



Brief Report

Entering adulthood in a recession tempers later narcissism – But only in men



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ARTICLE INFO

Article history:

Received 16 April 2015

Revised 21 August 2015

Accepted 26 October 2015

Available online 27 October 2015

Keywords:

Narcissism

Emerging adulthood

Macroeconomic conditions

Replication

Gender differences

ABSTRACT

In a recent study, Bianchi (2014) showed that macroeconomic conditions (i.e. average unemployment rate) during the years of emerging adulthood (ages 18–25) are inversely related to adult narcissism. Fletcher (2015) called into question the robustness of the results and Grijalva et al. (2015) presented meta-analytic support for real gender differences in narcissism. Here we report combined results from five studies ($N = 11,394$) showing that the average unemployment rate during emerging adulthood indeed tempers later narcissism – but only in men.

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1. Introduction

The development of narcissism has long been a topic of psychological inquiry (e.g. Kernberg, 1975; Millon, 1981; Twenge & Campbell, 2009) but there is still little empirical evidence regarding the circumstances that influence the emergence of narcissism. Recently, a study by Bianchi (2014, Study 1) found evidence for the hypothesis that macroeconomic conditions during the impressionable phase of emerging adulthood play a role in the development of adult narcissism. Results were based on a large, cross-sectional online study ($N = 1572$) showing that the average national unemployment rate in the years of emerging adulthood (ages 18–25) negatively predicted individual scores on the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) while controlling for age.

Are these associations the same for males and females? A recent meta-analysis by Grijalva et al. (2015) showed that the frequently found gender differences in narcissism are true differences and not merely a measurement artifact. These differences can be explained by gender stereotypes and gender-specific role beliefs and

expectations, which are thought to encourage men to be dominant, assertive, and achievement striving, while women are encouraged to be selfless, tender, and nurturant.¹ Interestingly, gender-stereotypes might not only explain main effects of gender on narcissism but might also imply a moderating effect of gender on the association between unemployment rates in young adulthood and narcissism. The stereotype of men as being, for instance, more achievement-oriented and the accompanying societal expectations come along with a stronger focus of men on achievement and work. As men's identity is on average more closely linked to achievement- and work-related issues, unemployment might have stronger effects on the development of narcissism in men compared to women.

The findings by Grijalva et al. (2015) and Bianchi (2014) as well as a recent comment on Bianchi, calling into question the robustness of her results (Fletcher, 2015) encouraged us to investigate whether the proposed macroeconomic effect is subject to gender differences in four large samples from the US and a representative sample from Germany. When considering the role of

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¹ Although gender roles are less strictly separated in our modern times, today's men on average still have higher achievement motivation. Participants in our data sets have gone through emerging adulthood in times when gender role separation was clearer and more strongly 'enforced'.

gender-stereotypes (e.g., males are more achievement-oriented) on the valuation of work and achievement (i.e. are valued more by men) it is plausible that the effect of rougher economic (i.e. work- and achievement-related) conditions during emerging adulthood on the development of narcissism found by Bianchi (2014) is subject to gender differences, such that these conditions are more important, and thus have a stronger influence for men.

2. Method and results

2.1. Participants

Participants were part of Internet surveys of narcissism (Sample 1 Open Internet: $N = 2200$; 25% male; Foster, Campbell, & Twenge, 2003, Sample 2 MTurk: $N = 3078$; 44% male; Sample 3 MTurk: $N = 2667$; 35% male), the original data from Bianchi's (2014) Study 1² (Sample 4 Online Panel: $N = 1572$; 58% male), and a representative subsample (Sample 5: $N = 1877$; 48% male; Richter & Schupp, 2012) of a large, ongoing longitudinal survey of private households and persons in Germany conducted by the German Institute for Economic Research (Socio-Economic Panel; Wagner, Frick, & Schupp, 2007). Only data from participants who resided in the respective country (US or Germany) and were aged 18 or older were used in the data analyses. Ages ranged from 18–72 ($M = 25.98$, $SD = 9.14$; Sample 1), 18–83 ($M = 32.46$, $SD = 11.86$; Sample 2), 18–75 ($M = 32.57$, $SD = 11.57$; Sample 3), 18–65 ($M = 41.42$, $SD = 11.13$; Sample 4), and 18–95 ($M = 52.02$, $SD = 17.47$; Sample 5).

2.2. Measures

The four large American samples used the NPI (Raskin & Terry, 1988) to assess narcissism whereas in the German sample, the short form of the Narcissistic Admiration and Rivalry Questionnaire was used (NARQ; Back et al., 2013) was used. All inventories showed good internal consistencies ranging from .83 to .90 for the NPI and .80 for the short NARQ (NARQ-S).

