



## Narcissists are approach-oriented toward their money and their friends

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### ABSTRACT

According to the unmitigated approach model (UAM) of narcissism, narcissists possess strong approach motivation coupled with weak avoidance motivation. The present research tests the UAM in two independent contexts: social and financial. In Study 1, narcissists report having social goals that emphasize the promotion of positive outcomes (e.g., having fun). This predilection is mediated by strong approach motivation. In Study 2, narcissists report a preference for aggressive financial investment strategies (e.g., investing in volatile stocks rather than stable bonds). This preference is mediated by both strong approach and weak avoidance motivation. Discussion focuses on how these results support the UAM and more broadly on how the UAM provides a theoretical framework for understanding the costs and benefits of narcissistic personality.

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### 1. Introduction

A central feature of narcissism, according to Campbell's agency model, is approach orientation (Campbell, Brunell, & Finkel, 2006; Campbell & Foster, 2007). That is, narcissists<sup>1</sup> are strongly motivated by reward (approach motivation) and weakly motivated by punishment (avoidance motivation). We term this subcomponent of the agency model the unmitigated approach model (UAM) of narcissism (Foster & Trimm, 2008; Foster et al., 2008).

The UAM has to date been subjected to very little direct empirical testing. From a theoretical perspective, however, it makes sense that narcissists would be more strongly motivated by reward than punishment. Narcissism likely develops in part from parenting that is overindulgent, overvaluing, and overprotective (Horton, Bleau, & Drwecki, 2006; Kohut, 1977; Millon, Grossman, Millon, Meagher, & Ramnath, 2004; Otway & Vignoles, 2006). Similarly, exposure to similar societal messages may be partly to blame for the recent increase in narcissism observed in young adults (Twenge, 2006; Twenge & Foster, 2008; Twenge, Konrath, Foster, Campbell, & Bushman, 2008a, 2008b). To the extent that narcissism develops because individuals receive messages suggesting that everything they do is positive and failure is impossible, then it should be expected that narcissists will be more strongly motivated by reward than punishment. In the words of Foster and

Trimm (2008), "[If one learns through years of experiences that] the most likely outcome of one's behavior is reward... then reward should provide the primary motivation to behave" (p. 1005).

Empirically speaking, there is also some indirect evidence supporting the UAM. For example, narcissism is linked to psychopathic personality (Paulhus & Williams, 2002; Reidy, Zeichner, Hunnicutt-Ferguson, & Lilienfeld, 2008), and psychopathy often correlates positively with approach motivation and negatively with avoidance motivation (Newman, MacCoon, Vaughn, & Sadeh, 2005; Ross et al., 2007; Uzieblo, Verschuere, & Crombez, 2007). Likewise, from a behavioral perspective, narcissists engage in elevated rates of aggression (Bushman & Baumeister, 1998; Reidy, Zeichner, Foster, & Martinez, 2008), and aggression is associated with high approach motivation and low avoidance motivation (Harmon-Jones, 2003).

Direct support for the UAM is thus far limited to a single published study. Foster and Trimm (2008) recently showed that scores on the most widely used measure of narcissism in social psychology, the Narcissistic Personality Inventory (Emmons, 1984; Raskin & Hall, 1979, 1981; Raskin & Terry, 1988), correlate positively with scores from measures of approach motivation and negatively with scores from measures of avoidance motivation. They further showed that high approach motivation and/or low avoidance motivation account for some of the behavioral and intrapsychic correlates of narcissism (i.e., impulsivity, high self-esteem).

These findings provide initial support for the UAM and suggest a strong potential utility of applying the constructs of approach-avoidance motivation to the study of narcissism. The purpose of the present studies was to expand upon this research by further testing the validity and utility of the UAM across different contexts. To test the generalizability of the UAM, we purposefully selected two seemingly unrelated contexts for investigation: friends and money. The guiding hypothesis, based on the UAM, was that

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<sup>1</sup> We use the term "narcissists" throughout this paper to refer to individuals who score above the sample mean of measures of narcissistic personality. The term is used as a matter of convenience. We are aware that commonly used measures of narcissism in social psychology do not capture a qualitatively distinct group of "narcissists" (Foster & Campbell, 2007).

narcissists would exhibit approach orientation toward their friends and money.

