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Relationship between Narcissism, the Economy, and the Pandemic

By  
Ruby A. Staten

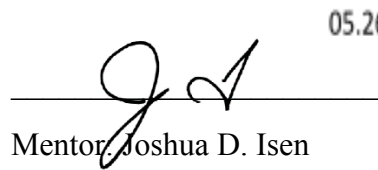
A thesis submitted in partial fulfillment of the requirements of the Honors College at University  
of South Alabama and the Bachelor of Arts in the Psychology Department

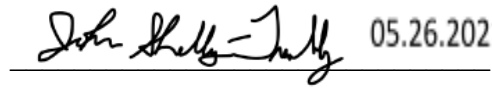
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## **DEDICATION**

This thesis is dedicated to my love DeAndre Adams, my parents Charlie and Serita Staten, and my big brother Charlie Staten Jr. (A.K.A Little Gravy Head). You all mean the world to me.

## **ACKNOWLEDGEMENTS**

I am highly thankful to Dr. Joshua Foster, my mentor, for assisting and believing in my research. I appreciate your guidance, constant virtual supervision, and also support in completing this endeavor; you aided in this thesis becoming a reality in a time where everything was done virtually. Thanks also goes to the members of my thesis committee: Dr. Kathy Cooke, Dr. Jack Shelley Tremblay, and Dr. Joshua Isen for their consistent encouragement, constructive criticism, and guidance. Finally, I wish to thank Dr. Kern Jackson for always telling me what I needed to hear and Candice Fairchild for reading over my thesis tirelessly. Their contributions were numerous and critical to the completion of this research.

## **ABSTRACT**

Narcissists are more likely to be found in individualistic cultures. The study focuses on the economic decline associated from the pandemic and the reduced narcissism levels in the population. Narcissism levels from the University of South Alabama undergraduate students would be lower in Fall 2020 compared to Fall 2019. This was assessed using students enrolled in introductory psychology courses during either Fall 2019 or Fall 2020 semesters who completed the Narcissistic Personality Inventory during a subject pool registration process. Predictions were made that the NPI scores would be lower for the Fall 2020 sample compared to the Fall 2019 sample.

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## **Introduction**

The purpose of this thesis study is to test whether levels of narcissistic personality in college students has been affected by the Covid-19 pandemic. I will begin by discussing the history of narcissism, from its roots in ancient Greek mythology to its contemporary usage and measurement as both a clinical disorder and a personality trait. I will then provide an overview of the Covid-19 pandemic, paying particular attention to its economic impact. Finally, I will discuss research that suggests narcissism may be affected by economic conditions such that people living in prosperous economic times may manifest higher levels of narcissism on average.

### *Origins of the Construct Narcissism*

The term “narcissism” originated from ancient mythology; specifically, from Ovid’s poem *Echo and Narcissus*. This Greek myth depicts Echo as a beautiful woman that never gains the attention of Narcissus and depicts Narcissus as being so intensely self-absorbed that he drowns attempting to look at his own reflection in still water. Although the meaning of narcissism has transformed overtime to personality traits and a psychological disorder, the traits of Narcissus in many respects have remained consistent.

Discussion of narcissism dates to the work of Sigmund Freud (1914), who described it as vital to the development and maintenance of satisfaction. Freud referred to narcissism as “sexual preservation” and the sexually objectification of one’s own body (Freud, 1914:73). The history of Narcissistic Personality Disorder as a clinical disorder depicts narcissism as selfishness, lack of empathy, and a sense of entitlement. Freud suggests narcissism is interpreted by human experience throughout life and is a pattern that creates psychotic exhibitors. Karen Horney (1937/1939) approached narcissism as consistent “infantile drives”, which relates to children’s

emotional state during childcare. In response to Freud, Horney's approach to the clinical diagnosis of a person depends more on the complexities of one's experiences.

Heinz Kohut (1977) and Otto Kernberg's (1975/1985) work played vital roles in making narcissism an official diagnosis with the inclusion of Narcissistic Personality Disorder (NPD) in the 1980 DSM-III. Kohut and Kernberg labeled narcissism as initiating in the early stages of development. In the developmental stages of a child, mirror transference takes place and the child desires acceptance from their parents. The emergence of mirror transference is reflected in the personality of the child and corresponds to the time it occurred. In short, a child that is neglected, their traits will not be integrated in their personality but be the "core" of their personality with possible resemblance of narcissistic personality traits.

