Entering Adulthood in a Recession Tempers Later Narcissism
Emily C. Bianchi
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What is This?
I've noticed a lot more people around my age [are] more grateful about what they have or can get. We're a lot more humble. When we were graduating high school, it was a world of possibilities, but when the recession hit, it was like, “Oh, man.” It’s a completely different change in attitude.

—Alex Graham, Class of 2009, University of Memphis (quoted in McMillin, 2010)

Economic recessions tend to be particularly devastating for young adults. As new workers with limited work experience, they are considerably more likely to be unemployed compared with older, more seasoned adults. For instance, in June 2010, 20.0% of 16- to 24-year-olds actively seeking work were unemployed, compared with 8.2% of adults ages 25 to 54 (U.S. Bureau of Labor Statistics, 2013). Young adults who do find jobs during recessions are often underemployed and underpaid relative to their prerecession counterparts—compromised career beginnings that can hamper later financial and occupational success (Kahn, 2010; Oyer, 2008). Even getting into and financing school becomes more difficult during a recession, as competition for enrollment rises while access to funding declines (Oliff, Palacios, Johnson, & Leachman, 2013). Recessionary realities are nearly impossible for most young adults to avoid and are likely to affect their lives in some meaningful way.

Does entering adulthood during a recession affect how narcissistic people ultimately become? Narcissists regard themselves as superior to other people and believe that they are entitled to good outcomes, excessive admiration, and unyielding praise (Morf & Rhodewalt, 2001). Although much is known about the relational and interpersonal costs of narcissism, relatively little is known about the conditions that facilitate or thwart the development of a grandiose self-concept. Past work suggests that narcissism can be cultivated in childhood by overindulgent and overprotective parenting (e.g., Kohut, 1977; Millon, 1981) and by excessive and unearned praise (Twenge & Campbell, 2009). The present research evaluated whether factors outside of childhood and at a critical
stage of identity formation can also influence the development of a grandiose self-concept.

There are several reasons why entering adulthood during times of economic prosperity or scarcity might have lasting implications for how unique, special, and deserving people believe themselves to be. One is that emerging adulthood is often a particularly impressionable period of life (e.g., Arnett, 2000; Mannheim, 1952). As most people become less dependent on their childhood families and communities, they become more aware of and reliant on the outside world (e.g., Arnett, 2000). Identity, values, and attitudes are typically explored, developed, and solidified during this time, and societal conditions often become part of this formulation (e.g., Duncan & Agronick, 1995; Mannheim, 1952; Stewart & Healy, 1989). A growing body of work has shown that macroenvironmental experiences during emerging adulthood can shape later attitudes and values, often in ways that reflect the prevailing concerns of the time (Giuliano & Spilimbergo, in press; Inglehart, 1997; Malmendier & Nagel, 2011). For instance, people who begin their adult lives during wars or economic depressions tend to be particularly attuned to national and economic security later in life (Inglehart, 1997; Inglehart & Baker, 2000). Those who experience economic stagnation during their impressionable years also tend to be more risk averse in both their personal (Malmendier & Nagel, 2011) and professional (Schoar & Zuo, 2011) lives, and more grateful for and satisfied with their jobs (Bianchi, 2013), compared with those who enter adulthood in more prosperous times. This heightened risk aversion and enhanced gratitude likely reflect the more cautious, deliberate, and humbling mood of tumultuous economic times.

Given that people often bear traces of the societal conditions of their early adult years, entering adulthood in prosperous times is likely to fuel narcissism, and coming of age amidst relative scarcity is likely to subdue it. Economic expansions are characterized by self-focused, individualistic behavior (e.g., Bianchi, 2014; Greenfield, 2009; Hofstede, 1980; Park, Twenge, & Greenfield, 2014). Extreme self-focus is viable only when people are not reliant on others to satisfy their basic needs. Thus, people and countries that are wealthier are more likely to champion autonomy and self-sufficiency and to focus on the realization of individual goals (e.g., Hofstede, 1980; Inglehart & Baker, 2000). Moreover, even fleeting periods of economic prosperity or subtle exposure to financial abundance is associated with increased attendance to individual rather than group needs (Park et al., 2014; Vohs, Mead, & Goode, 2006). At an extreme, self-focus or individualism can morph into narcissism. Indeed, individually oriented people and countries tend to be more narcissistic than those that are more collectively focused (Foster, Campbell, & Twenge, 2003).