### 1.1. Narcissism and friends

Individuals have various motives and goals for their social relationships. Social goals can be separated into two distinct classes: approach goals and avoidance goals (Elliot, Gable, & Mapes, 2006; Gable, 2006; Gable & Strachman, 2008; Strachman & Gable, 2006a, 2006b). Approach goals are those that promote positive social outcomes whereas avoidance goals are those that prevent negative social outcomes. Examples of approach goals would be to have fun with or make a good impression on someone else. Avoiding conflict with someone else would be an example of an avoidance goal.

Social goals that are specific to friendships are called friendship goals (Elliot et al., 2006). Again, approach friendship goals are those that promote positive outcomes whereas avoidance friendship goals are those that prevent negative outcomes. Complementing a friend would be an example of an approach friendship goal whereas not criticizing a friend would be an example of an avoidance friendship goal.<sup>2</sup> Fittingly, individuals who are strongly approach motivated tend to have strong approach friendship goals, whereas individuals who are strongly avoidant motivated tend to have strong avoidance friendship goals (Gable, 2006). To the extent that narcissists possess strong approach motivation and weak avoidance motivation, as proposed by the UAM, we would expect narcissism to be linked to high approach friendship goals and low avoidance friendship goals. In other words, narcissists should focus more on promoting positive outcomes than preventing negative outcomes in their friendships because of their motivational disposition.

### 1.2. Narcissism and money

Similar to friendships, individuals have different motives and goals with regard to their finances. In the present study, we focused on financial investment strategies; for example, whether to invest in volatile stocks versus stable bonds. Broadly, investment strategies fall along a continuum that range from risk intolerant to risk tolerant, with risk tolerance defined as the “maximum amount of uncertainty that someone is willing to accept when making a financial decision” (Gable, 2000, p. 625). In the present article, we use the term aggressive investment strategy to refer to investment strategies that are motivated by high risk tolerance. We use the term cautious investment strategy to refer to investment strategies that are motivated by low risk tolerance. We use these terms because we think that the term risk tolerance places too much emphasis on risk and not enough emphasis on reward (e.g., high profit) stemming from investment decisions.

A cautious investment strategy is one in which finances are invested into relatively stable securities, such as Treasury bonds. This investment strategy minimizes risk, but at the cost of reduced profit potential. An aggressive investment strategy is one in which finances are invested into relatively unstable securities, such as individual stocks. This investment strategy maximizes profit potential, but comes with increased risk. In short, aggressive investment strategies result in wider ranges of profit/loss potential than do cautious investment strategies.

Most of the research in this area tends to focus more broadly on financial decision-making rather than specific investment strate-

gies. In terms of individual differences, the research shows that men tend to make more aggressive financial decisions (Eckel & Grossman, 2002; Keller & Siegrist, 2006; Powell & Ansic, 1997), as do older, married, highly educated, and highly paid individuals (Gable, 2000; Keller & Siegrist, 2006). In terms of personality traits, Carducci and Wong (1998) found that individuals with Type-A personality are more aggressive with their finances.

Most relevant to the present study were several studies that linked financial decision-making to approach–avoidance motivation. Noussair and Wu (2006) showed that temporally distant financial outcomes promoted more aggressive financial decision-making. This is relevant because additional research suggests that temporal distance is positively associated with approach motivation (Mogilner, Aaker, & Pennington, 2008; Pennington & Roese, 2003).<sup>3</sup> Most critical, however, are studies that directly link financial decision-making to approach–avoidance motivation (Hamilton & Biehal, 2005; Zhou, Pham, Mick, Iacobucci, & Huber, 2004). In each of these studies, participants who were more concerned with promoting gains than preventing losses tended to make more aggressive financial decisions.

Based on these findings, it seems reasonable to link aggressive financial decision-making, and consequently, aggressive investment strategizing, to high approach motivation. Likewise, it seems reasonable to link cautious investment strategizing, to high avoidance motivation. Therefore, the UAM predictions are evident: narcissists should adopt a more aggressive investment strategy because of their high approach/low avoidance motivational disposition.

## 2. Study 1: friendship goals

The purpose of this study was to test the UAM by determining whether narcissists focus more on promoting positive outcomes in their friendships (i.e., approach friendship goals) than preventing negative outcomes (i.e., avoidance friendship goals), and whether approach–avoidance motivation mediates these goal pursuits.

### 2.1. Method

#### 2.1.1. Participants, materials, and procedure

A sample of 109 participants ( $M$  age = 21, 59% female) was recruited from the University of South Alabama undergraduate participant pool. Participants completed measures of narcissism, approach–avoidance motivation, and friendship goals. Each measure is summarized below.