The DSM-V description of NPD includes nine criteria: (1) grandiose self-importance, (2) preoccupation with fantasies of unlimited power, brilliance, etc., (3) belief that one is special and unique, (4) need for excessive admiration, (5) sense of entitlement, (6) being interpersonally exploitative, (7) lacking empathy, (8) envious of others, and (9) arrogant and superior attitude and behavior (APA, 2013). These symptoms primarily reflect grandiosity (e.g., grandiose self-importance), and exclude more vulnerable expressions of narcissism, although not entirely (e.g., being envious of others; Krizan & Johar, 2015). Some scholars assert that the DSM fails to sufficiently capture the vulnerable side of NPD (e.g., feelings of insecurity; Skodol et al., 2014).

Although narcissism has its roots in ancient mythology and later clinical psychology, it is also a general personality trait. Indeed, a common way to think about NPD is that it is diagnosed when a narcissistic personality creates serious problems for the individual. If narcissism is not creating this level of clinical impairment, it is narcissism personality rather than NPD. Similar to

what I noted when discussing NPD, narcissistic personality also contains grandiose and vulnerable expressions.

One major theoretical model suggests that narcissistic personality is comprised of two general expressions (i.e., grandiose and vulnerable) and three underlying traits, called agentic extraversion, antagonism, and narcissistic neuroticism. Both grandiose and vulnerable narcissism share interpersonal antagonism in common. That is, people who are grandiose or vulnerably narcissistic tend to think and act in ways that get them into conflicts with others. The big difference between grandiose and vulnerable narcissism is that grandiose narcissism is also characterized by agentic extraversion whereas vulnerable narcissism is characterized by narcissistic neuroticism. That is, whereas grandiose narcissists have an extraverted manner that primarily aims to draw attention to themselves, vulnerable narcissists are more withdrawn and consumed by anxiety and bitterness over perceived lack of recognition by others. In terms of the Big Five or Five Factor personality models (Anglim & O'Connor, 2019; Widiger, 2017), grandiose and vulnerable narcissism share low levels of agreeableness. However, grandiose narcissism is also associated with high levels of extraversion, whereas vulnerable narcissism is associated with high levels of neuroticism (Miller et al., 2011). Moreover, grandiose narcissism tends to be positively related to self-esteem and negatively related to psychological distress. Alternatively, vulnerable narcissism is associated with increase psychological distress and negative emotions (e.g., anxiety and shame).

Today, both grandiose and vulnerable narcissism are widely studied, although grandiose narcissism has received far more empirical attention over the years and will, in fact, be the focus of my study. This is in no small part due to the fact that the first widely used measure of

narcissistic personality (i.e., non-clinical narcissism) was designed primarily around the DSM criteria for NPD, which has been, as noted above, mostly laden with grandiose content. The Narcissistic Personality Inventory (NPI) was introduced in 1979 by Robert Raskin and Calvin Hall. The development of the NPI corresponded with the inclusion of narcissistic personality disorder into the DSM-III and was designed to measure NPD-like characteristics found in the general population.

The original NPI contained 80 items, and each item contained two self-descriptive statements, one narcissistically toned (e.g., “I like to be the center of attention”) and the other neutrally toned (e.g., “I prefer to blend in with the crowd”). In 1988 a 40- item, 7 factor NPI was published that is commonly used today (Raskin & Terry, 1988). In addition to measuring a “global” total narcissism score, it also measures seven narcissistic traits: authority (i.e., preferring to be in charge), superiority (i.e., belief that one is inherently better than other), vanity (i.e., emphasis on physical beauty), self-sufficiency (i.e., unwillingness to work with and rely on others), exhibitionism (i.e., drawing attention to the self), entitlement (i.e., feeling that one is deserving of special treatment), and exploitativeness (i.e., willingness to take advantage of others). Again, these traits mostly/all capture grandiose narcissism, which is consistent with the DSM description of NPD that they were derived from.

There are a variety of other measures of narcissism, including those that focus on grandiose narcissism, vulnerable narcissism, as well as some that capture both types of narcissism. The NPI, however, continues to be one of the, if not the, most widely used measures of narcissism—specifically, grandiose narcissism—in contemporary narcissism research (Foster

& Raley, in press). It appears to do a reasonable job of capturing the gist of grandiose narcissism and will be the measure I employ in my study to assess narcissism.