Conversely, challenging environmental circumstances typically engender a more interdependent and other-oriented mind-set, which is less likely to cultivate excessive self-regard (e.g., Greenfield, 2009; Park et al., 2014). For instance, during the Great Recession, American teenagers became more concerned with the needs and problems of others (Park et al., 2014). Even during mild economic downturns, Americans become more collectively focused, a shift that is apparent in the values they emphasize and the songs that become popular (Bianchi, 2014). As resources become scarce, the needs, desires, and interests of the individual are often superseded by those of the group. Given that young adults tend to carry legacies of the period in which they came of age, those who first navigate the adult world amidst economic turmoil should be more likely to develop an other-oriented and ultimately less narcissistic self-concept, whereas those who first navigate the adult world at a time when people are more self-reliant and independent should be more likely to adopt a self-focused orientation.

Additional support for the possibility that recessions reduce later narcissism comes from research suggesting that narcissism is tempered by adversity and failure (e.g., Kohut, 1977; Morf & Rhodewalt, 2001). For instance, some scholars have argued that narcissism declines over the life span in part because age increases the likelihood of encountering humbling setbacks and ego-bruising failures (Foster et al., 2003). Other work indicates that narcissism is fostered in childhood by overprotective parenting (Kohut, 1977) and by excessive praise and undeserved rewards (Twenge & Campbell, 2009). These accounts similarly suggest that when encounters with failure are limited, egos are allowed to expand unchecked by the blows of adverse experiences. Given the scarcity of jobs and opportunities, people who enter adulthood during a recession are substantially more likely to endure failures and setbacks compared with people who enter adulthood during more prosperous times. Consequently, they also should be less likely to develop an inflated sense of self-importance.

Three studies using large, diverse samples of American adults and attitudinal and behavioral measures of narcissism examined whether economic conditions in early adulthood predicted narcissism in later life. Studies 1 and 2 evaluated whether people who entered adulthood in more difficult economic times endorsed fewer narcissistic items as older adults. Study 3 extended this inquiry to a behavioral manifestation of narcissism and examined whether CEOs who came of age in recessions paid themselves relatively modestly compared with CEOs who came of age in prosperous times.
Study 1

Participants and procedure

The sample in Study 1 consisted of 1,572 members of a research panel (57.7% male; 76.9% Caucasian) who completed a survey online. A sample of 1,500 was targeted to ensure a substantial range of ages. This cutoff was slightly exceeded before the survey link was disabled. Respondents were born between 1947 and 1994 and on average were 41.4 years old (SD = 11.1).

Narcissism was measured using the 40 forced-choice items from the Narcissism Personality Inventory (NPI-40; Raskin & Terry, 1988; \( \alpha = .90 \)). Possible scores ranged from 1 to 40 (\( M = 14.6, SD = 8.2 \)), with higher scores reflecting the endorsement of more narcissistic options. Additionally, self-esteem was measured using Rosenberg’s (1965) Self-Esteem Scale. This measure was included to evaluate whether any dips in narcissism among respondents who came of age in recessions could be explained by dampened self-esteem, an aspect of narcissism that is associated with adaptive psychological functioning and health (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004).

Economic conditions in emerging adulthood were measured using the average national unemployment rate during the years respondents were ages 18 through 25 (\( M = 6.2\% \), SD = 1.01), the age range often used to capture the impressionable years of emerging adulthood (e.g., Arnett, 2000; Giuliano & Spilimbergo, in press; Krosnick & Alwin, 1989). The average unemployment rate during this period of life was highly correlated with other measures of economic conditions, including the highest annual unemployment rate during this life stage (\( r = .90 \)) and the severity (\( r = .61 \)) of recessions experienced. Figure 1 shows the average unemployment rate in early adulthood across all three studies reported here. In Study 1, economic conditions in emerging adulthood varied considerably across cohorts and ranged from 4.28% to 7.73%. In this sample, respondents who were born in the late 1940s and the late 1970s encountered the best economic conditions during emerging adulthood, and those born in the early 1960s and the late 1980s encountered the worst.

The relationship between economic conditions in emerging adulthood and narcissism was examined in three models using ordinary least squares regressions with robust standard errors. Given that narcissism typically declines over the life span (e.g., Roberts, Edmonds, & Grijalva, 2010; Stinson et al., 2008), age was included as a control variable in all three models. Models 2 and 3 also included a control for gender (female = 0, male = 1), given that narcissism scores are often higher among men than women (e.g., Foster et al., 2003; Stinson et al., 2008). In addition, Model 3 controlled for educational level (five levels) because entering adulthood in a recession positively affects educational attainment (e.g., Kahn, 2010).

