fit, are reported in Table 6.

For each CPI disposition, the linear model fit as well or better than the intercept only model; thus the linear model was retained. Further testing comparing the linear models with quadratic models indicated no significant improvement with the quadratic model. Thus the linear models were retained.

The results of the seven linear HLM analyses indicated a positive change trajectory for Dominance ( $b_1 = .008$ ) and Independence ( $b_1 = .008$ ), and a negative trajectory for Social Presence, Self-acceptance, Capacity for Status, Empathy and Sociability ( $b_1 = -.003$  to  $-.032$ ) (see Table 6) Also, there was significant individual change variability for each of these dimensions ( $ps < .01$ ) (see Table 6).

These results indicate that the average participant's Dominance and Independence scores increased .30 points from A1 to A4, Social Presence decreased 1.20 points, Self-acceptance and Capacity for

Status decreased .52 and .49 points, Empathy decreased .11 points, and Sociability decreased .30 points.

#### 9.4. Does A1 Narcissism predict A4 CPI change?

To determine the relation between A1 Narcissism and change in the CPI dimensions, Narcissism scores at A1 were correlated with change (slope) scores for each CPI dimension. The results are presented in Table 7. Willfulness at A1 predicted a decrease in Dominance ( $r = -.16$ ), a decrease in Social Presence ( $r = -.19$ ), and a decrease in Empathy slope ( $r = -.14$ ). Autonomous predicted an increase in Independence ( $r = .33$ ), and a decrease in Capacity for Status ( $r = -.18$ ), and Empathy ( $r = -.19$ ). Hypersensitivity was unrelated to CPI change.

These findings indicate that two of the changed correlations for Willfulness at A4 were related to a decrease in CPI scores (Dominance and Social Presence), but two were not (Self-acceptance and Independence). For Autonomous narcissism, the change in the Empathy correlation at A4 was related to a decrease in Empathy.

#### 9.5. Is the changed correlation between A1 Narcissism and A4 CPI also due to Narcissism change?

It is also possible that the changed relation between A1 Narcissism and A4 CPI scores was due to a change in Narcissism between A1 and A3. Analysis of Narcissism change using HLM indicated that although change was significant for Hypersensitivity ( $b_1 = -3.44$ ,  $p < .001$ ) and Autonomous narcissism ( $b_1 = 1.04$ ,  $p < .001$ ), the individual variability (S.D.) in the two  $b_1$  slopes was not significant. The longitudinal change for Willfulness was not significant ( $b_1 = -.47$ ,  $p = .12$ ), and the individual variability (S.D.) in  $b_1$  slope was not significant. Gender was a significant predictor of Willfulness intercept ( $b_0$ ) and change ( $b_1$ ). The predicted age 34 intercept ( $b_0$ ) for males = 223.55; for females, 223.55 + 82.15 = 305.70. The predicted male ( $b_1$ ) slope is at a rate of +.163 per agegroup; for females, +.163 + (-2.12) = i.e., a negative change of - 1.957 per agegroup. Thus males show an increase of .326 in Willfulness from A1 to A3, whereas females show a decrease of 3.915 from A1 to A3.

However, since the absence of significant variability (S.D.) individual Willfulness  $b_1$  slopes does not allow the use of  $b_1$  data, male and female slopes cannot be used in further analyses. Nevertheless, we explored the possibility that there were gender differences in the relation between Willfulness  $b_1$  slopes and CPI  $b_1$  change scores. A series of Hotelling's tests for independent groups indicated no gender differences in the relation between Willfulness  $b_1$  scores and any CPI variables.<sup>7</sup>

Since the variabilities (S.D.s) were not significant, the use of Narcissism  $b_1$  change slopes as independent variables was not justified. Instead, to test the role of narcissism change, change scores (A3 minus A1) for Willfulness, Hypersensitivity and Autonomy were calculated. Although difference scores do not give an estimate for rate of change and are necessarily restricted to participants who have scores at both A1 and A3, they do give an estimate of the magnitude of change between A1 and A3.

Participants were then divided into those who Increased in each type of Narcissism (top 25%) and those who Decreased (bottom 25%).<sup>8</sup> To ascertain that the Increasers and Decreasers did show a statistically significant change, the Reliable Change Index (RCI):

<sup>7</sup> Also, there were no gender differences in the relation between Willfulness  $b_1$  scores and Anxiety or Depression. Thus gender was not further considered.

<sup>8</sup> For Willfulness, Increasers' scores ranged from +6 to +34; Decreasers from -7 to -28. For Hypersensitivity, Increasers' scores ranged from +9 to +41; Decreasers from -20 to -42. For Autonomous, Increasers' scores ranged from +10 to +30; Decreasers' from -5 to -30.



