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## Preschool Personality Antecedents of Narcissism in Adolescence and Emergent Adulthood: A 20-Year Longitudinal Study

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### Abstract

This prospective study examined relations between preschool personality attributes and narcissism during adolescence and emerging adulthood. We created five a priori preschool scales anticipated to foretell future narcissism. Independent assessors evaluated the participants' personality at ages 14, 18, and 23. Based upon these evaluations, we generated observer-based narcissism scales for each of these three ages. All preschool scales predicted subsequent narcissism, except Interpersonal Antagonism at age 23. According to mean scale and item scores analyses, narcissism increased significantly from age 14 to 18, followed by a slight but non-significant decline from age 18 to 23. The discussion focused on a developmental view of narcissism, the need for research on automatic processing and psychological defenses, and links between narcissism and attachment.

### Keywords

Narcissism; Preschool Personality Precursors; Developmental Perspective

### 1. Introduction

Narcissism has increasingly attracted the attention of social, personality, and clinical psychologists; the literature on this topic spans both clinical observations and empirical research. Narcissism, conceptually related to defensive self-esteem (e.g., Kernis, 2003; Paulhus, 1998; Robins & Beer, 2002) and self-enhancement (John & Robins, 1994), has been studied both as a process model (Morf & Rhodewalt, 2001) and as an individual difference model (Raskin & Terry, 1988).

The origins and developmental course of narcissism are not well understood. Although self-report narcissism scales have been developed for use with school-age children (e.g., Thomaes, Stegge, Bushman, Olthof, & Denissen, 2008), longitudinal studies are needed to examine whether narcissism later in life has precursors going back as far as preschool. The aim of this study is to begin to close this knowledge gap by tracing the preschool personality precursors (age 3–4) of narcissism in adolescence and young adulthood, using observational data of

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preschool children in natural settings (i.e., nursery-school). In addition, we examined age-related changes in mean level narcissism scores during adolescence and emerging adulthood in order to gain a better understanding of changes in narcissism during this developmental period.

It is beyond the scope of this paper to provide a complete overview of narcissism. Suffice to say that narcissism continues to be viewed from a variety of perspectives (see, for example, the special issue of *Psychological Inquiry*, 2001, 12 [4]). Furthermore, clinical and social-personality conceptualizations of narcissism often differ, although both approaches share an emphasis on interpersonal antagonism (Miller & Campbell, 2008). Nonetheless, reasonable consensus exists about the core attributes of a narcissistic personality. Narcissists tend to harbor inflated (or defensive) self-esteem, self-absorption, grandiosity, hostility, self-enhancement, inadequate impulse regulation, and an unrealistic sense of entitlement (e.g., Faisalini, 1993; Kernberg, 1975, Kernberg, 1986b; Raskin, Novacek, & Hogan, 1991; Vazire & Funder, 2006). Underlying the excessive positive view of self, narcissists also appear to experience deep-rooted feelings of self-doubt. As Vazire and Funder (2006) commented, narcissists maintain "a self-concept that is both overly positive and overly negative" (p. 155). Whereas narcissism might be visible in many situations, its emotional core is most likely to appear in close relationships, in which the often outgoing and sociable facade may rupture and reveal the detached and defensive nature of the narcissist's emotional life. For example, Campbell and Foster (2002), using selfreport scales, reported that narcissists were less commitment to ongoing relationships. Kernberg (1986a), furthermore, observed, "on a deeper level they [narcissists] are completely unable really to depend on anybody because of their deep distrust and depreciation of others" (p. 214).

### 1.1 Does Narcissism in Adolescence and Emergent Adulthood have Preschool Antecedents?

Our first research question was whether narcissism in adolescence and emerging adulthood has personality antecedents stretching back all the way to preschool. In the personality development literature, there is increasing consensus that not only can children be reliably assessed as early as at age 3, but also that personality characteristics measured this early in life have long-term implications for future adaptation (Caspi, 2000). Furthermore, the DSM-IV (American Psychiatric Association, 2000) proposed that, in general, personality disorders are relatively stable and their onset can be traced back to early childhood (Shiner, 2005). Of course, we do not argue that narcissism per se exists as a fully developed and distinct personality type in preschool. We only propose that knowledge of childhood antecedents may throw light on the early features of narcissism and how such features may over time culminate into a relatively stable narcissistic orientation.

Previous research has identified three core qualities of narcissism: an inflated self, interpersonal hostility, and impulsivity. The inflated self includes excessive self-esteem (e.g., Kernis, 2003), fragile and unstable self-esteem (e.g., Rhodewalt, Madrian, & Cheney, 1998), grandiosity (e.g., Raskin et. al., 1991), and defensive self-enhancement specifically related to egoistic concerns (e.g., Campbell, Rudich, & Sedikides, 2002; John & Robins, 1994; Paulhus & Williams, 2002). Furthermore, recent research suggests that the inflated self may not be reduced to self-enhancement alone; it also includes organizational features such as lack of self-integration. For example, emerging evidence suggests that such organizational components of the narcissistic self are perhaps more important than mere self-enhancement in explaining behavioral outcomes related to narcissism (Stucke & Sporer, 2002). Lack of self-integration is conceptually related to psychoanalytic views of narcissism and to the importance of defense mechanisms, such as splitting used to protect the vulnerable self-esteem of narcissism.