### *Narcissism and the Economy*

The remainder of this paper, unless otherwise specified, will focus on grandiose narcissism. Far more research has been done on grandiose narcissism compared to vulnerable narcissism. Grandiose narcissism (or “narcissism” from here forward) is a highly agentic and individualistic trait (Foster & Brennan, 2012). Narcissists value interpersonal dominance over interpersonal warmth (Bradlee & Emmons, 1992; Foster et al., 2015; Miller et al., 2012). Narcissists strive to be unique and want to stand apart from the crowd by dressing flamboyantly. (Vazire et al., 2008). Narcissists are more likely to be found in highly individualistic cultures, such as the United States and other Western European countries (Foster et al., 2003). Narcissists tend to avoid working with and relying on others. For example, one of the items of the Narcissistic Personality Inventory, contains the statement, “I rarely depend on anyone else to get things done” (versus, “I sometimes depend on people to get things done”).

The excessively individualistic mindset associated with narcissism, along with several other interpersonally noxious traits, such as entitlement and attention-seeking, creates interpersonal difficulties for narcissists, especially in long-term relationships. It is common for narcissists to be liked upon the first encounter, but their superficial charm wears off relatively quickly and their undesirable features show more intensely as people get to know them (Back et al., 2018; Foster & Brunell, 2018; Paulhus, 1998). It is not uncommon for people to dislike narcissists after long-term and close relationships are formed (Foster & Twenge, 2011).

Considering narcissists' actions and behaviors, especially with others, it is clear to see why they might not function well in collectivistic cultures. In contrast to individualistic cultures, which tends to promote independence, autonomy, and uniqueness, collectivistic cultures place more emphasis on the well-being and stability of the group which promotes interdependence (Santos et al., 2017). These cultural differences have widespread and crucial effects on human psychology and personality (Markus & Kitayama, 1991; Triandis, 2001). To act narcissistically is to stand apart from the group, act in an entitled manner, and draw attention to yourself. All of this runs counter to collectivistic cultural norms. Indeed, in some collectivistic groups, such as the !Kung people, this behavior would be exceedingly counterproductive and result in social leveling mechanisms. Social leveling mechanisms are practices that encourage equality among group members. For example, the !Kung people practice what is referred to as "shaming the meat" (Lee, 1969). This is done to discourage group members from acting arrogantly or asserting their dominance above other group members, members of !Kung society will sometimes ridicule other group members for their food contributions. The purpose of this is described to Lee (1969) by one !Kung elder:

"...when a young man kills much meat he comes to think of himself as a chief or a big man, and he thinks of the rest of us as his servants or inferiors. We can't accept this. We refuse one who boasts, for someday his pride will make him kill somebody. So we always speak of his meat as worthless. This way we cool his heart and make him gentle." (p. 225).

Notably, the !Kung people were a band-level society until the 1970s. Band-level societies are relatively small (30-50 people) groups of immediate and extended family members.

Band-level societies are rare, but of vast interest to social scientists. This is in part because they are thought to reflect human societies prior to the emergence of civilizations. Thus, collectivism may be the “default” human culture.

Although collectivism may be thought of as the default human culture, individualism has been on the rise for decades around the world. A variety of theories have been alleged to account for these cultural shifts, including pathogen prevalence, disaster frequency, and climate change; however, the most abundant evidence favors the role of socioeconomic development (Santos et al., 2017). The basic premise is that the values and practices associated with collectivism helped humans cope with environmental stressors (e.g., food availability) by working together in small groups. As societies developed and their economies became more resource-rich, there became less of a need for humans to rely on immediate groups for survival (Inglehart & Baker, 2000). Consistent with this, Santos et al. (2007) analyzed 51 years of data from 77 different countries and found clear links between economic development, prosperity, and increase in individualism. For example, increases in socioeconomic development consistently predicted increases in individualism 10 years later. The majority of countries have become more individualistic during the time-period analyzed in this study. In general, the countries that either did not become more individualistic or became more collectivistic experienced the least amount of socioeconomic development.

If it is correct that economic prosperity breeds individualism—and to be clear, more research needs to be conducted to be certain—then it is possible that economic prosperity also breeds narcissism. This is, of course, because of narcissism’s strong connections to individualistic values and practices (e.g., prioritizing the self over the group). Some research

supports this hypothesis. Bianchi (2014) found that people who entered adulthood during periods of economic decline (e.g., high unemployment) were less narcissistic later in life. It is worth noting that although Bianchi partly explains her findings by linking narcissism to individualism, she also notes that narcissism is likely to be moderated by adverse experiences and personal failure, which are also more likely to occur during economic downturns (e.g., failure to find a job) (Bianchi, 2018).