**Table 5**  
Relation of Adult 1 narcissism to CPI scales at A1 and A4 and emotional maladjustment at A1 and A3.

	Narcissism Adult 1		
	Willfulness	Hypersensitivity	Autonomous
<i>CPI dimensions</i>			
Adult 1 (n = 178)			
Dominance	.23**	.05	.22**
Social presence	.19*	-.07	.19**
Self-acceptance	.18**	-.08	.32***
Independence	.20**	.07	.27***
Capacity for status	.01	-.09	.31***
Empathy	.07	-.09	.32***
Sociability	.10	-.08	.15*
Adult 4 (n = 112)			
Dominance	.10	.07	.22**
Social presence	.01	-.15	.03
Self-acceptance	.03	-.05	.28**
Independence	.10	.05	.31***
Capacity for status	.04	-.01	.20*
Empathy	-.10	-.10	.10
Sociability	-.02	-.07	.06
<i>Emotional maladjustment</i>			
Adult 1 (n = 232)			
Anxiety	.58***	.38***	-.07
Depression	.24***	.69***	-.12
Adult 3 (n = 181)			
Anxiety	.20**	.13	.02
Depression	.13	.26***	-.02

\* p < .05.  
\*\* p < .01.  
\*\*\* p < .001.

**Table 6**  
CPI scales, emotional maladjustment: intercepts, linear slopes, variance and fit.

	Fixed effects						Random effects		Fit indices		
	Intercept			Linear slope			Intercept	Linear slope	AIC <sup>a</sup>	AIC <sup>b</sup>	Deviance test
	γ <sub>00</sub>	S.E.	t-ratio	γ <sub>10</sub>	S.E.	t-ratio	S.D.	S.D.			χ <sup>2</sup>
<i>CPI scale</i>											
Do	21.28	.62	34.36***	.008	.01	.82	7.29***	.08***	4477.33	4470.72	13.10**
Sp	25.50	.28	89.43***	-.032	.01	-4.01***	4.17**	.06***	4109.16	4091.34	23.82***
Sa	16.83	.22	75.45***	-.014	.01	-2.17*	3.24***	.05***	3768.59	3760.68	19.90***
In	17.47	.26	67.44***	.008	.01	1.13	3.70***	.04**	3989.17	3997.78	3.39
Cs	17.71	.21	82.64***	-.013	.01	-2.22*	3.14***	.04***	3643.22	3636.94	12.28**
Em	20.58	.26	77.74***	-.003	.01	-0.38	3.78***	.05**	4052.53	4054.77	3.76
Sy	21.04	.29	71.87***	-.008	.01	-1.10	4.33***	.05**	4105.84	4107.13	4.71
<i>Emotional maladjustment</i>											
Anxiety	21.14	.71	29.78***	-.107	.03	-3.42***	9.24***	.20**	5198.64	5187.47	17.17***
Depression	15.28	.83	18.42***	-.276	.04	-6.13***	9.09***	.31**	5633.39	5594.00	44.98***

Do = Dominance; Sp = Social presence; Sa = Self-acceptance; In = Independence; Cs = Capacity for status; Em = Empathy; Sy = Sociability.

\* p < .05.  
\*\* p < .01.  
\*\*\* p < .001.

<sup>a</sup> Intercept only model.  
<sup>b</sup> Linear growth model.

Christensen & Mendoza, 1986) was calculated for each change group, for each Narcissism type. These analyses indicated that the change was significant for each type of Narcissism: Willfulness, Increasers RCI = 4.28, Decreasers RCI = 3.45; Hypersensitivity, Increasers RCI = 1.84, Decreasers RCI = 5.87; Autonomy, Increasers RCI = 3.48, Decreasers RCI = 2.06.

Then, for each Increaser/Decreaser group, their A1 Narcissism scores were correlated with CPI change (b<sub>1</sub> slope) scores. Table 7 shows that CPI change depended on whether participants increased or decreased in Narcissism. Especially striking, the data show that those individuals who increased in Willfulness showed

a decrease in the agentic personality dispositions that characterized Willfulness at A1: Dominance (r = -.33), Social Presence (r = -.31), and Self-acceptance (r = -.30) (ps < .05). These findings indicate that three of the four changed correlations between A1 Willfulness and A4 CPI agentic dispositions were significantly related to an increase in Willfulness.

The situation is different for Hypersensitivity. As shown in Table 5, the correlation between A1 Hypersensitivity and CPI dispositions does not change from A1 to A4. Nevertheless, for those participants who increased in Hypersensitivity, their A1 Narcissism scores predicted a decrease in the communal traits of Empathy

**Table 7**

Correlation between A1 Narcissism and CPI Growth Trajectory: A1 → A4: all participants, narcissism increasers, narcissism decreaseers.

	CPI change ( $b_1$ slope)						
	Do	Sp	Sa	In	Cs	Em	Sy
<i>A1 Willfulness</i>							
All ( $n = 211$ )	-.16*	-.19**	-.10	.04	-.02	-.14*	-.11
Increasers ( $n = 43$ )	-.33*	-.31*	-.30*	.12	-.14	-.21	-.22
Decreasers ( $n = 44$ )	-.05	-.12	.05	.01	.11	-.31*	-.02
<i>A1 Hypersensitivity</i>							
All ( $n = 211$ )	-.03	-.12	-.03	-.02	-.01	-.02	-.01
Increasers ( $n = 44$ )	.03	-.16	.04	.05	-.13	-.34*	-.29*
Decreasers ( $n = 43$ )	-.29	-.29	-.28	.08	-.15	-.06	.05
<i>A1 Autonomous</i>							
All ( $n = 211$ )	-.02	-.09	.02	.33***	-.18**	-.19**	-.08
Increasers ( $n = 44$ )	.09	.16	-.02	.53***	-.06	-.08	-.03
Decreasers ( $n = 43$ )	-.12	-.20	-.13	.33*	-.20	-.15	.01

Do = Dominance; Sp = Social presence; Sa = Self-acceptance; In = Independence; Cs = Capacity for status; Em = Empathy; Sy = Sociability.