Antagonistic interpersonal behavior is another defining feature of narcissism (e.g., Raskin et. al., 1991; Warren, Burnette, South, Chauhan, Bale, & Friend, 2002). For example, hostility

has been observed when the narcissist's inflated self-view is challenged (e.g., Bushman & Baumeister, 1998; Smalley & Stake, 1996; Twenge & Campbell, 2003). Recent research, however, suggests that hostility is not merely a result of challenged self-esteem but also reflects issues related to the narcissist's fragmented sense of self (Stucke & Sporer, 2002).

Antagonistic interpersonal behaviors are likely to be maintained by the interpersonal consequences of these behaviors (Raskin, et al., 1991). Unfortunately, the everyday interpersonal relationships of narcissists, observed in natural daily settings outside of the laboratory, have rarely (if ever) been studied; thus the actual real-life manifestations of narcissism are not well understood. Theoretically, aggressive behavior that provokes emotional or submissive reactions might reinforce the inflated self. Such reactions might reaffirm the narcissists' sense of superiority. For example, emotional reactions might reinforce narcissists' view of others as emotional and therefore weak and vulnerable, whereas they see themselves as rational and logical. Thus, a vicious cycle is maintained across time and context. This cycle may promote the continuity of narcissism (Raskin, et al., 1991).

Impulsivity is the third main quality detected in narcissists. Based on their meta-analysis, Vazire and Funder (2006) argued convincingly that this characteristic has consistently been observed in studies using different measures of both narcissism and impulsivity. Impulsivity is likely to be more than just a correlate of narcissism; it might lie close to the conceptual core of narcissistic personality dynamics. Vazire and Funder (2006), furthermore, suggested that the centrality of impulsiveness in narcissists signifies the existence of non-deliberate and automatic processing of cognitive and affective actions. This lack of conscious reflection may be an important aspect of the inflated self as well as the defenses related to this self-view. As the automatic cognitive and affective processing seen in these defenses becomes more dominant in the narcissists' life, their actions are likely to rely less on conscious deliberation (Diamond & Blatt, 1994).

Automatic processing may also be implicated in the hostile behaviors typical of narcissists. For example, aggressive behaviors during childhood have been linked to automatic processing of emotions and thoughts in the interpersonal domain (see Crick & Dodge, 1994, for a review). Impulsivity, constrained cognitive-evaluation, and the limited behavioral repertoire likely to characterize narcissists might explain their hostility--especially when their inflated-self is threatened and give rise to a host of undesired and non-integrated emotions that make deliberate processing even more difficult (Vazire & Funder, 2006).

Thus, the narcissistic defensiveness revolves around three inter-linked components: an inflated sense of self, hostility, and impulsivity. The dynamic interplay within this personality constellation might contribute to continuity over time. The emphasis on the core defensive nature of narcissism brings this concept back to its rich theoretical origins (see Morrison, 1986, for a collection of classic papers), and the implication of psychological defenses in the continuity of narcissistic traits over time. In view of the links between some of the preschool predictors described above, we expected the inter-item correlation to be moderately high.

## 1.2. Age-related Changes in Narcissism during Adolescence and Emergent Adulthood

Our second research question examined the degree of stability in mean narcissism scores from middle adolescence and into emerging adulthood. Recently, some researchers have argued that young adults have become more narcissistic than earlier generations (cf., Twenge, 2006). In support of this argument, Twenge, Konrath, Foster, Campbell, and Bushman (2008) reported that self-reported narcissism (using the NPI) has increased by 0.33 standard deviations since the 1980s. Trzesniewski and her colleagues (e.g., Trzesniewski, Donnellan, & Robins, 2008a & b) contested this conclusion and found no changes in self-enhancement in youth from the 1970s and into the present. Although it is beyond the scope of this paper to review these

competing arguments detail, the participants in our sample have most likely been exposed to the cultural and environmental factors cited as responsible for the proposed recent increase in narcissism, as outlined in the work of Twenge and her colleagues (e.g., Twenge, 2006; Twenge et al., 2008). Given Twenge's (2006) arguments and the age of our sample, we tentatively hypothesize that mean-level of narcissism should increase from middle adolescence and into early adulthood.

Although it has been suggested that emerging adulthood might be characterized by narcissism in terms of being over-confident, selfish, yet being miserable and unfulfilled, Arnett (2007) argued that this position is a manifestation of the century-old myth of adolescence as a time of "storm and stress." Few studies have examined age-related changes in narcissism. An exception is a recent cross-sectional study reporting that narcissism decreased with age in cross-national samples ranging in age from age 8 to 83 (Foster, Campbell, & Twenge, 2003). The authors, however, offered few theoretical explanations for this finding and noted that the effect size was rather weak. Furthermore, the sample sizes for extreme age groups (< 15 and > 34) were relatively small, compared to the adolescent and young adult samples, potentially leading to unstable estimates for these groups. In fact, the groups with larger sample sizes (age 15 through 34) showed relatively similar mean levels of narcissism. Hence, this reported age effect might be due to differing sample sizes and other artifacts related to cross-sectional methods and cohort effects. Therefore, a longitudinal study examining this age effect might be of interest, especially in view of the fact that detailed analyses of changes in mean values from middle adolescence and into emerging adulthood within the same longitudinal sample have not been reported. In sum, longitudinal studies examining age changes in narcissism are needed to complement existing cross-sectional studies.