### *The Covid-19 Pandemic and Narcissism*

The Covid-19 global pandemic began in late 2019 and spread to the United States by early 2020. As of now, the pandemic has cost the United States more than 500,000 lives and untold trillions of dollars in lost economic activity. Between February 2020 and April 2020, the seasonally adjusted unemployment in the United States increased from less than 4% to nearly 15%. By the beginning of the Fall university semester (August 2020), the unemployment rate was above 8%, or twice what it was before the start of the pandemic. To put this into context, Bianchi's (2014) analysis of narcissism and economic prosperity predicted an approximate 0.5 *SD* decrease in narcissism when unemployment rates increased from 4% to 8%. Thus, there is reason to think the Covid-19 pandemic might have lowered narcissism levels due to the economic disparities brought on by the pandemic.

Before moving forward, the studies cited above that linked economic conditions to individualism and narcissism examined long-term changes (i.e., changes that occurred over decades). For example, Bianchi's (2014) analysis examined unemployment rates when participants were in the "emerging adulthood" period of development (i.e., ages 18-25) and used



them to predict narcissism levels in the same participants when they were on average approximately two decades older (average age of sample was 41 years). Thus, it is unclear when changes in economic conditions can create more immediate changes personality, which would be necessary to detect changes associated with the Covid-19 pandemic.

One study done by Bianchi (2016), suggests that it might be possible for such transient changes. Her study did not examine narcissism, per se, but it did look at individualism. Across six studies consistent evidence showed that changes in individualistic-collectivistic attitudes, preferences, and practices were associated with concomitant changes in the economic state. These findings were consistent with earlier findings suggesting that exposing people to money or by making money more accessible in memory can prompt more individualistic thinking and behavior (Vohs et al., 2006, 2008). Thus, it seems possible that transient changes in economic conditions can produce immediate changes in individualism. However, whether rapid changes in individualism translate to rapid changes in personality is unclear. Personality by definition is a relatively stable phenomenon, especially among adults. However, personality is not set in stone or unalterable (Bleidorn et al., 2019; Hill & Roberts, 2018). With regards to narcissism, there is evidence that narcissism levels can fluctuate across short periods of time, even within a single day (Edershile et al., 2019; Giacomini & Jordan, 2016). Therefore, it is possible although untested, that changes in economic conditions can produce concomitant changes in narcissistic personality.

### *Present Study*

The premise of the present study was that economic declines associated with the Covid-19 pandemic should have reduced narcissism levels in the population. More specifically,

my hypothesis was that narcissism levels in University of South Alabama undergraduate students would be lower in Fall 2020 (i.e., after the onset of the pandemic) compared to Fall 2019 (i.e., before the onset of the pandemic). This hypothesis was tested using students enrolled in introductory psychology courses during either the Fall 2019 or Fall 2020 semesters who completed the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) during a subject pool registration process. I predicted that NPI scores would be lower for the Fall 2020 sample compared to the Fall 2019 sample.

## **Methods**

### *Participants*

The participants in the study consisted of 1134 undergraduate students enrolled in introductory psychology courses at the University of South Alabama. Participants reported being on average 19.25 ( $SD = 3.39$ ) years of age. The majority of participants reported being White (63.8%) and female (71.8%). Another 20.1% reported being Black, 6.9% Asian, 3.6% Hispanic, 0.6% Native American, and 4.9% reported or identified as another race/ethnicity. The demographic makeup of this sample is representative of a typical introductory psychology student population at the University of South Alabama.

### *Procedure*

All students enrolled in the introductory psychology courses are required to participate in a research subject pool. This pool is used by the Psychology Department to recruit participants for research being conducted by faculty and graduate students. As part of the initial registration process, students complete a prescreen assessment that contains several questionnaires (e.g., demographic questions) and surveys (e.g., personality surveys). The prescreen assessment is administered online and takes on average 30 minutes to complete. Most students take this assessment during the first few weeks in the semester. The necessary variables assessed for the study were obtained from the prescreen assessment. Specifically, data used in this study was collected from the Fall 2019 and Fall 2020 prescreen assessments. This allowed for the comparison of samples from students who were enrolled in introductory psychology courses during the fall semesters either before the start of the Covid-19 pandemic (i.e., the Fall 2019 sample) or after the start of the pandemic (i.e., the Fall 2020 sample).