\*  $p < .05$ .\*\*  $p < .01$ .\*\*\*  $p < .001$ .

( $r = -.34$ ) and Sociability ( $r = -.29$ ,  $ps < .05$ ). For Autonomy, Increasers and Decreasers did not differ in relation to CPI change ( $b_1$  slope).

#### 9.6. Correlations between A1 Narcissism and emotional maladjustment

We turn now to the relation between Narcissism and the Maladjustment variables of Anxiety and Depression. Table 5 presents the correlations between the A1 Narcissism scales and the Maladjustment scores at A1 and A3. At A1, Willfulness and Hypersensitivity are positively related to Anxiety and Depression. In contrast, Autonomous was unrelated to Anxiety and Depression. Hotelling's tests indicated that the relations of Willfulness A1 to Anxiety A1 and Depression A1 was significantly stronger than the relations with Autonomous: Anxiety,  $t(229) = 7.42$ ,  $p < .001$ ; Depression  $t(229) = 3.56$ ,  $p < .002$ . Similarly, the relations of Hypersensitivity A1 to Anxiety A1 and Depression A1 was significantly stronger than those for Autonomy: Anxiety,  $t(229) = 6.66$ ,  $p < .001$ ; Depression,  $t(229) = 17.74$ ,  $p < .001$ .

At A3, Anxiety continues to be predicted by A1 Willfulness, and Depression continues to be predicted by A1 Hypersensitivity, but the strength of these correlations has decreased, Hotelling's  $ts(178) = 5.84$  and  $7.29$ ,  $ps < .001$ . The difference between Willfulness A1 and Autonomous A1 is no longer significant, Hotelling's  $t(178) = 1.30$ ,  $p = .10$ ; the difference between Hypersensitivity A1 and Autonomous A1 continues to be significant,  $t(178) = 2.40$ ,  $p < .01$ . The decreased relation between Hypersensitivity and Anxiety is also significant (Hotelling's  $t(178) = 3.40$ ,  $p = .001$ ) (see Table 5). Again in contrast, A1 Autonomous is unrelated to Anxiety and Depression at A3. The difference between Willfulness A1 and Autonomous A1 in relation to Anxiety A3 is borderline significant,  $t(178) = 1.53$ ,  $p < .06$ ; the difference between Hypersensitivity A1 and Autonomous A1 is not significant,  $t(178) = .90$ .

Thus, as with the CPI personality dispositions, the relation between A1 Narcissism and Maladjustment changes as the narcissist grows older. To understand the basis of this change, we determine the relation of *change* in maladjustment to *change* in Narcissism.

#### 9.7. Does maladjustment change from age 34 to age 59?

For each of the Emotional Adjustment variables, HLM was used to determine the growth trajectory from A1 to A3. At each wave (A1, A2, A3), age was calculated as the average age of the two lon-

gitudinal groups (Oakland, Berkeley). These agegroup values (34, 45.5, 58.5) were centered at agegroup 34. Thus the intercepts represent the estimated Adjustment score at Adult 1 (agegroup 34) (for the use of agegroups, see Singer & Willett, 2003).

First, an unconditional means model (intercept only) was tested. Then, with three data points (A1, A2, A3) only a linear growth model could be tested (Level 1). Next, the trajectory of change for each individual in the sample (Level 2) was determined (Bryk & Raudenbush, 1987) (see Table 6).

##### 9.7.1. Average trajectory of Anxiety

The obtained linear growth model was significantly better than the intercept only model,  $\chi^2(3229) = 17.17$ ,  $p < .001$  (see Table 6). The model provided a negative trajectory (slope) for Anxiety, ( $b_1 = -.107$ ). Thus, across the 24 years from A1 to A3, the average participant showed a 2.68 point decrease in Anxiety.

The HLM results also indicated that participants showed significant variability in the Anxiety linear slopes (S.D. = .20,  $p < .01$ ). Thus, HLM was used to provide linear slope values for each individual in the sample.

##### 9.7.2. Average trajectory of Depression

Following a similar approach using HLM, the obtained linear growth model was significantly better than the intercept only model,  $\chi^2(3229) = 44.98$ ,  $p < .001$ . The model provided a negative trajectory (slope) ( $b_1$ ) for Depression, ( $b_1 = -.276$ ). Thus, across the 24 years from A1 to A3, the average participant showed a 9.08 point decrease in Depression (see Table 6).

The HLM results also indicated that the participants showed significant variability in their Depression linear slopes (S.D. = .31,  $p < .01$ ). Linear slope values were then obtained for each individual in the sample.

