

## A Sociocultural Approach to Narcissism: The Case of Modern China

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*Abstract:* Using large Internet samples, we examined the possible influence of sociodemographic factors on the Chinese self-concept and in particular, on the level of narcissism. We found that (i) younger persons are more narcissistic than older ones; (ii) persons from higher socioeconomic classes are more narcissistic than those from lower socioeconomic classes; (iii) persons from only-child families are more narcissistic than those from families with multiple children; (iv) persons from urban areas are more narcissistic than those from rural areas; and (v) individualistic values are predictive of individual differences in narcissism. The findings suggest that sociocultural changes contribute to the rise of narcissism in China. Copyright © 2011 John Wiley & Sons, Ltd.

Key words: narcissism; self-concept; individualism; China

The self is one of the most studied topics in Western psychological research. However, the topic has been slower to develop a research tradition in the East. For example, the first edition of *The Handbook of Chinese Psychology* (Bond, 1996) did not include a chapter on the Chinese self. A reason underlying these two research trajectories may be the differing emphasis that Eastern versus Western socialisation processes have traditionally placed on the self (Kwan, Hui, & McGee, 2010). Yet, there are signs that such an emphasis is shifting due to social changes in the China.

Globalised commerce and unprecedented technological advances have brought rapid cultural changes across the world. Research has documented the extensive impact of social changes on cognition (Saxe, 1982), emotion (Mesquita, Frijda, & Scherer, 1997), creativity (Leung, Maddux, Galinsky, & Chiu, 2008), motivation (Twenge & Im, 2007), interpersonal behaviour (Loucky, 1976), personality traits (Roberts & Helson, 1997) and the self-concept (Twenge, Campbell, & Gentile, in press). The China has undergone dramatic social, economic and cultural changes in the past 3 decades. In this article, we address how these changes may have influenced the Chinese view of the self.

Traditional perspectives on culture suggest that the Chinese are collectivistic, valuing relational harmony and downplaying the importance of the self (Heine & Hamamura, 2007; Markus & Kitayama, 1991; but see: Cai et al., 2011; Sedikides, Gaertner, & Toguchi, 2003; Sedikides, Gaertner, & Vevea, 2005). ‘Modesty brings benefits, whereas haughtiness invites loss,’ as a proverb, has been axiomatic for thousands of years. However, news reports have heralded an increasing trend of narcissism in China (Simon, 2007). The claim is that the 300 million adult Chinese under the

age of 30 years are rather pre-occupied with themselves and show disinterest in others and in public affairs. What limited research has been carried out on this topic revealed that young Chinese university students in Beijing and Shanghai are more likely to engage in individuating behaviours than their counterparts in Hong Kong and Vancouver, Canada (Chen, 2009), and that these elite Chinese students are more narcissistic than their Western counterparts in an Ivy League University (Kwan, Kuang, & Hui, 2009). These reports constitute preliminary indications of elevated Chinese narcissism.

To study diachronic effects of social changes on human functioning, researchers often take a synchronic (or cross-sectional) approach. In particular, researchers test whether the outcome variables of interest vary among persons who differ in dimensions that mark societal changes (Greenfield, 1997). For example, Saxe (1982) examined the effect of commercialization on mathematical cognition among Oksamin people by comparing those who had been highly commercialised with those who had been less commercialised. The logic underlying this method is that societal changes are usually uneven, and so, the impact of cultural changes over historical time could be reconstructed in terms of current variability in the presumed outcome of cultural change. This method is especially useful when considerable cultural changes occur in a relatively brief time. Given that such a temporal condensation of cultural changes characterises China, we adapted the cross-sectional method in this investigation.