**2.1.1.1. Narcissism.** Participants completed the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). The NPI consists of 40 pairs of self-descriptive statements. Participants received one point for each narcissistic statement selected (e.g., “I am an extraordinary person.”). Higher scores indicated higher narcissism ( $M = 18.37$ ,  $SD = 7.58$ ,  $\alpha = .87$ ).

**2.1.1.2. Approach–avoidance motivation.** Participants completed the 20-item Behavioral Approach System (BAS)/Behavioral Inhibition System (BIS) Scales (Carver & White, 1994). Thirteen BAS items measure approach motivation (e.g., “When I want something, I usually go all-out and get it.”) and seven BIS items measure avoidance motivation (e.g., “If I think something unpleasant is going to happen I usually get pretty worked up.”). Participants responded to items from very false (1) to very true (4). Higher scores indicated stronger approach motivation ( $M = 41.76$ ,  $SD = 5.78$ ,  $\alpha = .86$ ) and stronger avoidance motivation ( $M = 19.92$ ,  $SD = 3.97$ ,  $\alpha = .77$ ).

<sup>2</sup> As noted by a reviewer, not all avoidance friendship goals will prevent negative outcomes, especially long-term negative outcomes. For example, failing to deliver criticism might prevent immediate negative outcomes (e.g., a yelling match), but might also promote more severe long-term negative outcomes (e.g., the underlying problem growing worse).

<sup>3</sup> Technically, these studies examined promotion focus (Higgins, 1997, 1998), which is a strategic focus that is triggered by appetitive (i.e., approach) motivation.

**2.1.1.3. Friendship goals.** Participants completed the eight-item Friendship Goals Inventory (FGI; Elliot et al., 2006). The FGI measures the extent to which individuals are focused on promoting positive social outcomes (approach friendship goals, measured by four items) versus preventing negative social outcomes (avoidance friendship goals, measured by four items). An example of an approach friendship goal item is, “I am trying to deepen my relationships with my friends.” An example of an avoidance friendship goal item is, “I am trying to stay away from situations that could harm my friendships.” Participants responded to items from not at all true of me (1) to very true of me (7). Higher scores on the two subscales indicated stronger approach friendship goals ( $M = 22.64$ ,  $SD = 4.89$ ,  $\alpha = .87$ ) and stronger avoidance friendship goals ( $M = 22.28$ ,  $SD = 4.85$ ,  $\alpha = .77$ ).

## 2.2. Results and discussion

Consistent with the UAM and prior research (Foster & Trimm, 2008; Foster et al., 2008), narcissism correlated with high approach motivation ( $r = .58$ ,  $p < .001$ ) and low avoidance motivation ( $r = -.21$ ,  $p < .05$ ). Also consistent with prior research (Gable, 2006), approach friendship goals were positively correlated with approach motivation ( $r = .31$ ,  $p < .01$ ) and uncorrelated with avoidance motivation ( $r = .13$ ,  $p > .16$ ). Likewise, avoidance friendship goals were positively correlated with avoidance motivation ( $r = .24$ ,  $p < .05$ ) and uncorrelated with approach motivation ( $r = .16$ ,  $p > .10$ ).

Supporting the UAM, narcissism correlated positively with approach friendship goals ( $r = .19$ ,  $p < .05$ ). Narcissism did not correlate with avoidance friendship goals ( $r = .03$ ,  $p > .74$ ). Technically, this second finding conflicts with what the UAM predicts. However, as observed in this and prior studies (Foster & Trimm, 2008; Foster et al., 2008), narcissism sometimes correlates more strongly with approach motivation than avoidance motivation. Therefore, it was not entirely unexpected that narcissism would more strongly predict approach friendship goals compared to avoidance friendship goals. Nevertheless, the fact that narcissism did not significantly negatively predict avoidance friendship goals may suggest that the UAM should be revised slightly to lessen the importance of weak avoidance motivation. Indeed, this would be consistent with recent research on narcissism’s sister trait psychopathy suggesting that weakened avoidance motivation may not be the primary driving force behind psychopathic behavior (for review, see Wallace & Newman, 2008). With this said, given the relatively small number of studies that have examined the link between narcissism and approach–avoidance motivation, we hesitate to make any immediate changes to the UAM. Further studies are needed to clarify this association.

To more firmly establish the role of approach motivation in the link between narcissism and approach friendship goals, we next conducted a mediation analysis. We followed Baron and Kenny’s (1986) causal steps method of establishing statistical mediation.