#### 9.8. Does A1 Narcissism predict A3 Maladjustment change?

To determine how A1 Narcissism was related to change in Maladjustment, A1 Narcissism scores were correlated with individual change scores (linear slope) for each Maladjustment variable. As may be seen in Table 8, A1 Willfulness was related to a decrease in Anxiety ( $r = -.52$ ), but unrelated to change in Depression. A1 Hypersensitivity was related to a decrease in both Anxiety ( $r = -.35$ ) and Depression ( $r = -.22$ ). A1 Autonomous was unrelated to change in Anxiety and Depression.

**Table 8**

Correlation between A1 Narcissism and emotional maladjustment growth trajectory: A1 → A3: all participants, narcissism increasers, narcissism decreaseers.

	Emotional maladjustment change ( $b_1$ slope)	
	Anxiety	Depression
<i>A1 Willfulness<sup>a</sup></i>		
All ( $n = 232$ )	-.52***	-.02
Increasers ( $n = 44$ )	-.17	.30*
Decreasers ( $n = 45$ )	-.35**	.03
<i>A1 Hypersensitivity<sup>a</sup></i>		
All ( $n = 232$ )	-.35***	-.22***
Increasers ( $n = 45$ )	-.26	.13
Decreasers ( $n = 44$ )	-.31*	-.15
<i>A1 Autonomous<sup>a</sup></i>		
All ( $n = 232$ )	.06	.05
Increasers ( $n = 45$ )	-.13	.16
Decreasers ( $n = 45$ )	-.09	-.38**

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

### 9.9. Is the correlation between A1 Narcissism and A3 Maladjustment change also due to Narcissism change?

It is also possible that the relation between A1 Narcissism and A3 Emotional Adjustment change was due to a change in Narcissism between A1 and A3. To examine this, Narcissism difference scores (A3 minus A1) were correlated with Emotional Adjustment change ( $b_1$  slope) scores. Participants who Increased in each type of Narcissism (top 25%) and those who Decreased (bottom 25%) were identified. For each group, their A1 Narcissism scores were correlated with Emotional Adjustment change ( $b_1$  slope) scores.

Table 8 shows that those participants who Decreased in Willfulness showed a significant decrease in Anxiety ( $r = -.35, p < .01$ ). Those who increased in Willfulness showed a significant increase in Depression ( $r = .30, p < .05$ ). For Hypersensitivity, both Decreasers and Increasers decreased in Anxiety ( $r_s = -.31$  and  $-.26, ps < .05$  and  $.07$ ). Finally, and unexpectedly, those who decreased in Autonomy also showed a significant decrease in Depression ( $r = -.38, p < .01$ ).

### 9.10. The relation of Narcissism to life outcomes

To determine if the three types of A1 Narcissism predicted different life outcomes, Narcissism scores were related to Marital history, Occupation and Social class, at A3. As may be seen in Table 9, at A1 Willfulness predicted a greater number of subsequent divorces. The difference between A1 Willfulness ( $r = .18$ ) and A1 Autonomous ( $r = -.02$ ) is significant by Hotelling's test,  $t(175) = 1.68, p < .04$ . A1 Autonomous predicted subsequent higher Occupational level and higher Social Class, significantly different from A1 Willfulness, Hotelling's  $t_s(107) = 2.68$  and  $2.73, ps < .004$ , and higher than Hypersensitivity, Hotelling's  $t_s(107) = 1.99$  and  $2.00, ps < .02$ .

The relation between Narcissism and Life Outcome variables becomes more pronounced at A3. Willfulness is now related to having had more marriages and more divorces. Hypersensitivity is related to having had more divorces. Autonomous is related to having had fewer marriages. Hotelling's  $t$ -tests showed that the correlations of A3 Willfulness with Marital history differed from those of A3 Autonomous with Marital history; for Total number of Marriages,  $t(230) = 3.16, p < .001$ ; for Total number of Divorces,  $t(217) = 3.04, p < .001$ , with Willfulness associated with more of both.

A comparison of types of Narcissism for later life Occupational level and Social class indicated that Autonomous was associated

with a higher Occupational level, and a higher Social Class level<sup>9</sup> (see Table 9). Hotelling's  $t$ -tests showed that the correlations of A3 Willfulness with Occupational level differed from that of A3 Autonomous with Occupational level,  $t(135) = 2.17, p < .01$ , and with Social class,  $t(135) = 2.45, p < .008$ . The difference between A3 Hypersensitivity and A3 Autonomy for correlation with Occupational level was also significant,  $t(135) = 1.96, p < .03$ , and significant for Social Class,  $t(135) = 1.96, p < .03$ . The difference between A3 Willfulness and A3 Hypersensitivity is not significant for either Occupational level or Social Class.

As before, these results were further examined to determine if the relation between A3 Narcissism and Life Outcome variables was different for those who Increased (top 25%) and those who Decreased (bottom 25%) in Narcissism. An increase in Willfulness was related to having had more marriages ( $r = .35, p < .02$ ), and more divorces ( $r = .50, p < .001$ ). A decrease in Willfulness was related to having reached a higher social class ( $r = -.41, p < .05$ ). The relation between Hypersensitivity and Life Outcome variables did not differ for Increasers and Decreasers. An increase in Autonomous was related to a higher Occupational level ( $r = -.35, p < .06$ ) and to higher Social class ( $r = -.40, p < .03$ ). A decrease in Autonomous was unrelated to Life Outcome variables.