Our interest is on narcissism. The term ‘narcissism’ originated in Greek mythology, became popular in psychology due to the psychodynamic tradition (Horton, Bleau, & Drwecki, 2006; Miller & Campbell, 2008; Sedikides, Campbell, Reeder, Elliot, & Gregg, 2002) and has now become a common phrase in Western pop culture. The construct

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has received much empirical attention by scholars in the West. There is a protracted debate over whether narcissism is on the rise among U.S. college students, with some researchers arguing that there has been no change on level of narcissism in the past decades (Trzesniewski, Donnellan, & Robins, 2008), and others arguing in favour of a significant upward trend which manifests after accounting for confounding by college campus (Twenge & Foster, 2010). Narcissists are characterised by a self-aggrandizing, entitled, dominant and manipulative orientation: a core feature of narcissism is its high agency but low communion, manifesting as soaring grandiosity and entitlement (Campbell, Rudich, & Sedikides, 2002; Hart *et al.*, 2011; Horton & Sedikides, 2009; Morf, Horvath, & Torchetti, 2011). In terms of this conceptualization, social changes that facilitate agency and inhibit communion could boost individual level of narcissism.

Of the numerous changes taking place in China, four are directly relevant to our investigation. *First*, to control its burgeoning population, the Chinese government has implemented a one-child-per-family policy since 1978. The policy has succeeded in lowering the total fertility rate (i.e. average number of births per woman) from approximately 5 to approximately 1.8 (Bristow, 2007). Today, the younger generation of Chinese consists largely of only-children due to this policy. Such children have received lavish attention and profligate praise from their parents and grandparents (Tao & Chiu, 1985; Wang, 1984). According to Millon's (1981) social learning theory of narcissism, these young Chinese from only-child families are likely to feel grandiose and entitled (see also: Curtis & Cowell, 1993; Eyring & Sobelman, 1996; Joubert, 1989). Thus, we expected that persons from only-child families would be more narcissistic than persons who currently have siblings (Hypothesis 1).

*Second*, China has taken big steps toward establishing a more capitalistic economy and has undergone more than 30 years' economic growth at an unparalleled rate. As a result, the gross national product (GDP) increased from Ren Min Bi (RMB) 364.5 billion in 1978 to RMB 24.95 trillion in 2007 (National Bureau of Statistics of China, 2008a), and the per capita GDP increased from RMB ¥381 in 1978 to RMB ¥18 934 in 2007 (National Bureau of Statistics of China, 2008b). Accordingly, the personal disposable income has also increased greatly. Affluence has been linked to key features of narcissism (Campbell, Brunell, & Finkel, 2006; Foster, Campbell, & Twenge, 2003; Morf, *et al.*, 2011), such as personal mastery (Lachman & Weaver 1998), self-directedness (Kohn & Schooler 1983), preferences for uniqueness (Stephens, Markus, & Townsend, 2007) and devaluation of relationships (Vohs, Mead, & Goode, 2006). More importantly, high affluence has been linked directly with high narcissism (Lebeau, 1988). Therefore, we expected that persons with higher social economic status (SES) would be more narcissistic than those with lower SES (Hypothesis 2).

*Third*, rapid urbanisation is a key aspect of China's recent development. Many Chinese have abandoned their rural roots to pursue employment in the expanding cities. The portion of city dwellers has increased from 17.92% in 1978 to 44.94% in 2007 (National Bureau of Statistics of China, 2008c), suggesting that more than 300 million people have

moved from rural communities to urban areas. Compared with rural communities, urban areas are highly commercialised and industrialised, which may be associated with higher endorsement of agency-related values such as independence, autonomy, competitiveness and uniqueness (Elder, King & Conger, 1996; Loucky, 1976; Saxe, 1982; Seymour, 1999). Indeed, urban residents are more individualistic than their rural-dwelling counterparts (Georgas, 1989; Freeman, 1997). Moreover, residential and job mobility may foster a sense of agency (Chen, Chiu & Chan, 2009; Oishi, 2010). Evidence indicates that Chinese in urban areas report higher self-esteem than those in rural areas (Zhang, Zhang, Xu, & Zhao, 2006). In light of such findings, we expected that people living in urban areas would be more narcissistic than those living in rural areas (Hypothesis 3).