### 1.3. The Current Study: Overview and Expectations

To our knowledge, no study has examined the preschool antecedents of narcissism; thus our hypotheses must necessarily be tentative. Narcissistic tendencies that are expected to emerge in early childhood include the need to be the center of attention, high activity level, histrionic tendencies, impulsivity, and an antagonistic interpersonal stance. The need to be at the center of attention is considered a defensive stance in older narcissists; it reflects their desire to have others confirm their grandiose self-view. Some analytically oriented theorists see this grandiose self as developing early in life and as underlying social interactions that further reinforce narcissists' grandiose self of self (Kernberg, 1986b; Raskin et al., 1991; White, 1980). Hence, the desire to be the center of attention was expected to emerge as a preschool precursor of subsequent narcissism. Histrionic tendencies are related to the need to be the center of attention by representing another possible way to gain notice from others. We hypothesized that histrionic tendencies are therefore also likely to emerge as an early precursor of subsequent narcissism.

Impulsivity, as noted above, is one of the main features underlying the continuity of narcissism (Raskin et al., 1991; Vazire & Funder, 2006; Wink, 1992). Given that narcissism, at least its impulsive component, is likely to have biological underpinnings (Spinella, 2004), we expected that lack of impulse control to be a prominent preschool precursor to narcissism in young adults. We also anticipated that impulsivity manifests itself in a high level of physical activity, especially in preschool. We expected therefore that high physical activity would be observed early in life for subsequent narcissists.

Like impulsivity, antagonistic behaviors towards one's peers are also viewed as an attribute that emerges early and contribute to the continuity of narcissism (Raskin et al., 1991). Bushman and Baumeister (1998), for example, suggested that narcissists are likely to respond to ego-threats with aggressive behaviors; behaviors that may provoke hostility from others and start a relational downward spiral. We expected therefore that interpersonal antagonism would be

observable early in life of subsequent narcissists. In sum, we anticipated that the preschool precursors of narcissism in adolescence and emergent adulthood to be characterized by a desire to be at the center of attention, high activity level, histrionic behaviors, poor impulse control, and interpersonal antagonism.

Predictions about mean changes in narcissism from middle adolescence (age 14) into early adulthood (age 23) are difficult due to the lack of relevant longitudinal research. Some researchers have suggested that narcissism would be likely to increase during adolescence and young adulthood for the historical cohort that our sample represents (e.g., Twenge et al., 2008), whereas a cross-sectional study by the same research group suggested a decrease in narcissism over the lifespan (Foster et al., 2003). Furthermore, cohort research by Trzesniewski and her colleagues (2008a) indicated that changes in narcissism scores should be interpreted with caution. For example, across historical cohorts, narcissism did not increase in all aspects, but rather some components of narcissism seemed to increase narcissism (e.g., self-sufficiency, as measured by the NPI), whereas others decreased (e.g., superiority and vanity). Thus the few relevant studies have yielded contradictory results, making it difficult to advance exact prediction regarding age-related changes in narcissism. With this in mind, we seek to scrutinize these age changes (if found) by precise item-level analyses.

## 2. Method

### 2.1 Participants

One-hundred-and-three individuals (52 females and 51 males) participated in this study. The participants, who took part in the Block and Block Longitudinal Project (Block and Block, 1980, 2005; Gjerde, 1995), were recruited in preschool while either attending a parent cooperative or a university-run nursery school. The sample was assessed at ages 3, 4, 5, 7, 11, 14, 18, and 23. Observer ratings were obtained at all ages (with the exception of age 5). At each age, the participants were seen on multiple occasions, by multiple observers, and completed a wide variety of tasks. About two-thirds of the participants were European American, one-quarter was African American, and one-twelfth was Asian American. Although this sample is heterogeneous with respect to social class and parental education, it is slightly skewed toward middle-class socioeconomic status. Attrition was minimal in this longitudinal sample. The lowest number of participants occurred at the age 7 assessment ( $N = 99$ ). At ages 14, 18 and 23, the number of participants had increased and ranged between 103 and 104. Due to missing data on some variables, the number of participants varied slightly across analyses.

### 2.2 Measures

#### 2.2.1 Measuring Personality: Encoding Observer Evaluations by Means of the California Child Q-set (CCQ) and California Adult Q-set (CAQ)

**California Child Q-set (CCQ):** The CCQ (Block & Block, 1980) consists of 100 widely ranging statements about personality, cognitive, and social characteristics of children. Observers described each participant by arranging the Q-set items into a forced nine-step distribution according to their evaluations of the characterological salience of each item for each participant. Judgments ranged from most uncharacteristic (1) to most characteristic (9) of the person being evaluated. At age 3, each child was evaluated using the CCQ by three nursery school teachers who had observed the child for at least six months and who had received intensive training in the use of the CCQ in this particular context. At age 4, each child was again described by means of the CCQ procedure, but this time by an entirely different set of three trained nursery school teachers. Within each assessment, the observers worked independently of each other. At the age 3 and 4 assessments, the three independent Q-sort evaluations of each child were averaged to form a composite Q-sort evaluation. These two composite Q-descriptions were, in turn, averaged to form an overall (age 3 and age 4) preschool

composite for each child. This overall preschool composite was used in the analyses reported in this research. The *alpha* of the CCQ items based on correlations among nursery school teachers, averaged .65 at both age 3 and age 4. The average CCQ item reliability of the composite was .91.