## 10. Discussion

This paper addresses the question of how three types of narcissism, and the personality characteristics associated with each, change with age. Following a large group of individuals, the results indicated that, as a group, between age 34 and age 59 there was a decrease in Hypersensitivity, an increase in Autonomous, and no significant change in Willfulness narcissism. Also, as a total group, the change in emotional adjustment was consistent with that found in previous studies; there was a decrease in anxiety and depression with age.

However, the findings indicated that the relation between narcissism and personality dispositions differed for different types of narcissism. At age 34, Willfulness looks like Autonomous in terms of manifest agentic personality characteristics. Both appear poised and self-assured, and thus present an overt personality likely to be found attractive to others. However, Autonomous at this age is additionally characterized by high Capacity for Status and by the communal personality characteristic of Empathy, neither of which are associated with Willfulness. Contrary to prediction, A1 Autonomous and A1 Willfulness did not differ significantly in their association with Sociability; both types of narcissism showed a weak, positive relation, possibly for different reasons – i.e., whereas the relation for Autonomous may indicate truly enjoying the company of others, for Willfulness being with others may provide an opportunity for grandiose display and sought after admiration. Hypersensitivity was not significantly associated with any of these overt personality characteristics.

Differences among the three types of narcissism were also found for their level of emotional maladjustment. At age 34, both types of maladaptive narcissism – Willfulness and Hypersensitivity – were positively associated with anxiety and depression. However, Autonomous was unrelated to anxiety and depression. Thus, although manifest personality characteristics differentiate Willfulness and Hypersensitivity, the underlying adjustment of both of these two types of narcissism shows similar problems, and is different from Autonomous.

These findings, showing a positive relation of Willfulness and Hypersensitivity to emotional maladjustment, differ from those of studies using the NPI self-report measure of narcissism, in which

<sup>9</sup> The significant relation of Autonomous with Occupational level and Social level remained after IQ was partialled out,  $ps < .04$ .

**Table 9**  
Correlation between narcissism and A3 socio-economic variables.

	A1 Narcissism			A3 Narcissism			A3 Scores		
	Willfulness	Hypersensitivity	Autonomous	Willfulness	Hypersensitivity	Autonomous	Mean	S.D.	Range
Total number marriages	.05	-.10	-.12	.16*	.01	-.14*	1.29	.76	0–6
Total number divorces	.18*	-.06	-.02	.26***	.13*	-.03	.36	.76	0–5
Occupational level <sup>a</sup>	.07	-.01	-.30**	-.01	.02	-.26*	2.78	1.43	1–7
Social class <sup>b</sup>	.07	-.02	-.32***	.01	-.01	-.28***	30.40	13.13	11–73

<sup>a</sup> Hollingshead occupational scale: low rating (1) = higher occupational level.

<sup>b</sup> Hollingshead Social Class scale: low rating (11) = higher social level.

narcissism is often found to be associated with positive emotional adjustment (e.g., Sedikides et al., 2004; Zuckerman & O'Loughlin, 2009). It seems likely that the demonstrated relation between narcissism and the use of the defense of denial (Cramer, 1999, 2011) may account for these latter findings – i.e., on self-report measures, narcissists deny they have any problems.

As the participants grew older, the relation between their earlier narcissism and subsequent personality and personal adjustment also differed, depending on the type of narcissism, and on whether narcissism had increased or decreased with age. Willfulness is no longer associated with many of the agentic characteristics that were appealing at the earlier age, while the association with empathy, never very strong, declines even further. At the same time, Willfulness continues to be associated with emotional adjustment problems. An increase in Willfulness with age had particularly negative effects, both for agentic personality characteristics and depression. Also, Willfulness, and especially an increase in Willfulness, was also associated with evidence of poorer partner relationships – more marriages and more divorces. Thus, overall, the early “bloom” of Willfulness had faded by later adulthood.

For Hypersensitivity, the change in personality and emotional adjustment with age was different. At age 34, Hypersensitivity was unrelated to agentic or communal personality characteristics, but was negatively related to emotional adjustment. An increase in Hypersensitivity with age was associated with a decrease in the communal characteristics of empathy and sociability. Apparently, as vulnerability to perceived slight increased, the ability to sympathetically and positively interact with others decreased. However, by age 59, the relation of early adult Hypersensitivity to anxiety and depression had decreased.

For Autonomous narcissism, the change with age in personality and emotional adjustment was again different. At age 34, Autonomous was positively associated with both agentic personality characteristics and with empathy. The positive association with agentic characteristics continued at later adulthood, and early Autonomous predicted increasing independence. However, early Autonomous also was associated with a decrease in both Capacity for Status, as was found for the total group, and, unexpectedly, with empathy. Interestingly, a reduction in Autonomous strivings was also associated with a decrease in depression, perhaps because reduced striving meant less expectation of success and hence less chance of experiencing disappointment about goals not met. Autonomous was also associated with success in maintaining intimate partner, married relationships. Further, an increase in Autonomous narcissism was associated with reaching higher occupational and social levels.