Finally, the open-to-abroad policy, starting in the 1980s, as well as increasing globalisation, has shifted traditional Chinese values, particularly among younger persons. Both anecdotal and empirical evidences have documented rises in individualism among younger Chinese (Chen, 2009; Simon, 2007). Findings from USA suggest that increases in individualism contribute to increases in narcissism (Roberts & Helson, 1997; Twenge & Foster, 2008, 2010; Twenge, Konrath, Foster, Campbell, & Bushman, 2008a, b). There are two subsets of individualism, horizontal and vertical (Singelis, Triandis, Bhawuk, & Gelfand, 1995). Persons high on horizontal individualism think of themselves as similar to others and endorse equality. In contrast, persons high on vertical individualism think of themselves as different from others and endorse inequality. Vertical (but not horizontal) individualism is predictive of individual differences in narcissism (Le, 2005; Konrath, Bushman, & Grove, 2009). In light of this distinction, we expected that vertical individualism would be associated positively with narcissism (Hypothesis 4).

To test these hypotheses, we conducted two studies using Internet samples. In Study 1, we tested the first three hypotheses, controlling for gender and age differences. In Study 2, we first examined the generalizability of Study 1 findings and then tested the fourth hypothesis. Online surveys have made it possible to test a large and diverse population from different geographical regions. Importantly, the validity of online surveys has been established both in USA (Buchanan & Smith, 1999; Nosek, Banaji, & Greenwald, 2002) and China (Cai, Lin, Wu, Yan, & Huang, 2008), and also in conjunction with narcissism (Foster *et al.*, 2003).

## STUDY 1

Study 1, a large Internet survey, tested the hypotheses that decrease in family size and increases in financial wealth and geographical mobility, predict a raise in level of narcissism.

### Method

#### *Participants and sociodemographic characteristics*

We collected data online between 2 March 2008 and 28 September 2009 by posting the survey link onto a website

(<http://www.psych.org.cn/>) that is designed to disseminate psychological knowledge in China. Of the initial 10 979 participants, we excluded 324 (.03%) for stating their age as younger than 10 years old and for random responding (i.e. giving the same responses to all questions regardless of positively or negatively worded items). The final sample consisted of 10 655 participants: 41.81% from one-child families, 32.12% from families with below average income; 34.44% with a high school education or less; 45.00% from rural areas; 54.60% males. The participants' age ranged from 11 to 71 years, with a mean of 22.81 ( $SD=5.07$ ); 90% of the participants were between the ages of 18 and 40 years.

We also examined whether narcissism was correlated with a randomly generated variable ( $M=0$ ,  $SD=1$ ). The resulting null correlation,  $r(10654)=0.002$ ,  $p=0.886$ , suggested that our observed effects are not simply artefacts of a large sample.

### Narcissism

We measured narcissism with the Chinese version of the 40-item Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). The NPI is the most commonly used and widely researched instrument in nonclinical samples in the West. Example items are: 'I know that I am good because everybody keeps telling me so' and 'If I ruled the world, it would be a much better place'. The Chinese version has been validated in a previous study (Kwan et al., 2009). Responses on the Chinese version of NPI in that study were correlated with key features of narcissism, self-esteem and self-efficacy, and these correlations were similar to those found in relevant research on Western samples.

In accordance with prior research (Jordan, Spencer, Zanna, Hoshino-Browne, & Correll, 2003; Kwan et al., 2009), we recorded the participants' responses on a six-point scale (1 = *strongly disagree*, 6 = *strongly agree*). The reliability coefficient ( $\alpha=0.92$ ) suggested high internal consistency of responses. Our rationale for choosing the Likert scale response option was as follows. It is difficult for Chinese participants to endorse extreme responses such as those afforded by the forced-choice format of the original NPI scale (Chen, Lee, & Stevenson, 1995). The Likert scale format, however, provides more options, which may be more appropriate for the participants in China.