As has been shown, narcissism, approach motivation, and approach friendship goals were all significantly correlated with each other. However, when approach friendship goals was regressed onto narcissism and approach motivation simultaneously, the link between narcissism and approach friendship goals fell to non-significant ( $\beta = .02$ ,  $p > .85$ ), while the link between approach motivation and approach friendship goals remained significant ( $\beta = .30$ ,  $p < .01$ ). A Sobel test indicated that the level of mediation was significant ( $z = 2.47$ ,  $p < .05$ ). To summarize, the link between narcissism and approach friendship goals was completely and significantly mediated by approach motivation (see Fig. 1).

## 3. Study 2: investment strategies

The purpose of this study was to test the UAM in a completely different context. Specifically, we had participants respond to several different hypothetical investment scenarios to determine whether their investment strategies were more cautious or aggressive. According to the UAM, narcissists should endorse a more aggressive strategy. We also tested whether approach–avoidance motivation mediated the investment strategies of narcissists.

### 3.1. Method

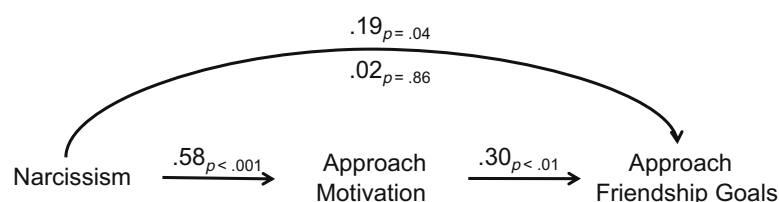
#### 3.1.1. Participants, materials, and procedure

A sample of 119 participants ( $M$  age = 20, 55% female) was recruited from the University of South Alabama undergraduate participant pool. Participants completed the NPI ( $M = 18.14$ ,  $SD = 7.96$ ,  $\alpha = .89$ ), BAS ( $M = 41.76$ ,  $SD = 4.97$ ,  $\alpha = .81$ ), and BIS ( $M = 19.81$ ,  $SD = 3.79$ ,  $\alpha = .75$ ). Participants also responded to four different investment scenarios that were created by the authors. Each of these scenarios is presented below.

**3.1.1.1. Mutual fund investment.** Participants read the following scenario:

Imagine that you have \$50,000 to invest in a mutual fund (i.e., an organization that invests your money into various stocks and bonds). There are different types of mutual funds available. Some are more aggressive and some are more conservative. Both types of mutual funds have advantages and disadvantages. Aggressive mutual funds offer the potential for large profits, but also the risk of large losses. Conservative mutual funds are less risky, but also offer the potential for smaller profits. Which type of mutual fund would you invest your \$50,000 into?

Participants picked one of five types of mutual funds that ranged from (1) extremely conservative [low risk/low reward], (2) moderately conservative, (3) neutral [moderate risk/moderate reward], (4) moderately aggressive, and (5) extremely aggressive [high risk/high reward]. Thus, higher scores indicated a more aggressive investment strategy ( $M = 3.08$ ,  $SD = .94$ , range = 1–5).



**Fig. 1.** Mediation of narcissism and approach friendship goals by approach motivation. Numbers are standardized regression coefficients. Coefficient atop curved arrow is direct bivariate correlation between narcissism and approach friendship goals. Number below curved arrow is indirect correlation between narcissism and approach friendship goals controlling for approach motivation.

**3.1.1.2. Company investment.** Participants read the following scenario:

Imagine that you have \$50,000 to invest in a company. In exactly 5 years you will cash in your investment. There are several companies to choose from, each with different amounts of risk/reward associated with them. Beside each company listed below are two values. The values reflect the amount of money you will get back at the end of 5 years. The first value is the least amount of money that you might get back at the end of 5 years (in other words, this is the worst you can do). The second value is the most amount of money that you might get back at the end of 5 years (this is the best you can do). Obviously, what you get back can fall anywhere in between these values. In which company would you invest your money?

Participants picked one of 10 value ranges (1 = \$47,500–\$52,500, 2 = \$45,000–\$55,000, . . . , 10 = \$25,000–\$75,000). Higher scores had larger ranges and thus indicated a more aggressive investment strategy ( $M = 5.11$ ,  $SD = 2.85$ , range = 1–10).