### *Measures*

The data analyzed for this study included three demographic variables: age (in years), gender identity (measured as a binary male versus female), and race/ethnicity (measured as White, Black, Asian, Hispanic, Native American, or “other”). Narcissism was measured using the 40-item version of the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). Each of the 40 items in the NPI contains two self-descriptive statements (e.g., “I am an extraordinary person” versus “I am much like everybody else”). One of the statements is designed to reflect higher narcissism and the other is designed to be neutral or non-narcissistic. Participants were asked to choose the statement that most accurately described them. The NPI is scored in such a way that one point is given each time participants select a narcissistic statement. Therefore, total NPI scores can range from zero (i.e., none of the narcissistic statements were selected) to 40 (i.e., all of the narcissistic statements were selected). For the present set of data, scores on the NPI averaged 13.61 ( $SD = 6.39$ ). Reliability was assessed using Cronbach’s Alpha ( $\alpha$ )—a measure of internal consistency (i.e., an assessment of whether individual items of the NPI tend to correlate positively with each other)—and was found to be .83, which is considered acceptable.

## Results

The Fall 2019 and 2020 samples were compared in terms of age, gender, and race. It was expected that the samples would be equivalent in terms of these demographic variables.

However, testing was essential to confirm the equivalency of the variables and was especially pertinent because of the societal and financial disparities caused by the Covid-19 pandemic.

Notably, age, gender, and race have been associated with narcissism in prior research (e.g., Foster, Campbell, & Twenge, 2003). More specifically, men tend to score higher than women, younger people tend to score higher than older people, and Black people tend to score slightly higher and Asian people tend to score lower than other race/ethnicity groups.

The average age in the Fall sample of 2019 was 19.30 (SD = 3.36) and the average age for the Fall sample of 2020 was 19.21 (SD= 3.42). The means found were not significantly different  $t(1132) = 0.43, p = 0.67$ . The percentage of women in the Fall 2019 sample was 70.1% and the percentage of women in the Fall 2020 sample was 73.4%. The percentages were not significantly different,  $\chi^2(df = 1, N = 1134) = 1.49, p = .22$ . Race was measured using a six-category system (White, Black, Asian, Hispanic, Native American, and Other). The racial identity of the Fall 2019 sample was: 66.8% White, 19.0% Black, 6.5% Asian, 2.4% Hispanic, 0.7% Native American, and 4.5% Other. The racial identity of the Fall 2020 sample was: 61.0% White, 21.1% Black, 7.2% Asian, 4.8% Hispanic, 0.5% Native American, and 5.3% Other. These percentages were not significantly different,  $\chi^2(df = 5, N = 1134) = 7.64, p = .18$ . In sum, the two samples were equivalent in terms of age, gender, and race/ethnicity.

The primary hypothesis tested was that the Fall 2020 sample of students would report lower narcissism scores than the Fall 2019 sample of students. This hypothesis was tested using

an independent sample t-test that compared the average NPI score of the 552 Fall 2019 students with the average NPI score of the 582 Fall 2020 student sample. The average NPI score of the Fall 2019 sample was 13.44 ( $SD = 6.63$ ) and the average NPI score of the Fall 2020 sample was 13.77 ( $SD = 6.15$ ). Therefore, in contrast to my hypothesis, the Fall 2020 sample's average NPI score was slightly higher than the Fall 2019 sample's average narcissism score. However, this difference in the average narcissism score was not statistically significant,  $t(1132) = -0.88, p = .38$ . Nevertheless, my hypothesis that Fall 2020 students would report lower narcissism levels than Fall 2019 students was not supported by the data.

I conducted the same comparisons on the seven NPI subscales: authority, self-sufficiency, vanity, superiority, exhibitionism, entitlement, and exploitativeness. The results of these comparisons are shown in Table 1. As shown in Table 1, out of the seven comparisons, only two were statistically significant using an alpha of .05 (i.e.,  $p < .05$ ). They were for self-sufficiency and exploitativeness and both suggested that the Fall 2020 sample was higher than then Fall 2019 sample (i.e., opposite of what was hypothesized). These subscale comparisons were unplanned, and a reduced alpha level would be appropriate to guard against type-1 (false positive) errors. The way I reduced the alpha was to divide it by the number of comparisons, which would reduce alpha from .05 to .0071. Given the fact that the subscale comparisons were non-significantly different using the revised alpha, a conservative interpretation of these comparisons is that the two samples were equivalent in terms of the NPI subscales. Thus, once again, my hypothesis was unsupported by the data.

Table 1.