### Socioeconomic status

We measured the SES with the question 'what is your (or your family's) economic status' (1 = *very poor*, 2 = *a little below average*, 3 = *average level*, 4 = *a little above average*, 5 = *very rich*). People's subjective sense of where they stand in relation to others in society is closely tied to a range of important health outcomes (Adler & Matthews, 1994; Adler & Rehkopf, 2008). Mean reported SES in this sample was 2.80 ( $SD=0.88$ ).

## Results and discussion

As expected, participants from one-child families ( $M=3.59$ ,  $SD=0.74$ ,  $N=4455$ ) were more narcissistic than their counterparts with siblings ( $M=3.49$ ,  $SD=0.73$ ,  $N=6200$ ),

$t(10\ 653)=6.80$ ,  $p<0.001$ ,  $d=0.14$ . Also, higher SES participants were more narcissistic than lower SES ones,  $r(10655)=0.10$ ,  $p<0.001$ ,  $d=0.20$ . Moreover, participants from urban areas ( $M=3.58$ ,  $SD=0.74$ ,  $N=4795$ ) were more narcissistic than those from rural areas ( $M=3.49$ ,  $SD=0.73$ ,  $N=5860$ ),  $t(10\ 653)=6.27$ ,  $p<0.001$ ,  $d=0.12$ . In addition, males ( $M=3.63$ ,  $SD=0.73$ ,  $N=4855$ ) were more narcissistic than females ( $M=3.45$ ,  $SD=0.73$ ,  $N=5800$ ),  $t(10\ 653)=13.00$ ,  $p<0.001$ ,  $d=0.25$ . Similar to the previous findings in USA (Foster et al., 2003), younger participants were more narcissistic than older ones,  $r(10655)=-0.05$ ,  $p<0.001$ ,<sup>1</sup>  $d=0.10$ .

To examine the unique association of narcissism with family size (0 = *non only-child*, 1 = *only-child*), SES, geographic area (0 = *rural*, 1 = *urban*), gender (0 = *female*, 1 = *male*) and age, we conducted a multiple regression analysis with all these variables as predictors and narcissism as the outcome. As Table 1 shows, all predictors had a significant and unique contribution on narcissism (all  $ps<0.01$ ). Together, these findings confirmed the first three hypotheses, suggesting that decreases in family size and increases in financial wealth, as well as geographical mobility, facilitate a raise in narcissism.

## STUDY 2

Narcissism theory and research, in the West, singles out vertical individualism (i.e. endorsement of competition, status and inequality) as a key precursor of narcissism (Foster et al., 2003; Le, 2005; Roberts & Helson, 1997; Singelis et al., 1995). In addition to retesting the first three hypotheses with a new sample, Study 2 tested the fourth hypothesis, zeroing in on the relation between vertical individualism and narcissism.

### Method

#### Participants and sociodemographic characteristics

We completed the data collection online between 28 September 2009 and 2 February 2010. Using the same criteria as in Study 1, we excluded 310 (.02%) participants from the original sample of 15 832. The final sample consisted of 15 522 participants: (43.67% from one-child families, 32.33% from families with below average income; 32.12% with a high school education or less; 52.36% from rural areas; and 47.32% males. The participants' age ranged from 11 to 62 years, with a mean of 23.32 ( $SD=5.33$ ); 89% of the participants were between the ages of 18 and 40 years. As in Study 1, we checked if narcissism was correlated with a randomly generated variable ( $M=0$ ,  $SD=1$ ). The resulting null correlation,  $r(15521)=-.006$ ,  $p=.486$ , suggesting desirable quality of this sample.

<sup>1</sup>Previous research suggested a nonlinear relation between narcissism and age (Foster et al., 2003). We tested for such a relation by including the quadratic term of age into the regression equation. The effect was not significant,  $\beta=0.03$ ,  $t=1.20$ ,  $df=10\ 648$ ,  $p=0.229$ . Thus, we omitted the nonlinear effect of age from further analyses.