### 10.1. Limitations

The participants in this study come from an earlier generation, as is a necessity of longitudinal studies, raising a question of possible cohort differences. Although longitudinal change in narcissism has not been previously studied, the present study does show that

the participants are similar to those of current studies of age related differences in anxiety and depression. Further, recent meta-analytic study of cross-sectional age and cohort differences in NPI scores led Roberts et al. (2010) to the conclusion that the effect of age is “far more important” (p. 101) for understanding narcissism differences than are cohort or generational changes.

Although not all of the participants provided data for all adult ages, a strength of HLM is that it allows for incomplete data. While the group change found for the personality variables is often quite small, what is interesting about this change is that the individual variability in personality change is significantly related to individual differences in narcissism change.

An important feature of the present study is that it uses two very different methods to study personality change. The measures of agentic and communal personality dispositions are based on a standardized self-report questionnaire, whereas the measure of narcissism is based on ratings made by multiple independent observers across the years.

It is also the case that the participants in the Intergenerational Studies are of relatively high intelligence and education, and they are generally long term residents of the San Francisco Bay Area. Conceivably, narcissists of lower intellectual level and/or different geographic locations might differ in personality and adjustment. Also, narcissism prior to age 34 was not considered. Nevertheless, a positive feature of this study is that different types of narcissism are being assessed in the same individual, so that relations between different types of narcissism and personality variables are not confounded with other individual differences.

In addition to the relation between narcissism change and change in personality and emotional maladjustment, it is likely that age related change in narcissism has implications for other areas of functioning. Further research may explore these possibilities.

### References

- Aldwin, C. M., Spiro, A., Levenson, M. R., & Bosse, R. (1989). Longitudinal findings from the Normative Aging Study: 1. Does mental health change with age? *Psychology and Aging, 4*, 295–306.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed). Washington, DC: Author.
- Back, M. D., Schmukle, S. C., & Egloff, B. (2010). Why are narcissists so charming at first sight: Decoding the narcissism-popularity link at zero acquaintance. *Journal of Personality and Social Psychology, 98*, 132–145.
- Beekman, A. T. F. (2008). Anxiety in aging: A newly chartered territory. *American Journal of Geriatric Psychiatry, 16*, 787–789.
- Block, J. (1961). *The Q-sort method in personality assessment and psychiatric research*. Springfield, IL: Thomas.
- Bosson, J. K., Lakey, C. E., Campbell, W. K., Zeigler-Hill, V., Jordan, C. H., & Kernis, M. H. (2008). Untangling the links between narcissism and self-esteem: A theoretical and empirical review. *Social and Personality Psychology Compass, 2*, 1415–1439.
- Bryk, A. S., & Raudenbush, S. W. (1987). Application of hierarchical linear models to assessing change. *Psychological Bulletin, 101*, 147–158.
- Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models: Application and data analysis methods*. Newbury Park, CA: Sage.
- Butcher, J. N., Aldwin, C. M., Levenson, M. R., Ben-Porath, Y. S., Spiro, A., & Bosse, R. (1991). Personality and aging: A study of the MMPI-2 among older men. *Psychology and Aging, 6*, 361–370.