*Comparisons of NPI Subscales.*

	Fall 2019	Fall 2020	<i>d</i>	<i>p</i>
Authority	3.98 (2.24)	3.77 (2.08)	.10	
Self-sufficiency	2.28 (1.39)	2.44 (1.24)	.12	*
Vanity	1.10 (1.12)	1.08 (1.10)	.02	
Superiority	2.15 (1.44)	2.25 (1.40)	.07	
Exhibitionism	1.35 (1.53)	1.42 (1.57)	.05	
Entitlement	1.35 (1.31)	1.43 (1.22)	.06	
Exploitativeness	1.24 (1.17)	1.39 (1.24)	.13	*

*Notes.* \*  $p < .05$ ; blank cells under  $p$ -value column indicate non-significant ( $p < .05$ ); numbers beside parentheses are mean scores; numbers in parentheses are standard deviations;  $d$  = Cohen's  $d$  statistic;  $p$ -values based on  $t$ -test comparisons.

Finally, I conducted a set of chi-square comparisons that compared the Fall 2019 sample with the Fall of 2020 sample in terms of the proportion of each sample that selected the narcissistic statement for each of the 40 NPI items. This provides the most detailed examination possible of narcissism as it was measured in this study. These comparisons are shown in Table 2. As seen in Table 2, only five of the 40 comparisons resulted in statistically significant (i.e.,  $p < .05$ ) differences. Same as above, these comparisons were unplanned and thus a reduced alpha level was necessary. Reducing alpha based on the number of comparisons would reduce it from .05 to .0012. This reduced the number of statistically significant differences down to one (using

the revised alpha). This item contained the narcissistic statement, “I would prefer to be a leader,” versus the neutral statement, “It makes little difference to me whether I am a leader or not.” In the Fall of 2019 sample 48.4% selected the narcissistic statement whereas 38.5% of the Fall 2020 sample. The direction and statistical significance of this one comparison was consistent with my hypothesis, however, the other 39 comparisons were not. Therefore, in sum, the overwhelming majority of statistical tests produced results that were inconsistent with my hypothesis.

Table 2.

*Proportion of Fall 2019 and Fall 2020 samples that endorsed the narcissistic statement for each of the 40 NPI items.*

NPI Item	Fall	Fall	Diff	<i>p</i>
	2019	2020		
I have a natural talent for influencing people.	.629	.581	-.048	
Modesty doesn't become me.	.165	.160	-.005	
I would do almost anything on a dare.	.210	.198	-.012	
I know that I am a good person because everybody keeps telling me so.	.471	.459	-.012	
If I ruled the world it would be a better place.	.264	.308	.044	
I can usually talk my way out of anything.	.170	.247	.077	*
I like to be the center of attention.	.201	.215	.014	



I will be a success.	.862	.885	.023	
I think I am a special person.	.303	.342	.039	
I see myself as a good leader.	.665	.674	.009	
I am assertive.	.435	.435	.000	
I like having authority over other people.	.277	.244	-.033	
I find it easy to manipulate people.	.100	.144	.044	*
I insist upon getting the respect that is due me.	.219	.218	-.001	
I like to show off my body.	.226	.222	-.004	
I can read people like a book.	.502	.502	.000	
I like to take responsibility for making decisions.	.543	.565	.022	
I want to amount to something in the eyes of the world.	.308	.306	-.002	
I like to look at my body.	.355	.325	-.030	
I will usually show off if I get the chance.	.143	.170	.027	
I always know what I am doing.	.150	.149	-.001	
I rarely depend on anyone else to get things done.	.563	.625	.062	*
Everybody likes to hear my stories.	.196	.187	-.009	
I expect a great deal from other people.	.054	.079	.025	

I will never be satisfied until I get all that I deserve.	.172	.167	-.005	
I like to be complimented.	.707	.682	-.025	
I have a strong will to power.	.330	.349	.019	
I like to start new fads and fashion.	.292	.342	.050	
I like to look at myself in the mirror.	.516	.533	.017	
I really like to be the center of attention.	.264	.253	-.011	
I can live my life anyway I want to.	.409	.462	.053	
People always seem to recognize my authority.	.339	.321	-.018	
I would prefer to be a leader.	.484	.375	-.109	***
I am going to be a great person.	.529	.552	.023	
I can make anyone believe anything I want them to.	.268	.306	.038	
I am a born leader.	.288	.256	-.032	
I wish someone would someday write my biography.	.274	.282	.008	
I get upset when people don't notice how I look when I go out in public.	.071	.084	.013	
I am more capable than other people.	.087	.086	-.001	
I am an extraordinary person.	.399	.486	.087	**

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*Notes.* \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; blank cells under  $p$ -value column indicate non-significant ( $p < .05$ ); numbers under sample column headings represent proportion of sample that selected narcissistic statement (e.g., .629 = 62.9% of sample endorsed narcissistic statement); diff = difference between sample proportions;  $p$ -values based on  $\chi^2$  tests with  $df = 2$  and  $N = 1134$ .