Table 1. Regression analyses of narcissism on predictors

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Constant	3.265	0.042			
Family size	0.044	.016	.030	2.72	.007
SES	0.089	.008	.107	10.99	.000
Geographic area	0.064	.016	.044	3.98	.000
Age	-.005	.001	-.038	-3.89	.000
Gender	0.205	.014	.139	14.42	.000

SES, social economic status.

#### *Narcissism, individualism, and socioeconomic status*

As in Study 1, we assessed narcissism with the NPI. Again, the reliability was high ( $\alpha=0.93$ ). Furthermore, we assessed individualism with the Triandis and Gelfand (1998) four-item subscale of vertical individualism (1 = *strongly disagree*, 5 = *strongly agree*;  $\alpha=0.64$ ). Example items are 'Winning is everything' and 'competition is the law of nature'. Finally, we assessed SES as in Study 1; mean reported SES was 2.81 ( $SD=0.89$ ).

### Results and discussion

We observed similar patterns of results between narcissism and sociodemographic characteristics as in Study 1. Participants from one-child families ( $M=3.58$ ,  $SD=0.75$ ,  $N=6779$ ) were more narcissistic than those with siblings ( $M=3.49$ ,  $SD=0.75$ ,  $N=8743$ ),  $t(15\,520)=7.50$ ,  $p<0.001$ ,  $d=0.12$ . Higher SES participants were more narcissistic than lower SES ones,  $r(15\,522)=0.08$ ,  $p<0.001$ ,  $d=0.16$ . Participants from urban areas ( $M=3.57$ ,  $SD=0.75$ ,  $N=7395$ ) were more narcissistic than those from rural areas ( $M=3.50$ ,  $SD=0.75$ ,  $N=8127$ ),  $t(15\,520)=5.90$ ,  $p<0.001$ ,  $d=0.09$ . Males ( $M=3.59$ ,  $SD=0.75$ ,  $N=7340$ ) were more narcissistic than females ( $M=3.47$ ,  $SD=0.74$ ,  $N=8177$ ),  $t(15\,520)=10.66$ ,  $p<0.001$ ,  $d=0.16$ . Younger participants were more narcissistic than older ones,  $r(15\,522)=-0.06$ ,  $p<0.001$ ,  $d=0.12$ . Finally, consistent with the findings from the West (Le, 2005), vertical individualism was positively related to narcissism,  $r(15\,522)=0.46$ ,  $p<0.001$ ,  $d=1.04$ .

To assess the unique contribution of each variable to narcissism, we conducted a hierarchical multiple regression analysis. First, we entered all sociodemographic variables into the equation. The contribution of these variables was significant,  $R^2=0.02$ ,  $F(5, 15\,516)=63.07$ ,  $p<0.001$ . Replicating findings of Study 1, all predictors contributed uniquely and significantly to narcissism (all  $ps<0.001$ ). We then added vertical individualism into the equation. The change of  $R^2$  was significant,  $\Delta R^2=0.21$ ,  $F(1, 15\,515)=4197.30$ ,  $p<0.001$ , as vertical individualism uniquely accounted for 21% of the variance. We present the regression coefficients from the second step in Table 2.

### DISCUSSION

Narcissism appears to be on the rise in USA due to culture changes (Twenge & Foster, 2010; Twenge *et al.*,

Table 2. Regression analyses of narcissism on predictors

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Constant	1.738	0.040			
Family size	0.048	0.012	0.031	3.857	.000
SES	0.066	0.006	0.078	10.849	.000
Geographic area	0.053	0.012	0.035	4.289	.000
Age	-0.008	0.001	-0.059	-8.204	.000
Gender	0.107	0.011	0.071	9.978	.000
Individualism	0.446	0.007	0.458	64.787	.000

SES, social economic status.