The nursery-school teachers observed, on a daily basis, the ebb and flow of children's behavior in a familiar setting, including how they reacted in ego-threatening situations. In sum, the observer data obtained in preschool was based on long periods of observations (at least six months at both ages) by multiple observers who employed a rigorous coding method (the CCQ) to evaluate the participants in age-appropriate settings. The problems of generalizability and validity often characteristic of naturalistic data were therefore reduced. The age 7 CCQ descriptions were provided by 67 homeroom elementary school teachers and by two trained graduate students. The three evaluations were composited. At age 11, four advanced graduate students used the CCQ described each child and these four ratings were also composited for each individual participant.

**Preschool CCQ Scales:** Based on the CCQ evaluations and a priori expectations, we developed five preschool CCQ measured anticipated to foretell narcissism at age 23: 1) *Impersonal Antagonism* (78 items,  $\alpha = .79$ ), 2) *Histrionic Tendencies* (5 items,  $\alpha = .78$ ), 3) *Activity Level* (4 items,  $\alpha = .94$ ), 3), 4) *Desire to be at the Center of Attention* (5 items,  $\alpha = .78$ ), and *Undercontrol of Impulse* (4 items,  $\alpha = .77$ ). (The scale items are shown in Appendix A). Care was taken to avoid item overlap among the five scales.

**2.2.2. The California Adult Q-Set—**Independent sets of observers used the California Adult Q-Set (CAQ; Block, 1978) to record their impressions of each participant's personality at ages 14, 18, and 23. The CAQ-set also consists of 100 widely ranging age-appropriate statements about personality, cognitive, and social characteristics. The CAQ also uses a forced nine-step distribution. Judgments ranged from *most uncharacteristic* (1) to *most characteristic* (9) of the person being evaluated.

The assessors, Ph.D. psychologists and advanced clinical and personality graduate students, had no previous knowledge of the participants. The evaluations were based on lengthy, in-depth interviews and observations of the participants performing a wide variety of experimental tasks. Each single session lasted, on average, between two and three hours. The judges worked entirely independently of each other. Depending on the age of assessment, they interacted five or six times with each participant. Thus, CAQ evaluations for each individual were based on between 12 and 18 hours of face-to-face interaction with the participants. The several CAQ-sorts were averaged, and the composite descriptions were used in subsequent analyses. The average *alpha* reliability of the 100 age 23 CAQ items, based on the correlations among the raters, was .70. The personality evaluations across the seven assessment ages (ages 3, 4, 7, 11, 14, 18, and 23) were entirely independent. Attrition was minimal.

**2.2.3. Deriving an Observational Measure of Narcissism—**In this study, we did not have access to a self-report measure of narcissism such as the commonly used Narcissistic Personality Inventory (NPI; Raskin & Hall, 1981). Raskin and Terry (1988), as part of their study of the psychometric quality of the NPI, examined the relations between the NPI and CAQ observer evaluations. This allowed us to develop an observational measure of narcissism based on the 10 CAQ items that correlated most strongly with the NPI (the five highest positive and the five highest negative correlations). The CAQ items that showed the highest positive correlations with the NPI were: *Characteristically pushes limits* (item 65) ( $r = .50$ ), *Behaves in an assertive manner* (item 52) ( $r = .46$ ), *Perceives many contexts in sexual terms* (item 73) ( $r = .42$ ), *Expresses hostile feelings directly* (item 94) ( $r = .41$ ), and *Unaware of self-concern, feels satisfied with self* (item 74) ( $r = .38$ ). In contrast, the five CAQ items that showed the

highest negative correlations with the NPI were: *Arouses nurturing feelings in others* (item 21) ( $r = -.43$ , reversed), *Concerned with personal adequacy* (item 72) ( $r = -.42$ ), *Genuinely submissive; accepts domination comfortably* (item 14) ( $r = -.41$ ), *Seeks reassurance from others* (item 19) ( $r = -.40$ ), and *Delays or avoids action* (item 42) ( $r = -.40$ ).<sup>1</sup> These items were summed and the average taken. Separate scales were developed for ages 14 ( $\alpha = .85$ ), 18 ( $\alpha = .76$ ), and 23 ( $\alpha = .78$ ).

**Wechsler Intelligence Tests**—The Wechsler Adult Intelligence Scale (WAIS; Wechsler, 1981) was administered at age 18.

### 3. Results

#### 3.1. Descriptive Statistics

Males received significantly higher narcissism scores at all three ages (14, 18, and 23). Cohen's  $d$  ranged from .37 to .47 (see Table 1 for complete information about relevant descriptive statistics). This result is consistent with previous research (e.g., Foster et al., 2003). None of the three narcissism measures was significantly related to age 18 intelligence.