**3.1.1.3. Investment option.** Participants read the following scenario:

Imagine that you have \$50,000 that you must do something with. There are several options. Whatever you decide, you will stick with this option for at least 1 year. Each of these options is listed below. In which of these options would you put your \$50,000?

Participants picked one of six options that ranged from (1) savings account: you will end the year with a guaranteed \$51,250, (2) mutual fund: you will end the year with anywhere between \$47,500 and \$52,500, (3) single stock (very stable company): you will end the year with anywhere between \$45,000 and \$55,000, (4) single stock (moderately stable company): you will end the year with anywhere between \$42,500 and \$57,500, (5) single stock (somewhat unstable company): you will end the year with anywhere between \$37,500 and \$62,500, and (6) single stock (brand new company): you will end the year with anywhere between \$25,000 and \$75,000. Again, higher scores indicated a more aggressive investment strategy ( $M = 2.82$ ,  $SD = 1.62$ , range = 1–6).

**3.1.1.4. Stocks and bonds.** Participants read the following scenario:

In general, bonds are less risky than stocks. But stocks can make more money than bonds. Therefore, people usually have a mixture of stocks and bonds in their portfolio. People who are willing to take more risks to make more money usually have portfolios with more stocks than bonds. People who would rather take less risk, but make less money usually have more bonds than stocks. What percentage of stocks/bonds would you have in your portfolio (higher percentages of stocks = more risk and more potential money)?

Participants responded using a scale that ranged from 0% stocks (100% bonds) to 100% stocks (0% bonds). Again, higher scores indicated a more aggressive investment strategy ( $M = 46\%$ ,  $SD = 20\%$ , range = 0–100%).

## 3.2. Results and discussion

### 3.2.1. Data reduction

Responses to the four investment scenarios correlated significantly with each other ( $r$ s ranged from .27 to .50,  $p$ s < .01). We suspected that these scenarios were all tapping a single construct (i.e., investment strategy). Supporting this, a factor analysis of the re-

sponses (maximum likelihood extraction, promax rotation<sup>4</sup>) resulted in a single factor that accounted for 53% of the variance (eigenvalue of this factor = 2.11, next highest eigenvalue = .75). Responses to all four scenarios loaded positively on this factor (loadings ranged from .48 to .71). Therefore, we created a single measure called aggressive investment strategy by standardizing (i.e., z-scoring) and summing responses to the four investment scenarios. Higher scores indicated a more aggressive investment strategy ( $M = 0$ ,  $SD = 2.90$ ,  $\alpha = .70$ , range = -7.17 to 8.47).

### 3.2.2. Hypothesis testing

Consistent with the UAM, narcissism again correlated positively with approach motivation ( $r = .60$ ,  $p < .001$ ) and negatively with avoidance motivation ( $r = -.26$ ,  $p < .01$ ). Also supporting the UAM, narcissism predicted a more aggressive investment strategy ( $r = .22$ ,  $p < .05$ ). Likewise, aggressive investment strategy was predicted by high approach motivation ( $r = .28$ ,  $p < .01$ ) and low avoidance motivation ( $r = -.25$ ,  $p < .01$ ).

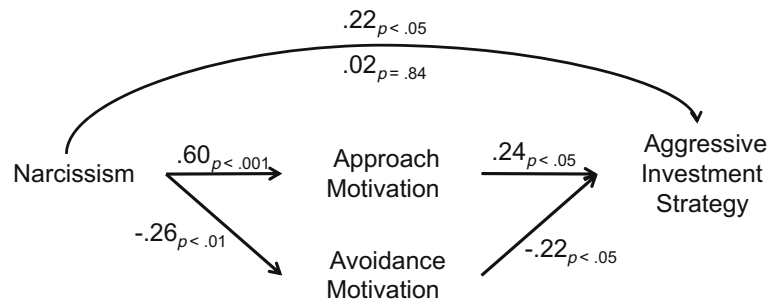
Did approach-avoidance motivation account for the link between narcissism and aggressive investment strategy? To test this, we again applied Baron and Kenny's (1986) causal steps approach to establish statistical mediation. Steps one through three have already been satisfied; narcissism, approach-avoidance motivation, and aggressive investment strategy were all significantly correlated with each other. The final step involved regressing aggressive investment strategy on to narcissism and approach-avoidance motivation simultaneously. Indicative of full mediation (see Fig. 2), the link between narcissism and aggressive investment strategy fell to non-significant in this regression model ( $\beta = .02$ ,  $p > .84$ ), while approach motivation and avoidance motivation remained significant predictors of aggressive investment strategy ( $\beta$ s = .24 and -.22,  $p$ s < .05). We next tested the significance of the combined and unique indirect effects (i.e., mediation) of approach motivation and avoidance motivation using Preacher and Hayes's (2004) and Preacher, Rucker, & Hayes's (2007) method and SPSS macro. The total indirect effect (i.e., combined mediation of approach and avoidance motivation) was statistically significant ( $z = 2.67$ ,  $p < .01$ ). Approach motivation also served as a significant mediator by itself ( $z = 2.13$ ,  $p < .05$ ). The level of mediation stemming from avoidance motivation by itself approached statistical significance ( $z = 1.87$ ,  $p < .07$ ). Finally, approach motivation and avoidance motivation did not differ from one another in terms of mediational strength ( $z = 1.20$ ,  $p > .23$ ). In short, consistent with the UAM, the motivational dispositions of narcissistic participants explained their tendencies toward more aggressive investment strategies.