2.3. Results

First, we estimated the effect of the average national unemployment rate during emerging adulthood on narcissism (controlling for age) using ordinary least squares regression in each sample. Models were estimated for males and females separately as well as for both genders combined. Second, we estimated the combined effect of unemployment during emerging adulthood on later narcissism across the 5 samples by combining the results of the regression analyses using inverse-variance weighting (e.g. Lipsey & Wilson, 2001) in a fixed-effects framework. Results showed that across samples, a reliable effect of unemployment during emerging adulthood on later narcissism could be replicated for males ($\beta = -.05$, 95% CI = $[-.08, -.02]$) but not females ($\beta = .02$, 95% CI = $[-.01, .04]$) or both genders combined ($\beta = -.01$, 95% CI = $[-.03, .01]$) (see Fig. 1). The effect for males differed significantly from the one for females ($Z = -3.56$, $p < .001$). In addition, to formally test the moderating effect of gender we added the gender * unemployment interaction term in all analyses and meta-analyzed the interaction effect as well as the simple slopes for men and women across studies. In line with our previous analyses, the moderator effect was significant ($\beta = -.03$, 95% CI = $[-.05, -.01]$). For men, later narcissism was negatively associated with the level of unemployment during emerging adulthood ($\beta = -.03$, 95% CI = $[-.05, -.01]$) but this was not the case for women ($\beta = -.002$, 95% CI = $[-.02,$

.02]). The difference between these estimates was significant ($Z = -2.25$, $p = .025$).

As various concerns about the robustness of the effect have been voiced in the literature (Fletcher, 2015) and by two anonymous reviewers, we tested a range of alternative models. These additional analyses included additional control variables (age squared, socio-economic status), and dropping samples that used a different narcissism measure (Sample 5) or produced a large effect while having disproportionately fewer male participants (Sample 1). The primary effect was not altered in a meaningful way, neither in magnitude nor direction, by various alternate ways of synthesizing the effect sizes and controlling for different variables. All results and the analyses themselves can be found in the Supplementary online material.³ Thus, we were able to show that a recession during emerging adulthood is indeed linked to tempered narcissism – but only in men.

3. Discussion

Analyses across five samples with a combined sample size of 11,394 participants showed that worse economic conditions during emerging adulthood temper adult narcissism, but that this effect is limited to men. Our results were robust even when removing data sets that over-represented females and showed a strong effect for males (Sample 1) or used a different narcissism measure and participants from a different country (Sample 5). In addition, results were also robust when employing a different conceptualization of age (age squared) and controlling for socio-economic status.

It is important to note that the effect of adverse macroeconomic conditions on narcissism is likely to be operating on a national rather than individual level. At the individual level unemployment is linked to lower agreeableness, conscientiousness, and openness across genders, a pattern inconsistent with lower narcissism (Boyce, Wood, Daly, & Sedikides, 2015).

Future research should try to further uncover the processes underlying the gender-specific effect of macroeconomic conditions during emerging adulthood on the development of narcissism. One particularly promising way of doing this is to consider gender-stereotypes and the way they affect the perception of macroeconomic conditions by men and women. Fig. 2 illustrates a working-model of the potential processes explaining both main effects of gender on narcissism as well as a moderation effect of gender on the consequences of unemployment. With regard to main effects of gender, Grijalva et al. (2015) suggest that the development of narcissism (an agentic trait) is influenced by existing gender-stereotypes and expectations which are phrased in terms of agency (male) and communion (female). Due to gender stereotypes (e.g. “men are more achievement-oriented, individualistic, assertive, and dominant”) men perceive that others expect them to be self-focused, assertive, dominant, and arrogant (i.e. narcissistic), and behave accordingly, ultimately leading to a more narcissistic self-concept. As an effect, men describe themselves as more narcissistic as women.

Importantly, the very same gender stereotypes also imply a moderation effect of gender on the influence of unemployment on individual's narcissism. Following Bianchi's (2014) general reasoning, the average unemployment rate during emerging adulthood should influence the perceived importance of individualistic versus rather collectivistic goals (also see Piff, Kraus, Côté, Cheng, & Keltner, 2010), which triggers perceived expectations regarding

² The authors would like to point out that when replicating the analyses from Bianchi (2014), we obtained the exact same results: average unemployment during ages 18–25 $b = -0.691$, $SE = 0.20$, $\beta = -.08$; age $b = -0.19$, $SE = 0.02$, $\beta = -.26$.

³ Detailed information on sources for the unemployment rates, determination of sample size, complete overview of regression models, complete results of the additional analyses, and synthesis of regression coefficients can be found in the supplemental material accessible via <http://go.wvu.de/6bnt3>.