2008a, b; see, however: Trzesniewski & Donnellan, 2010; Trzesniewski *et al.*, 2008). In response to a call for data from other cultures (Twenge *et al.*, 2008a), we conducted the first large-scale examination of self-views, as depicted in narcissism, in relation to various societal changes taking place in a traditionally collectivistic culture—namely, China. We obtained evidence consistent with the possibility of an increasing trend in narcissism.

### Summary of findings

People from only-child families were more narcissistic than their counterparts, suggesting that the only-child policy may contribute to the rise in narcissism. Higher SES people were more narcissistic than lower SES ones, suggesting that increasing wealth may be tracked by narcissism. People in urban areas were more narcissistic than those in rural areas, suggesting that rapid urbanisation may breed increases in narcissism. High individualism was associated with high narcissism, suggesting that elevated levels of individualism may underlie, in part, elevated levels in narcissism. Together, the most likely to be narcissistic are those who are only-child, rich, lives in urban environments and individualistic. In addition, value change (an effect precipitated by culture itself) is an immediate and pivotal contributor to narcissism.

### Limitations and implications

The present studies were made possible by the worldwide web, which provides a venue to tap into a large population of Internet users. Compared with the previous research, these studies examined a much more demographically diverse population of the participants from China. This facet of the research constitutes a considerable strength: psychological research has been criticised for relying too heavily on well-educated and largely white college students, undermining to some extent the external validity of empirical findings (Henrich, Heine, & Norenzayan, 2010; Kitayama, 2010; but see Gaertner, Sedikides, Cai, & Brown, 2010).

However, reliance on the worldwide web may also suggest a limitation. Internet users are typically younger, more educated, more likely urban dwellers and more affluent than the general Chinese public. This restriction in range of our sample characteristics may restrict the observed effects (Cohen, West, Cohen, & Aiken, 2002). Indeed, in comparison with vertical individualism, the contribution of

sociodemographic variables such as family size, income and geographical area are rather miniscule. Nevertheless, as we have learned from the presence of small effect sizes in other literatures, such as the public health one (i.e. influence of secondhand smoke on lung cancer, Öberg, Jaakkola, Woodward, Peruga, & Prüss-Ustün, 2011; preventive effect of Aspirin on heart attacks, Antithrombotic Trialists Collaboration, 2009), the observed effects of sociodemographic factors can be still important and meaningful (Prentice & Miller, 1992). Cultural changes trickle down to persons and appear as relatively small effects, due to individual differences in genetics, environments and their dynamic interactions. Small changes at the average could mean big differences at the high ends of the distribution—a point that is particularly relevant for narcissism. Given the huge and diverse population in China, by no means can we ignore the contribution of social demographic changes per se, while being vigilant on overstating it.

Another limitation is that both studies are cross-sectional. We cannot distinguish age differences from generational/cohort differences with the cross-sectional data. To pinpoint the independent effects of developmental maturation and generational differences, research employing a time-lag design is needed (e.g. Twenge, et al., in press). Furthermore, future research should attempt to replicate our findings with multiple measures. It is possible that narcissists give overly positive responses to all self-reports (although evidence is inconsistent with this possibility; Gregg & Sedikides, 2010; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004). Researchers could examine the agreements between self-reports and measures by knowledgeable informants. In addition, object measures, such as household income, could be implemented to study the relations between narcissism and socioeconomic status.

In closing, our investigation is consistent with recent conceptualizations on the relation between economic or political systems and geography on the one hand and individual selves on the other. Such conceptualizations include social ecology (Oishi, 2010), the mutual constitution of cultures and selves (Markus & Kitayama, 2010) and the association between social and developmental change (Greenfield, 2009). As such, our investigation is a demonstration of how the sociocultural environment may influence the psychology of the people: modern Chinese are becoming more narcissistic as an increasing number of them is only-child, relatively well-off, lives in urban areas and endorses individualistic values. Future research would do well to zero in, through time-lag or archival methods, on the processes that contribute to the growth of narcissism in China.

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