- Cain, N. M., Pincus, A. K., & Ansell, E. B. (2008). Narcissism at the crossroads: Phenotypic description of pathological narcissism across clinical theory, social/personality psychology, and psychiatric diagnosis. *Clinical Psychology Review*, 28, 638–656.
- Campbell, W. K. (2001). Is narcissism really so bad? *Psychological Inquiry*, 12, 214–216.
- Campbell, W. K., & Foster, C. A. (2002). Narcissism and commitment in romantic relationships: An investment model analysis. *Personality and Social Psychology Bulletin*, 28, 484–495.
- Campbell, W. K., Rudich, E. A., & Sedikides, C. (2002). Narcissism, self-esteem, and the positivity of self-views: Two portraits of self-love. *Personality and Social Psychology Bulletin*, 28, 358–368.
- Carstensen, L. L., Pasupathi, M., Mayr, U., & Nesselrode, J. R. (2000). Emotional experience in everyday life across the adult life span. *Journal of Personality and Social Psychology*, 79, 644–655.
- Charles, S. T., Reynolds, C. A., & Gatz, M. (2001). Age-related differences and change in positive and negative affect over 23 years. *Journal of Personality and Social Psychology*, 80, 136–151.
- Christensen, L., & Mendoza, J. L. (1986). A method of assessing change in a single subject: An alteration of the RC index. *Behavior Therapy*, 17, 305–308.
- Collins, D. R., & Stukas, A. A. (2008). Narcissism and self-presentation: The moderating effects of accountability and contingencies of self-worth. *Journal of Research in Personality*, 42, 1629–1634.
- Colvin, C. R., Block, J., & Funder, D. C. (1995). Overly positive self-evaluations and personality: Negative implications for mental health. *Journal of Personality and Social Psychology*, 68, 1152–1162.
- Cramer, P. (1999). Personality, personality disorders, and defense mechanisms. *Journal of Personality*, 67, 535–554.
- Cramer, P. (2002). Defense mechanisms, behavior, and affect in young adulthood. *Journal of Personality*, 70, 104–126.
- Cramer, P. (2003). Personality change in later adulthood is predicted by defense mechanisms use in early adulthood. *Journal of Research in Personality*, 37, 76–104.
- Cramer, P. (2004). Identity change in adulthood: The contribution of defense mechanisms and life experiences. *Journal of Research in Personality*, 38, 280–316.
- Cramer, P. (2011). Young adult narcissism: A 20 year longitudinal study of the contribution of parenting styles, preschool precursors of narcissism, and denial. *Journal of Research in Personality*, 45, 19–28.
- Cramer, P., & Jones, C. J. (2008). Narcissism, identification, and longitudinal change in psychological health: Dynamic predictions. *Journal of Research in Personality*, 42, 1148–1159.
- Cramer, P., & Tracy, A. (2005). The pathway from child personality to adult adjustment: The road is not straight. *Journal of Research in Personality*, 39, 369–394.
- Emmons, R. A. (1989). Narcissism: Theory and measurement. *Journal of Personality and Social Psychology*, 52, 11–17.
- Freud, S. (1957). On narcissism: An introduction. In: J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 14, pp. 67–104). London: Hogarth [original work published 1914].
- Foster, J. D., Misra, T. A., & Reidy, D. E. (2009). Narcissists are approach-oriented toward their money and their friends. *Journal of Research in Personality*, 43, 764–769.
- Gough, H. G., & Bradley, P. (1996). *CPI manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Gough, H. G., & Heilbrun, A. B. Jr., (1983). *The adjective check list manual* (1980 ed.). Palo Alto, CA: Consulting Psychologists Press.
- Grigoriadis, V. (2005). Celebrity and its discontents – A diagnosis. *New York Magazine*, 37, 34–38.
- Groth-Marnat, G. (1984). *Handbook of psychological assessment*. New York: Van Nostrand Reinhold Company.
- Haan, N., Milsap, R., & Hartka, E. (1986). As time goes by: Change and stability in personality over 50 years. *Psychology and Aging*, 1, 220–232.
- Hathaway, S. R., & McKinley, J. C. (1940). A multiphasic personality inventory (Minnesota): I. Construction of the schedule. *Journal of Psychology*, 10, 249–254.
- Helson, R., Jones, C., & Kwan, V. S. Y. (2002). Personality change over 40 years of adulthood: Hierarchical linear modeling analyses of two longitudinal samples. *Journal of Personality and Social Psychology*, 83, 752–766.
- Hollingshead, A. B., & Redlich, F. C. (1958). *Social class and mental illness*. New York: Wiley.
- Holtzman, N. S., Vazire, S., & Mehl, M. R. (2010). Sounds like a narcissist: Behavioral manifestations of narcissism in everyday life. *Journal of Research in Personality*, 44, 478–484.
- Jones, C., Livson, N., & Peskin, H. (2003). Longitudinal hierarchical linear modeling analyses of California Psychological Inventory data from age 33 to age 75: An examination of stability and change in adult personality. *Journal of Personality Assessment*, 80, 294–308.
- Jones, C., & Peskin, H. (2009). Psychological health from the teens to the 80s: Multiple developmental trajectories. *Journal of Adult Development*, 17, 20–32.
- Jones, C. J., & Peskin, H. (2010). Psychological Health from the teens to the 80s: Multiple developmental trajectories. *Journal of Adult Development*, 17, 20–32.
- Kernberg, O. F. (1975). *Borderline conditions and pathological narcissism*. New York: Jason Aronson.
- Kessler, R. C., Foster, C., Webster, P. S., & House, J. S. (1992). The relationship between age and depressive symptoms in two national surveys. *Psychology and Aging*, 7, 119–126.
- Kohut, H. (1971). *The analysis of self*. New York: International Universities Press.
- Kohut, H. (1976). *The restoration of the self*. New York: International Universities Press.
- Kohut, H. (1977). *The restoration of the self*. New York: International Universities Press.
- Kremen, A. (1996). Depressive tendencies and susceptibility to anxiety: Differential personality correlates. *Journal of Personality*, 64, 209–242.
- Luhtanen, R. K., & Crocker, J. (2005). Alcohol use in college students: Effects of level of self-esteem, narcissism, and contingencies of self-worth. *Psychology of Addictive Behaviors*, 19, 99–103.
- Masterson, J. F. (1993). *The emerging self: A developmental self and object relations approach to the treatment of the closet narcissistic disorder of the self*. New York: Brunner/Mazel.
- Miller, J. D., Hoffman, E. T., Gaughan, B., Gentile, J., Maples, & Campbell, W. K. Grandiose and vulnerable narcissism: A nomological network analysis. *Journal of Personality*. doi: 10.1111/j.1467-6494.2010.00711.x.
- Millon, T. (1981). *Disorders of personality: DSM III: Axis II*. New York: John Wiley.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, 12, 177–196.
- Mroczek, D. K., & Spiro, A. (2003). Modeling intraindividual change in personality traits: Findings from the normative aging study. *Journal of Gerontology: Psychological Sciences*, 58B, 153–165.
- Newman, J. P. (1989). Aging and depression. *Psychology and Aging*, 4, 150–165.
- Oltmanns, T. F., Friedman, J. N., Fiedler, E. R., & Turkheimer, E. (2004). Perceptions of people with personality disorders based on thin slices of behavior. *Journal of Research in Personality*, 38, 216–229.
- Ozer, D. J. (1993). The Q-sort method and the study of personality development. In D. C. Funder, R. D. Parker, C. Tomlinson-Keasey, & K. Widaman (Eds.), *Study of lives through time* (pp. 147–169). Washington, DC: American Psychological Association.
- Paulhus, D. L. (1998). Interpersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing? *Journal of Personality and Social Psychology*, 74, 1197–1208.
- Paulhus, D. L., & John, O. P. (1998). Egoistic and moralistic biases in self-perception: He interplay of self-deceptive styles with basic traits and motives. *Journal of Personality*, 66, 1025–1060.
- Pincus, A. L., Ansell, E. B., Pimentel, C. A., Cain, N. M., Wright, A. G. C., & Levy, K. N. (2009). Initial construction and validation of the Pathological Narcissism Inventory. *Psychological Assessment*, 21, 365–379.
- Pincus, A. L., & Lukowitsky, M. R. (2010). Pathological narcissism and narcissistic personality disorder. *Annual Review of Clinical Psychology*, 6, 421–446.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385–401.
- Raskin, R., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological Reports*, 45, 590.
- Raskin, R., & Novacek, J. (1989). An MMPI description of the narcissistic personality. *Journal of Personality Assessment*, 53, 66–80.
- Raskin, R., Novacek, J., & Hogan, R. (1991). Narcissism, self-esteem, and defensive self-enhancement. *Journal of Personality*, 59, 19–38.
- 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, 66–80.
- Rhodewalt, F., & Morf, C. C. (1995). Self and interpersonal correlates of the Narcissistic Personality Inventory: A review and new findings. *Journal of Research in Personality*, 29, 1–23.
- 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 on Psychological Science*, 5, 97–102.
- Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, 132, 1–25.
- Rosenthal, S. A., & Hooley, J. M. (2010). Narcissism assessment in social-personality research: Does the association between narcissism and psychological health result from a confound with self-esteem? *Journal of Research in Personality*, 44, 453–465.
- Russ, E., Shedler, J., Bradley, R., & Westen, D. (2008). Refining the construct of narcissistic personality disorder: Diagnostic criteria and subtypes. *American Journal of Psychiatry*, 165, 1473–1481.
- Sedikides, C., & Gregg, A. P. (2001). Narcissists and feedback: Motivational surfeits and motivational deficits. *Psychological Inquiry*, 12, 237–239.
- Sedikides, C., Rudich, E. A., Gregg, A. P., Kumashiro, M., & Rusbult, C. (2004). Are normal narcissists psychologically healthy?: Self-esteem matters. *Journal of Personality and Social Psychology*, 87, 400–416.
- Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analyses: Modeling change and event occurrence*. New York: Oxford University Press.
- Smalley, R. L., & Skyke, J. E. (1996). Evaluating sources of ego-threatening feedback: Self-esteem and narcissism effects. *Journal of Research in Personality*, 30, 483–495.
- Teachman, B. A. (2006). Aging and negative affect: The rise and fall and rise of anxiety and depression symptoms. *Psychology and Aging*, 21, 201–207.