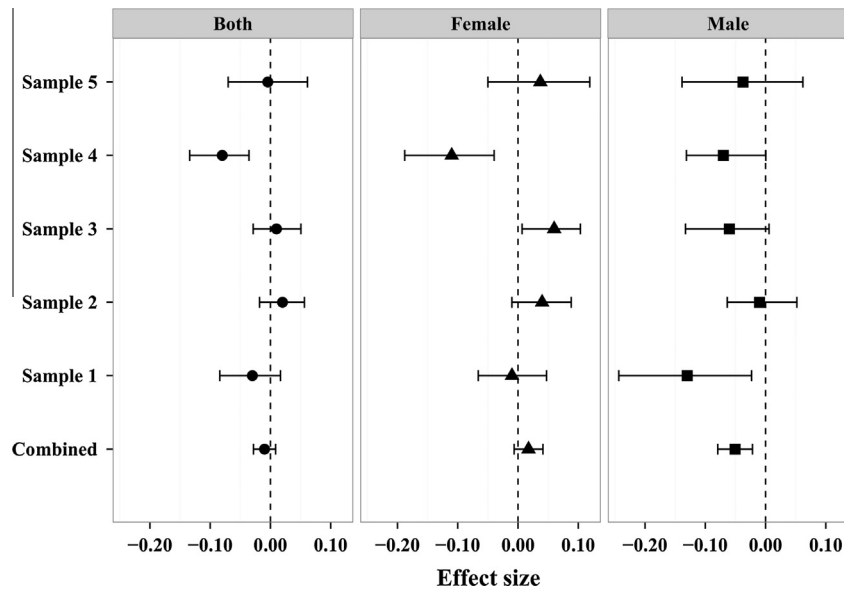


Fig. 1. Forest plot showing the estimated relationship between the average unemployment rate during emerging adulthood and later narcissism controlling for age. Results are organized into three sections: both genders, female, and male. The combined standardized effect estimate can be found in the last row. Horizontal bars represent the 95% CIs for the standardized effect estimates.

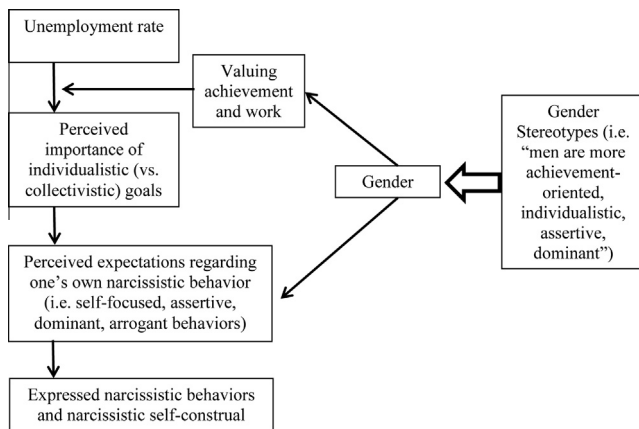


Fig. 2. A working-model of the gender-specific effect of macroeconomic conditions on the development of narcissism.

one's own narcissistic behavior, ultimately reducing the level of individuals' expressed narcissism and narcissistic self-concept. This general idea is qualified when considering the influence of gender stereotypes. Gender stereotypes (men are more achievement orientated, individualistic, assertive, and dominant than women) not only directly influence individuals' perceived expectations regarding their own behavior but can also lead to gender-specific valuations of different life domains. Specifically, men might place a stronger value on achievement- and work-related issues because this is in accordance with the gender stereotype – as a result, their identity is more closely linked to occupational achievement. Due to generally valuing achievement and work more than women, men should be affected more by achievement and work-related factors (e.g., unemployment). That is, given a higher unemployment rate they should, more than women, perceive a reduced importance of individualistic and an increased importance of collectivistic goals. Accordingly, they might, also more than women, perceive lower expectations regarding their own narcissistic behavior, ultimately reducing the level of their

expressed narcissism and narcissistic self-concept more than women.

Alternative processes that speak against the proposed negative effect of average unemployment on narcissism should, however, also be explored. Unemployment might, for example, also be conceptualized as an ego-threat (particularly for men, for whom it might go along with the perceived possibility of losing or not finding a job). At least in some individuals, this might lead to an enhanced and not reduced individualistic orientation given high unemployment rates. Such a potential reverse effect of unemployment on narcissism might particularly be true for individuals who already have high levels of narcissism and tend to react in antagonistic ways to ego-threats (e.g., [Bushman & Baumeister, 1998](#)).

Future studies should take up these and other points to try to further investigate and understand the effects that unemployment during emerging adulthood has on the development of narcissism.

Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at <http://dx.doi.org/10.1016/j.jrp.2015.10.006>.

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