#### 3.2. Correlations among the Preschool Personality Narcissism Predictors

The correlations among the five preschool personality predictors of narcissism in adolescence and emerging adulthood, ranged from .49 to .69, averaging .59 (calculated using the  $r$ - $z$ - $r$  formula). Although these intercorrelations are relatively high, they are not high enough for multicollinearity to be a problem. The issue of multicollinearity emerges when variables in a correlation matrix are too highly correlated, especially at .90 or above. As a rule of thumb, bivariate correlations of .70 or higher should be avoided. In this study, albeit the correlations among the predictor variables are moderately high, they do not appear to be high enough to raise the concern of redundancy or multicollinearity (for further discussion of this issue, see Tabachnick and Fidel, 1996, pp. 84–86).

#### 3.4. Preschool Precursors of Age 23 Narcissism

First, we correlated the six preschool scales with narcissism scores at ages 14, 18, and 23. These correlations for age 23, presented in Table 2, were as follows: Impersonal Antagonism ( $r = .15$ , ns), Inadequate Impulse Control ( $r = .27$ ,  $p < .01$ ), Center of Attention ( $r = .22$ ,  $p < .05$ ), Activity Level ( $r = .28$ ,  $p < .01$ ), and Histrionic tendencies ( $r = .25$ ,  $p < .05$ ). The only unexpected finding was that preschool interpersonal antagonism did not relate significantly to narcissism at age 23, although the correlation was in the expected direction. Table 2 also includes the correlations between the six preschool scales and the narcissism measures at ages 14 and 18. The results for the three ages are mostly similar, although the adolescent correlations (age 14 and 18) were somewhat stronger than the age 23 correlations.

#### 3.5 Age Differences in Mean Narcissism Scale Scores

Next, we evaluated changes in mean narcissism scores from age 14 through 23. A clear pattern emerged. Narcissism increased substantially from age 14 to age 18 (age 14,  $M = 4.63$ ,  $SD = .95$ ; age 18,  $M = 5.10$ ,  $SD = .62$ ;  $t = 5.30$ ,  $p < .0001$ ,  $d = .58$ ). A decline could be discerned from age 18 to 23, but this trend did not reach the  $p$ -level of .05. However, this downward trend, while not statistically significant in this sample, reduced the increase in narcissism scores from age 14 to 18 by 31%. This slight but non-significant decrease in narcissism scores should be

<sup>1</sup>The correlations in the parentheses represent the relations between the NPI and the CAQ items as reported by Raskin and Terry (1988).

re-examined using samples with greater statistical power to decide whether narcissism truly peaks during late adolescence.

As mentioned above, cohort level research has suggested that different components of narcissism may change differentially over time (Foster et al., 2002; Trzesniewski et al., 2008a). With this in mind, we examined item-level changes between age 14 and 23. Item-level results are listed in Table 3. Items following the general overall narcissism score pattern (i.e., items that increased significantly between ages 14 and 18, while showing a significant decrease at age 23) measured tendencies such as pushing limits, delay of actions, and lack of concern with personal adequacy. Other items showed a steady increase with development – that is, increasing from age 14 to age 18 and either remaining stable or increasing further at age 23. These items reflected assertiveness, unawareness of self-concern, submissiveness, and tendency to perceive interpersonal contexts in sexual terms. In addition, expression of hostility increased from age 18 to 23.

## 4. Discussion

To our knowledge, the current study is the first investigation of narcissism conducted from a developmental perspective and using longitudinal designs. The results of the prospective analyses indicated that adolescents and young adults with relatively high narcissism scores were characterized by a theoretically meaningful personality configuration as early as in preschool. Overall, these attributes emphasized interpersonal antagonism and problems of inadequate impulse control. In addition, some indicators of an inflated self were observed.

At all three ages, males were significantly more narcissistic than females at ages. Gender socialization allowing more hostility, impulsivity, and self-centeredness in males than in females might explain this difference. Previous studies have found this gender difference using self-reports (e.g., Gabriel, Critelli, & Ee, 1994; Wright, O’Leary, & Balkin, 1989). This study replicated these findings using an observer-based methodology.

In addition, for the whole sample, narcissism scores increased from age 14 to 18, and showed a declining non-significant trend by age 23 (31% reduction from age 18). Item-level analyses suggested that tendency to push limits and concerns with personal adequacy are largely responsible for these changes.

### 4.1. Inflated Self, Hostility, and Inadequate Impulse Regulation

The current study provided further evidence for the importance of the three core qualities (inflated self, hostility, and inadequate impulse regulation) in the development and maintenance of narcissism over the first two decades of life. As outlined in the introduction, these three qualities—observed in preschool—might mutually reinforce each other. These empirical findings are important because they highlight that such qualities (especially impulsivity and hostility) are not merely consequences of narcissistic processes but might also play an important role in the development and maintenance of narcissism over time. An inflated sense of self promotes and is reinforced by hostile behaviors (Raskin et al., 1991). Impulsivity helps in the production and eventual display of such hostility and perhaps also plays a central role in allowing the defensive narcissist to avoid too much self-reflection, thereby feeding the inflated sense of self even further. Impulsivity may also reflect the narcissist’s growing reliance on the automatic processing of affect and cognition in their daily lives. In sum, there seems to be a defensive core of dynamic and intertwined personality qualities underlying the course of narcissism over time. Consequently, we believe, that this dynamic core and the supportive processes of interactional and cumulative continuity might be responsible for the degree of differential continuity from preschool and through adolescence and emerging adulthood.