- Vazire, S., & Funder, D. C. (2006). Impulsivity and the self-defeating behavior of narcissists. *Personality and Social Psychology Review*, 10, 154–165.
- Vazire, S., Naumann, L. P., Rentfrow, P. J., & Gosling, S. D. (2008). Portrait of a narcissist: Manifestations of narcissism in physical appearance. *Journal of Research in Personality*, 42, 1439–1447.
- Vink, D., Aartsen, M. J., & Schoevers, R. A. (2008). Risk factors for anxiety and depression in the elderly: A review. *Journal of Affective Disorders*, 106, 29–44.
- Wallace, H. M., & Baumeister, R. F. (2002). The performance of narcissists rises and falls with perceived opportunity for glory. *Journal of Personality and Social Psychology*, 82, 819–834.
- Watson, P. J., & Biderman, M. D. (1993). Narcissistic Personality Inventory factors, splitting, and self-consciousness. *Journal of Personality Assessment*, 61, 41–57.
- Wink, P. (1991). Two faces of narcissism. *Journal of Personality and Social Psychology*, 61, 590–597.
- Wink, P. (1992). Three narcissism scales for the California Q-set. *Journal of Personality Assessment*, 58, 51–66.
- Wink, P., Dillon, M., & Fay, K. (2005). Spiritual seeking, narcissism and psychotherapy: How are they related? *Journal for the Scientific Study of Religion*, 44, 143–158.
- Young, S. M., & Pinsky, D. (2006). Narcissism and celebrity. *Journal of Research in Personality*, 40, 463–471.
- Zeigler-Hill, V. (2006). Discrepancies between implicit and explicit self-esteem: Implications for narcissism and self-esteem instability. *Journal of Personality*, 74, 119–143.
- Zeigler-Hill, V., Clark, C. B., & Pickard, J. D. (2008). Narcissistic subtypes and contingent self-esteem: Do all narcissists base their self-esteem on the same domains? *Journal of Personality*, 76, 753–774.
- Zuckerman, M., & O'Loughun, R. E. (2009). Narcissism and well-being: A longitudinal perspective. *European Journal of Social Psychology*, 39, 957–972.