Results

As shown in Table 1, higher unemployment rates during emerging adulthood were associated with lower narcissism scores later in life. This relationship persisted when controls for gender (Model 2) and education (Model 3) were included. Figure 2 illustrates this relationship using predicted values from Model 1.

Controlling for age, a 1-point increase in the average unemployment rate in emerging adulthood was associated with a 0.69-point decrease in narcissism scores. Thus, entering adulthood in the worst economic climate experienced by these respondents (mean unemployment = 7.73) was associated with the lowest levels of narcissism scores later in life (\( M = 5.4 \)).
7.7%) instead of the best (mean unemployment = 4.3%) was associated with a 2.35-point reduction in narcissism scores. Subsequent analyses showed that economic conditions at this life stage were not similarly predictive of self-esteem and that controlling for self-esteem did not meaningfully change the main effects in any of the models. Thus, respondents who entered the adult world during economic booms were not simply more confident and self-assured than those who became adults during economic downturns; they were more likely to be excessively confident and self-satisfied.

Follow-up analysis found that economic conditions in the subsequent (ages 26–33) period of life were not similarly predictive of current narcissism. Moreover, analyses showed that similar effects emerged for men and women. Finally, additional analyses included an interaction term for age and economic conditions in early adulthood to evaluate whether the effect of economic conditions diminished over time. This interaction term was not significant in any of the models, which suggests that the mark of economic experiences in emerging adulthood did not decrease meaningfully over time.

**Study 2**

**Participants and procedure**

Building on the results of Study 1, Study 2 included a larger, nationally representative sample and a different measure of narcissism. Data for Study 2 came from Wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions, a large, federally funded study designed to assess the prevalence of various mental-health conditions in the U.S. population (Grant, Kaplan, & Stinson, 2005). Face-to-face interviews with 43,093 respondents were conducted in 2001 and 2002 (see Grant et al., 2005, for details on sample selection and representativeness). Follow-up interviews with 34,653 of the original participants were conducted in 2004 and 2005. Narcissism was assessed during the second wave of interviews. Of the respondents interviewed in the second wave, 31,060 (89.6%) had valid responses to all independent and dependent variables and were included in the analyses.

Narcissism was gauged using 18 questions (Stinson et al., 2008). Like the questions in the NPI-40, these items reflected the nine subdimensions of narcissistic personality disorder outlined in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1994). Two forced-choice yes/no questions were used to gauge each dimension. Respondents were instructed to answer each question according to how they felt or acted most of the time and across different situations. Sample items included, “Have you felt that you were the kind of person who deserves special treatment?” and “Have people told you that you have too high an opinion of yourself?” Consistent with conceptualizations of subclinical narcissism, analyses focused on a continuous measure of narcissism, the number of narcissistic items endorsed. Narcissism scores

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**Table 1. Results From Linear Regressions Predicting Narcissism Scores in Study 1 (N = 1,572)**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Model 1 ($R^2 = .09^{***}$)</th>
<th>Model 2 ($R^2 = .10^{***}$)</th>
<th>Model 3 ($R^2 = .11^{***}$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
<td>$\beta$</td>
<td>$b$</td>
</tr>
<tr>
<td>Unemployment rate, ages 18–25</td>
<td>$-0.69$ (0.20)</td>
<td>$-0.08^{***}$</td>
<td>$-0.69$ (0.20)</td>
</tr>
<tr>
<td>Age</td>
<td>$-0.19$ (0.02)</td>
<td>$-0.26^{**}$</td>
<td>$-0.19$ (0.02)</td>
</tr>
<tr>
<td>Malea</td>
<td>$1.32$ (0.40)</td>
<td>$0.08^{***}$</td>
<td>$1.28$ (0.39)</td>
</tr>
<tr>
<td>Education</td>
<td>$0.93$ (0.17)</td>
<td>$0.13^{***}$</td>
<td>$0.93$ (0.17)</td>
</tr>
</tbody>
</table>

Note: Robust standard errors are in parentheses.

Gender was coded as 0 for female and 1 for male.

$^{***}p < .001$. $^{**}p < .01$. $^*p < .05$.

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![Confidence Interval](image-url)

**Fig. 2.** Best-fitting regression line (with 95% confidence interval) showing the relationship between economic conditions in emerging adulthood and narcissism, controlling for age, in Study 1.
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ranged from 0 to 18 ($M = 2.45$, $SD = 2.79$), and higher scores indicated greater narcissism. The unemployment rate in emerging adulthood for this sample ranged from 4.1% to 7.7% ($M = 5.9\%$, $SD = 1.09$). Respondents were born between 1930 and 1984, and as in Study 1, regression models controlled for age, gender (0 = female, 1 = male) and education (six levels).