The concept of interactional continuity suggests that the narcissist's antagonistic and exploitative interpersonal manner evokes particular reactions in others--behaviors likely to further reinforce the narcissist's hostile approach to the world (see Caspi, 2000; Caspi & Roberts, 2001 for discussions of interactional continuity). Furthermore, narcissism may stabilize with age because people self-select and/or are channeled into situations that tend to sustain narcissistic behaviors. Narcissism may therefore be maintained by the accumulation of its own consequences -- a process known as cumulative continuity (Caspi, Elder, & Bem, 1987).

For example, narcissists may self-select relationships with weaker peers who will reinforce their grandiose self-view.<sup>ii</sup> Such behavior resembles the descriptions of Beta-level children (along with their Omega-level friends) in dominance hierarchy research on children's and adolescent peer groups; such Beta-level children have been labeled "Bullies" (e.g., Savin-Williams, 1987). Links between socio-metric research and narcissism might be a fertile area of further investigation. In addition, children with narcissistic tendencies may also be channeled into classrooms and peer groups that potentially maintain and reward such tendencies (e.g., Cairns, Cairns, Neckerman, Gest, & Gariépy, 1988). Thus, it is plausible that the behavioral manifestations of narcissists stabilize relatively early as their mannerisms can be expected to evoke negative reactions from others.

#### 4.2. A Developmental View of Narcissism

Morf and Rhodewalt (2001) proposed that narcissism be considered a personality process, not a stable disposition or an individual difference variable. In their words: "The narcissistic self is constantly under construction" (p. 180). Although we do not disagree with this position, it might also be the case that at least some aspects of narcissism (e.g., an inflated self, hostility, and impulsivity) gradually solidify over time via processes such as interactional and cumulative continuity.

The early onset of narcissistic precursors raises the issue of automatic (and possibly defensive) processing for understanding the essence of narcissism. Preschool children are unlikely to deliberately contemplate strategies to defend their grandiose sense of self. Instead, from preschool, narcissistic individuals are described as compulsive attention-seekers, hostile, impulsive, suggesting a similar restricted behavioral flexibility as persons who tend to process affect and cognition automatically (see Mikulincer & Shaver, 2006). The early emergence of antagonistic interpersonal behavior and its persistence in the life of the narcissist also speaks to the importance of automatic processing (see Crick & Dodge, 1994, for a review of the automatic processing related to persistent hostile child behavior).

While there is a growing consensus that automatic processing should be of interest to researchers of narcissism, it is debatable whether such automatic processing is merely a parallel system running concurrently with a more deliberate, conscious system (e.g., Morf & Rhodewalt, 2001), or whether automatic processing is a more primary and overarching influence on the behavior of narcissists across time and context (e.g., Vazire, & Funder, 2006). This debate should not be seen as an "either-or" choice as surely both perspectives have heuristic value in adding to our understanding of narcissism. Our results highlight the value of paying attention on automatic processes in future narcissism research.

Furthermore, we suggest that the defensive processes associated with narcissism may play a role in the continuity of the precursors seen in this study. Given the importance of defenses in the theoretical origins of narcissism (Howell, 2005), further investigation of defensive

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<sup>ii</sup>For a splendid illustration of this dynamics in adults, see Halberstam (2007) absorbing description of General MacArthur during the Korean War.

processes might help uncover the narcissistic paradox of vulnerability combined with grandiosity. In particular, increased attention to defenses can provide more information about the vulnerability side of this paradox, as the grandiosity aspect has already been widely researched (see Morf & Rhodewalt, 2001 for comments on this knowledge gap in the current state of narcissism research).

Narcissism researchers might benefit from methods used by attachment researchers to investigate defensive processes. For both adolescent and adult samples, interviews (e.g., Main, Kaplan, & Cassidy, 1985; Gjerde, Onishi, & Carlson, 2004) have been particularly useful in uncovering defensive processes, as have laboratory/experimental methods (e.g., Fraley, Garner, & Shaver, 2000; Mikulincer, 1995; Mikulincer, Florian, & Weller, 1993; Mikulincer, & Orbach, 1995). Data on defensiveness at early ages have been collected via a combination of observational (Ainsworth, Blehar, Waters, & Wall, 1978) and physiological methods (Sroufe & Waters, 1977). In addition, interviews, self-reports, and play techniques with children as young as six years old have successfully revealed defensive processes (Cassidy, 1988).

Overall, a closer relation between attachment and narcissism research might hold promises. For example, Geiger and Crick (2001) suggested that children with insecure/avoidant attachments might be particularly likely to develop a narcissistic personality disorder. Fonagy (1999, p. 607), furthermore, not only argued that thick-skinned narcissist “deposits his or her own perceived inadequacies in others, whom he or she then can dismiss, denigrate, and devalue.” (p. 607), he also proposed that the “thick-skinned” narcissism was, in part, analogous to dismissive attachment, especially with regard to how dismissive individuals manifested denial of their caregivers. He further noted that Kohut’s view of narcissism has close links to attachment theory (Fonagy, 1999, pp. 611–612).<sup>iii</sup> It is not our aim to review these relations in detail, but rather to highlight the many useful methodologies and theoretical work for potential use in future investigations of the defenses processes in narcissism.