### **Discussion**

The purpose of this study was to test the hypothesis that the Covid-19 pandemic produced economic conditions that depressed narcissism levels in college students. The results of this study did not support this hypothesis. Students enrolled in introductory psychology courses at the University of South Alabama in Fall 2019 (i.e., prior to the pandemic) were on average equivalent in terms of narcissism as students enrolled in the same courses in Fall 2020 (i.e., during the pandemic). This was true regardless of whether narcissism scores were computed globally (i.e., total score), at the facet-level (i.e., subscale scores), or at the item-level.

Null results are inherently ambiguous, meaning that there are many possible reasons for a null result. This was certainly the case in the present study. First, it is, of course, possible that narcissism levels in college students were unaffected by the pandemic. Personality is by definition relatively stable and may not have been affected by the short-term economic fluctuations caused by the pandemic. Additionally, college students may not have been affected as much by economic circumstances. Although I did not have this information available, it is likely that many if not most of the participants in this study were financially supported by their parents. Thus, they may not have felt as directly the impact of the economic decline. Furthermore, college students who had to financial means to enroll in college in the midst of the pandemic were almost by definition less likely to have been impacted as severely by the

economic decline. In short, even if narcissism in the population was depressed by the pandemic and consequent economic decline, it may not have been apparent by examining a sample of students enrolled in college during the pandemic.

Study design might also have hampered efforts to detect possible declines in narcissism. I compared two independent samples of participants: one from Fall 2019 and another from Fall 2020. Although the two samples appeared to be similar in terms of several important demographic characteristics, such as age, gender, and race/ethnicity, it is impossible to say whether they differed in terms of other unmeasured variables. Any of these variables could have confounded the results of this study. A more controlled and sensitive test would have compared students enrolled in Fall 2019 to themselves in Fall 2020. This type of within-subjects/longitudinal design controls for sample differences (because the samples consist of the same people) and might have revealed differences in narcissism between Fall 2019 and Fall 2020. Unfortunately, this type of data was unavailable, and I was limited to a between-subject study design.

Finally, it is possible that narcissism levels in college students are already so low that they are difficult to move lower even by historically challenging economic conditions. A recent study by Twenge et al. (in press) suggests that narcissism levels in college students are as low as they have ever been. This study is particularly relevant because one of the studies (Study 3) used data collected at the University of South Alabama (USA) and showed that narcissism levels among USA undergraduates increased until the year 2008, then plummeted and have remained low ever since. The authors noted that the steep decline in narcissism scores correlated with the onset of the Great Recession. Since then, the economy has recovered somewhat, but has never

been as booming as it was before the recession. If it is true that economic prosperity breeds narcissism, then economic conditions may simply not have recovered enough prior to the pandemic for the pandemic to have had a noticeable effect.

Of course, each of these explanations is speculative in nature. Any one of them, or none of them, could account for the null results reported in this paper. As I noted at the beginning of this section, this sort of ambiguity is typical of null results. It is possible that other datasets, including those that use different kinds of participants (e.g., non-college students), longitudinal methods, and even different measures of narcissism, may exist. If so, it would be interesting and potentially enlightening to compare their results to the ones I obtained in this study. More generally, it would be interesting and useful to do these types of analyses and comparisons using other personality traits, such as Big Five personality traits. Studies like these will tell us more about how the Covid-19 pandemic changed the world and its inhabitants.

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## Appendix

### *The Narcissistic Personality Inventory.*

#### **NPI**

In each of the following pairs of attributes, choose the one that you **MOST AGREE** with. Mark your answer by writing either 1 *or* 2 in the space provided. Please do not skip any items.