Results

As shown in Table 2, worse economic conditions in emerging adulthood were associated with lower narcissism scores later in life. In other words, as in Study 1, people who came of age in worse economic environments were less likely to regard themselves as unique, special, and deserving. These results emerged among both men and women and even after controlling for gender and education. In Model 1, which included a control for age only, a 1-point increase in the average unemployment rate during early adulthood was associated with a 0.11-point decrease in later narcissism scores. Across the range of economic conditions in this sample (4.1%–7.7%), this translates to roughly a 0.40-point difference in narcissism scores between respondents who came of age in the best and worst economies.

Table 2. Results From Linear Regressions Predicting Narcissism Scores in Study 2 ($N = 31,060$)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$b$</th>
<th>$\beta$</th>
<th>$b$</th>
<th>$\beta$</th>
<th>$b$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment rate, ages 18–25</td>
<td>-0.11 (0.02)</td>
<td>-0.04***</td>
<td>-0.11 (0.02)</td>
<td>-0.04***</td>
<td>-0.10 (0.02)</td>
<td>-0.04***</td>
</tr>
<tr>
<td>Age</td>
<td>-0.03 (0.00)</td>
<td>-0.17***</td>
<td>-0.05 (0.00)</td>
<td>-0.17***</td>
<td>-0.03 (0.00)</td>
<td>-0.17***</td>
</tr>
<tr>
<td>Male$^a$</td>
<td>0.63 (0.04)</td>
<td>0.12***</td>
<td>0.63 (0.04)</td>
<td>0.12***</td>
<td>-0.11 (0.01)</td>
<td>-0.06***</td>
</tr>
</tbody>
</table>

Note: Robust standard errors are in parentheses.

$^a$Gender was coded as 0 for female and 1 for male.

Indeed, in validating behavioral manifestations of executive narcissism, Chatterjee and Hambrick (2007, 2011) found that relative compensation was highly correlated with other unobtrusive indicators of narcissism, including how prominently a CEO’s picture was featured in the company’s annual report, how frequently the CEO was mentioned in company press releases, and how often the CEO used first-person singular pronouns in public interviews. Moreover, these behavioral indices of narcissism were strongly correlated with narcissism ratings provided by securities analysts who regularly tracked the firms these CEOs ran (Chatterjee & Hambrick, 2007). Other studies using different behavioral markers of executive narcissism have similarly shown that more narcissistic CEOs pay themselves more in both absolute and relative terms and that outsized compensation relative to other senior employees provides a clear and visible signal of a CEO’s heightened self-regard (Ham et al., 2013).

Participants and procedure

The sample in Study 3 consisted of 2,095 CEOs from major publicly traded companies in the United States during 2007. I focused on 2007 because this was the last year preceding the most recent financial crisis, and compensation decisions were not likely to be constrained by the public scrutiny and economic turmoil that were triggered by the crisis. The majority of the data were collected from Standard & Poor’s Compustat/ExecuComp database, which gathers compensation data for the largest publicly traded firms in the United States. The ExecuComp database included 2,119 companies in 2007. Twenty-four companies were missing data for one of the independent or dependent variables and were not included in the analyses. Following past research, I gauged narcissism using two ratios: (a) the CEO’s salary and bonus relative to the salary and bonus of the next most highly paid executive and (b) the CEO’s overall compensation package relative to the total compensation package of the next most highly paid executive (Chatterjee & Hambrick, 2007, 2011). Total compensation included
all other income (e.g., stock grants, stock options, deferred income) reported in filings with the Securities and Exchange Commission. On average, the CEOs received 1.55 (SD = 0.79) times the salary and bonus and 2.41 (SD = 2.38) times the total compensation of the next most highly compensated executive in their company.

As in Studies 1 and 2, a control for gender was added in Model 2, although 95.7% of the CEOs were male. Model 3 included controls for annual revenues and assets in 2007, given that revenues and assets are strong predictors of CEO compensation (Tosi, Werner, Katz, & Gomez-Mejia, 2000). Data for revenues and assets were drawn from Compustat and were missing for 31 firms. Finally, dummy variables for the 20 North American Industry Classification System industry categories were added in Model 4 to control for any differences in pay norms across industries. Robust regression was used in all analyses to minimize the influence of outliers given the large range of compensation ratios in this sample (Rousseeuw & Leroy, 2003).