#### 4.3 Developmental Changes in Mean Narcissism Scores over Time

Our findings, furthermore, indicate that narcissism mean scores increased significantly from middle to late adolescence, followed by a trend toward a lower mean score from late adolescence into emerging adulthood. It merits attention that this finding might not indicate changes in narcissism per se, but might in addition reflect normative changes in development. For example, items related to impulsivity and concern about personal adequacy increased from middle to late adolescence, followed by a decline in emerging adulthood. This increase in impulsivity may be related to the developmentally appropriate risk-taking seen during adolescence (Arnett, 1999). Concern with one’s adequacy vis-à-vis one’s peers has also been noted as a normal developmental phenomenon during adolescence (e.g., Ryan & Kuczowski, 1994). In addition, items related to assertiveness showed steady increase over development. These items may be related to self-sufficiency, which is a component in many narcissism measures. The increase in self-sufficiency may be viewed as a positive developmental change and might not necessarily reflect increased narcissism per se (Trzesniewski et al., 2008a). Hence, while overall narcissism scores increased during adolescence (and decreased slightly by early adulthood), interpreting these changes as reflecting increases in narcissistic personality during adolescence might be problematic. Narcissism researchers who utilize adolescent and early adult samples should take special care to distinguish compulsive impulsivity, self-focus, and antagonism characteristic of narcissism from normative increases in risk-taking, self-consciousness, and assertiveness during this age-period.

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<sup>iii</sup>See Fonegy (2001) for further discussion about the relation between attachment and narcissism.

#### 4.4 Conclusions and Caveats

For several reasons, our results would seem to merit consideration. First, multiple influences on an outcome variable are common. Thus a focus on a single variable (in this case, early childhood personality) inevitably leads to the limitation of the magnitude of the reported personality precursor correlations because much of the variance is consumed by variables not considered in this study (Ahadi & Diener, 1989). For example, parenting might also promote narcissism in children (e.g., Horton, Bleau, & Drwecki, 2006; Otway & Vignoles, 2006). Correlations are also attenuated by measurement error (Block, 1963) and by unequally shaped distributions (Carroll, 1961; Gjerde, Block, & Block, 1986). Long intervals between assessments may also be expected to attenuate longitudinal relations, because long time periods provide greater chances for other, unmeasured variables to produce attenuating effects and thus lower the longitudinal correlation coefficients (Block & Block, 2006). It also deserves attention that the early childhood precursors were based on intensive observations by multiple and independent observers of children interacting in familiar and age-appropriate settings.

Studies of development need to recognize the issue of multifinality. Multifinality refers to circumstances in which similar initial conditions lead to different developmental end effects (Cicchetti & Rogosch, 1996). In other words, B (the outcome variable) might always follow A (the precursor) but this does not mean that A always precedes B. It is therefore possible that the precursors of narcissism included in this study are not specific to this personality disorder *per se*. For example, antagonism, high activity level, and lack of impulse control may also characterize children diagnosed with Attention-Deficit Hyperactivity Disorder (ADHD).<sup>iv</sup> Therefore, it is difficult, perhaps impossible, to know whether a preschool child with these attributes is on a developmental trajectory leading to narcissism or to ADHD. This study cannot address the non-specificity of the precursors of narcissism. In order to solve this problem, we would need, at a minimum, outcome measures of both ADHD and narcissism and carefully observe the developmental trajectories leading to each of the two outcomes. It is a limitation of this study that we did not have access to measures of both ADHD and narcissism; hence we can just acknowledge this problem but not solve it.

We recognize that our observer measure of narcissism is being used for the first time and that reasonable questions may be raised about its construct validity. It would have been advantageous if we had to our disposal commonly used self-report measures such as the NPI so that we would have been able to estimate the exact relation between NPI and our NPI-derived observational measure. Unfortunately, the NPI was not included in this longitudinal database. However, the measure that we used consisted of the CAQ items most highly correlated (positively and negatively) with the NPI as reported by Raskin & Terry (1988), and the content of these CAQ items captured the essential aspects of a narcissistic personality. It merits attention that our CAQ scale is empirically linked to the NPI and seems to have good domain coverage. In addition, our measure is related in theoretically-meaningful ways to independent assessments of children observed daily in natural settings by multiple trained observers as much as twenty years earlier.

More than a decade ago, Rhodewalt and Morf (1995) criticized the reliance on self-report assessment of narcissism, suggesting that this measurement approach might obscure the defensive aspects of this disorder. They argued that “if narcissism is characterized by a defensive ‘splitting off’ of negative elements of the self ... confidently held, overtly positive self-images of narcissists may be misleading” (p. 20). Unique reliance on self-reports might also lead to inflated correlations among a variety of self-report scales. Robins and Beer (2001), for example, suggested that “positive illusions may reflect a more general tendency to

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<sup>iv</sup>We thank one of the anonymous reviewers for this suggestion

bolster self-esteem by denying information that threatens self-worth, and this tendency may manifest itself on a wide range of self-report measures" (p. 340). Future research might benefit from examining relations between self-reported and observer-based assessments of narcissism and their relative affordances (cf. Gjerde et al., 2004 for an example from attachment research). In addition, future studies might also benefit from examining who increases or decreases in narcissism during adolescence and early adulthood. In this study, we were not able to discern differential patterns of change and whether membership in the different groups could be predicted from the preschool narcissism scales, mainly because of the low number of participants in each group.