- 1 \_\_\_\_ (1) I have a natural talent for influencing people.  
(2) I am not good at influencing people.
- 2 \_\_\_\_ (1) Modesty doesn't become me.  
(2) I am essentially a modest person.
- 3 \_\_\_\_ (1) I would do almost anything on a dare.  
(2) I tend to be a fairly cautious person.
- 4 \_\_\_\_ (1) When people compliment me I get embarrassed.  
(2) I know that I am a good person because everybody keeps telling me so.
- 5 \_\_\_\_ (1) The thought of ruling the world frightens the hell out of me.  
(2) If I ruled the world it would be a better place.
- 6 \_\_\_\_ (1) I can usually talk my way out of anything.  
(2) I try to accept the consequences of my behavior.
- 7 \_\_\_\_ (1) I prefer to blend in with the crowd.  
(2) I like to be the center of attention.
- 8 \_\_\_\_ (1) I will be a success.  
(2) I am not too concerned about success.
- 9 \_\_\_\_ (1) I am no better or worse than most people.  
(2) I think I am a special person.
- 10 \_\_\_\_ (1) I am not sure if I would make a good leader.  
(2) I see myself as a good leader.
- 11 \_\_\_\_ (1) I am assertive.  
(2) I wish I were more assertive.

- 12 \_\_\_\_ (1) I like having authority over other people.  
\_\_\_\_ (2) I don't mind following orders.
- 13 \_\_\_\_ (1) I find it easy to manipulate people.  
\_\_\_\_ (2) I don't like it when I find myself manipulating people.
- 14 \_\_\_\_ (1) I insist upon getting the respect that is due me.  
\_\_\_\_ (2) I usually get the respect I deserve.
- 15 \_\_\_\_ (1) I don't particularly like to show off my body.  
\_\_\_\_ (2) I like to show off my body.
- 16 \_\_\_\_ (1) I can read people like a book.  
\_\_\_\_ (2) People are sometimes hard to understand.
- 17 \_\_\_\_ (1) If I feel competent I am willing to take responsibility for making decisions.  
\_\_\_\_ (2) I like to take responsibility for making decisions.
- 18 \_\_\_\_ (1) I just want to be reasonably happy.  
\_\_\_\_ (2) I want to amount to something in the eyes of the world.
- 19 \_\_\_\_ (1) My body is nothing special.  
\_\_\_\_ (2) I like to look at my body.
- 20 \_\_\_\_ (1) I try not to be a show off.  
\_\_\_\_ (2) I will usually show off if I get the chance.
- 21 \_\_\_\_ (1) I always know what I am doing.  
\_\_\_\_ (2) Sometimes I am not sure what I am doing.
- 22 \_\_\_\_ (1) I sometimes depend on people to get things done.  
\_\_\_\_ (2) I rarely depend on anyone else to get things done.
- 23 \_\_\_\_ (1) Sometimes I tell good stories.  
\_\_\_\_ (2) Everybody likes to hear my stories.
- 24 \_\_\_\_ (1) I expect a great deal from other people.  
\_\_\_\_ (2) I like to do things for other people.
- 25 \_\_\_\_ (1) I will never be satisfied until I get all that I deserve.  
\_\_\_\_ (2) I will take my satisfactions as they come.

- 26 \_\_\_\_ (1) Compliments embarrass me.  
(2) I like to be complimented.
- 27 \_\_\_\_ (1) I have a strong will to power.  
(2) Power for its own sake doesn't interest me.
- 28 \_\_\_\_ (1) I don't care about new fads and fashion.  
(2) I like to start new fads and fashion.
- 29 \_\_\_\_ (1) I like to look at myself in the mirror.  
(2) I am not particularly interested in looking at myself in the mirror.
- 30 \_\_\_\_ (1) I really like to be the center of attention.  
(2) It makes me uncomfortable to be the center of attention.
- 31 \_\_\_\_ (1) I can live my life anyway I want to.  
(2) People can't always live their lives in terms of what they want.
- 32 \_\_\_\_ (1) Being in authority doesn't mean much to me.  
(2) People always seem to recognize my authority.
- 33 \_\_\_\_ (1) I would prefer to be a leader.  
(2) It makes little difference to me whether I am leader or not.
- 34 \_\_\_\_ (1) I am going to be a great person.  
(2) I hope I am going to be successful.
- 35 \_\_\_\_ (1) People sometimes believe what I tell them.  
(2) I can make anyone believe anything I want them to.
- 36 \_\_\_\_ (1) I am a born leader.  
(2) Leadership is a quality that takes a long time to develop.
- 37 \_\_\_\_ (1) I wish someone would someday write my biography.  
(2) I don't like people to pry into my life for any reason.
- 38 \_\_\_\_ (1) I get upset when people don't notice how I look when I go out in public.  
(2) I don't mind blending into the crowd when I go out in public.
- 39 \_\_\_\_ (1) I am more capable than other people.  
(2) There is a lot I can learn from other people.

- 40 \_\_\_\_\_ (1) I am much like everybody else.  
(2) I am an extraordinary person.