### General Discussion

Three studies using large, diverse samples of American adults found that entering adulthood during a recession tempered later narcissism. People who came of age during tumultuous economic times were less likely to endorse items suggesting that they were unique, special, and entitled to superior outcomes relative to people who entered adulthood in more prosperous times. They were also less likely to pay themselves substantially more than other top employees. Whereas past work has shown that economic conditions in emerging adulthood can leave an enduring mark on attitudes and behavior, these findings suggest that they can similarly shape self-concepts and self-regard. Moreover, whereas previous research has shown that parental behavior during childhood predicts later narcissism, the present findings suggest that macroenvironmental conditions play a similar role at a later stage of development.
The tendency of recessions to depress narcissism in young adults may have both adaptive and maladaptive consequences. On the one hand, narcissism exacts rational and interpersonal costs. Narcissists tend to focus on their own goals at the expense of the goals of other people and tend to alienate the people around them (Morf & Rhodewalt, 2001). On the other hand, narcissists are often well liked in initial interactions (Paulhus, 1998) and are effective at claiming resources for themselves (Campbell, Bush, Brunell, & Shelton, 2005). In this regard, the present results could help explain why entering the workforce in an economic boom continues to confer advantages even decades into people’s careers (Kahn, 2010; Oyer, 2008). Given that people who enter adulthood more prosperous times are more likely to feel entitled to good outcomes, they may be more likely to advocate for themselves in ways that could continue to yield greater financial and career success.

These results also may shed light on why narcissism among American college students has seemingly swelled in recent decades (Twenge, Konrath, Foster, Campbell, & Bushman, 2008). Although the presence and magnitude of this growth has been disputed (e.g., Trzesniewski, Donnellan, & Robins, 2008), if narcissism is rising, the strong economy of the late 1980s and 1990s may help account for this rise. Indeed, the most widely cited publication on the growth of narcissism charted rising egoism between 1979 and 2006 (Twenge et al., 2008), a time period that began with a deep recession and continued with several decades of mostly robust economic growth. Thus, growing narcissism among American college students over this period may reflect a long stretch of rising prosperity. If so, then the Great Recession may knock this upward trajectory off course.

These findings also should be viewed in light of several limitations. First, given that these studies were correlational, it is possible that unmeasured confounds account for the relationship between economic conditions in emerging adulthood and narcissism later in life. However, because respondents were selected into economic climates simply by their birth year, and because the independent and dependent variables were temporally removed and at different levels of analysis, any remaining confounds are likely to help explain why the observed effect emerges. Second, although I suggest that economic conditions are likely to be more influential for emerging adults than for older adults, an alternative possibility is that economic recessions are simply more uniformly challenging for young adults, though not necessarily more influential. Additionally, even though most young adults are affected by recessions, the duration and depth of the challenges they face are likely to be quite diverse. Those who are better educated or enter fields that are less upset by economic turmoil may be less humbled by entering adulthood at a time when options are limited and resources are scarce. Future work could examine whether more proximal economic conditions or personal experiences moderate the relationship between economic conditions in early adulthood and later narcissism. In doing so, it could continue to explore how and when economic recessions leave a humbling imprint on the egos of emerging adults.

**Author Contributions**

E. C. Bianchi is the sole author of this article and is responsible for its content.

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**Declaration of Conflicting Interests**

The author declared that she had no conflicts of interest with respect to her authorship or the publication of this article.

**Notes**

1. Following past work (e.g., Chatterjee & Hambrick, 2007), I use the term narcissist to refer to people with relatively high scores on attitudinal and behavioral measures of narcissism. Although in extreme cases narcissism is classified as a psychiatric disorder, it is also a continuous individual difference with substantial variation. Similarly, following past work (e.g., Bianchi, 2013), I use the terms recession and economic boom to refer to periods when the national unemployment rate is relatively high or low.

2. Eighty-two participants in this sample were still in emerging adulthood. For these respondents, economic conditions in emerging adulthood were calculated by averaging the annual unemployment rate for the years since they had turned 18. Similar results emerged whether or not these participants were included in the analyses.

3. The severity of recessions was assessed using the average change in gross domestic product, as reported by the U.S. Department of Commerce, Bureau of Economic Analysis (2014), when respondents were ages 18 through 25.

4. Because these data contain sensitive information about alcohol use, drug use, and mental illness, the raw data are not publicly available to researchers. Thus, all analyses were conducted by statisticians from the U.S. Census Bureau at the request of the author.

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