Finally, it is essential that long-term longitudinal studies, such as ours, be complemented by short-term longitudinal studies that address in greater detail the specific dynamic aspects of this disorder. For example, Robins and Beer (2001) stated that narcissism is a maladaptive way to achieve positive self-esteem, especially in the long term. Paulhus (1998) found that the positive impressions made by self-enhancers declined over seven weeks. These two studies, both of which considered changes through time, illustrate a promising method to gain further insight into the developmental dynamics of narcissism.

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## Appendix A

### CCQ34 Scale I: *Center of Attention*

- CCQ34021 – Tries to be the center of attention.
- CCQ34059 – Is neat and orderly in dress and behavior (reversed).
- CCQ34008 – Tends to keep thoughts, feelings, or projects to self (reversed).
- CCQ34086 – Likes to be by him/herself, enjoys solitary activities (reversed).
- CCQ34098 – Is shy and reserved; makes social contacts slowly (reversed).

### CCQ34 Scale II: *Activity*

- CCQ34026 – Is physically active.
- CCQ34028 – Is vital, energetic, and lively.
- CCQ34063 – Has rapid personal tempo.
- CCQ34052 – Is agile and well coordinated.

### CCQ34 Scale III: *Histrionic Tendencies*

- CCQ34054 – Emotional labile
- CCQ34058 – Is emotionally expressive
- CCQ34057 – Tends to exaggerate mishaps
- CCQ34035 – Is inhibited and constricted (reversed).

### CCQ34 Scale IV: *Interpersonal Antagonism*

- CCQ34035 – Aggressive (physically or verbally)
- CCQ34002 – Is considerate and thoughtful of other children (reversed)
- CCQ34032 – Tends to give lend, and share (reversed).



CCQ34076 – Can be trusted; is dependable (reversed).

CCQ34062 – Is obedient and compliant (reversed).

CCQ34006 – Is helpful and cooperative (reversed).

CCQ34 Scale V: *Undercontrol of Impulse*

CCQ34013 – Characteristically pushes and tries to stretch limits.

CCQ34065 – Is unable to delay gratification; cannot wait for satisfactions.

CCQ34095 – Overreacts to minor frustrations; is easily irritated and/or angered.

CCQ34010 – Has transient interpersonal relationships.

Table 1

Gender Differences in Narcissism at Ages 14, 18, and 23

Age	Mean	SD	95% Confidence Interval	Range of Scores	t-value	Cohen's <i>d</i>
Age 14						
Females	4.22	.89	4.18 – 4.66	2.48 – 6.33		
Males	4.57	.96	4.57 – 5.11	4.76 – 6.40	2.31*	.37
Age 18						
Females	4.96	.57	4.80 – 5.12	3.45 – 6.15		
Males	5.24	.63	5.09 – 5.43	4.01 – 6.63	2.37*	.47
Age 23						
Females	4.75	.96	4.48 – 5.01	2.50 – 7.00		
Males	5.16	1.15	4.83 – 5.48	2.40 – 7.40	1.98*	.38

Note. Ns of females = 52; Ns of Males = 51.

\* p &lt; .05

**Table 2**

Zero-order and Average Correlations Between Narcissism and its Preschool CCQ Scales

Preschool CCQ Scales	Narcissism Measured at Ages 14, 18, and 23			Average <i>r</i> across the three Age levels
	Age 14	Age 18	Age 23	
Interpersonal Antagonism	.37***	.23*	.15	.25
Inadequate Impulse Control	.42****	.25*	.27**	.31
Histrionic Tendencies	.38****	.24*	.25*	.31
High Activity Level	.31**	.28**	.28**	.31
Center of Attention	.38****	.23*	.21*	.29

*Note.* CCQ = California Child Q-Sort; *Ns* range from 96 to 99. Degree of statistically significance cannot be assigned to average correlations.

\*  
 $p < .05$ ,

\*\*  
 $p < .01$ ,

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

\*\*\*\*  
 $p < .0001$ .

**Table 3**

## The Narcissism Scale: Item –level Differences in Mean Values

CAQ Items	Age 14 versus 18	Age 18 versus 23
Items Indicative of Narcissism		
65. Characteristically pushes limits	$t = 2.36; p < .05$	$t = -3.28, p < .001$
52. Behaves in an assertive manner	$t = 2.54; p < .05$	$t = 3.82, p < .0002$
73. Perceives many contexts in sexual terms	$t = 3.84; p < .001$	ns
94. Expresses hostile feelings directly	ns	$t = 2.17, p < .05$
74. Unaware of self-concern, satisfies with self	$t = 3.05, p < .01$	ns
Items Non-Indicative of Narcissism (Reversed)		
21. Arouses nurturing feelings in others	ns	ns
72. Concerned with personal adequacy	$t = 5.57; p < .0001$	$t = -7.04, p < .0001$
14. Genuinely submissive; accepts domination	$t = 6.53; p < .0001$	ns
19. Seeks reassurance from others	ns	ns
42. Delays or avoids action	$t = 3.85; p < .001$	$t = -1.96, p < .05$

Note. CCQ = California Child Q-Sort; *Ns* range from 96 to 99. Positive *t*-values indicate increase in narcissism from one age to another. A negative *t*-value indicate significant decrease in that specific narcissism item from age 18 to age 23.

\*  
 $p < .05$

\*\*  
 $p < .01$

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

\*\*\*\*  
 $p < .0001$ .