## 4. General discussion

The purpose of the present studies was to more firmly establish the validity of the UAM, testing it in two entirely different contexts. Consistent with prior research on the UAM (Foster & Trimm, 2008), narcissism was linked to strong approach motivation and weak avoidance motivation across both studies. In Study 1, narcissism was linked to approach friendship goals and this link was fully mediated by strong approach motivation. In Study 2, narcissism was linked to aggressive investment strategy, and this link was fully mediated by both strong approach motivation and weak avoidance motivation.

The take-home message of the UAM is that narcissists are more strongly motivated by reward than punishment. We think that the UAM describes an important element of narcissistic personality. In particular, we think that the UAM helps to make sense of the

<sup>4</sup> Because this analysis results in a single factor, rotation was of course not performed.



**Fig. 2.** Mediation of narcissism and aggressive investment strategy by approach–avoidance motivation. Numbers are standardized regression coefficients. Coefficient atop curved arrow is direct bivariate correlation between narcissism and aggressive investment strategy. Number below curved arrow is indirect correlation between narcissism and aggressive investment strategy controlling for approach motivation and avoidance motivation.

“mixed blessing” (Paulhus, 1998) that is narcissism. Narcissism is often described as a mixture of adaptive and maladaptive features (e.g., Paulhus, 1998; Rhodewalt & Morf, 1995; Robins & Beer, 2001). In the present studies, we observed two sets of findings that exemplify this “mixed-blessing.”

In terms of the goals that narcissists have for their friendships, there is certainly a benefit to their approach orientation. Approach friendship goals are associated with greater relationship satisfaction, more frequent positive social events, and less loneliness (Elliot et al., 2006). As is often the case in the approach–avoidance motivation literature, avoidance friendship goals are mostly associated with poor functioning and negative outcomes. However, as Elliot et al. (2006) note, avoidance friendships goals may be highly adaptive in some circumstances. For example, Foster (2008) showed that the commitment of narcissists to their romantic relationships tends to be more tightly regulated by the investment model (Rusbult, Olsen, Davis, & Hannon, 2004) mechanisms of satisfaction, quality of alternatives, and investment. He speculated that narcissists are relatively unconcerned with the feelings of their romantic partners and focus more on what they are gaining from their relationships and whether they can do better elsewhere. The results of Study 1 support this view to some extent. Narcissism was not as strongly associated with preventing negative outcomes (e.g., upsetting their friends) as it was with promoting positive outcomes (e.g., having fun). To the degree that we can extend these friendship goals to the goals that narcissists have in their romantic relationships, it makes sense that the commitment of narcissists might be more strongly linked to how good their current relationships are and whether they can do better elsewhere. If their approach goals are not being met, their avoidance goals may do little to prevent them from leaving their relationships. Put simply, if narcissists are not having fun in their relationships, they are not likely to stay with their partners in order to avoid hurting them. So from a relationship maintenance perspective, the relationships of narcissists might function better if they emphasized avoidance social goals as much as they do approach social goals.

In terms of investment strategy, again, there are certainly potential advantages to being aggressive. Of course, there are potential problems too. It seems probable that the most successful investors are those who are most aggressive. Assume that a highly aggressive investment strategy has a 20% chance of incredible success and an 80% chance of spectacular failure. If we had 100 investors use this strategy and another 100 investors use a more cautious strategy, the vast majority of the aggressive investors would do worse than the cautious investors. However, those 20 aggressive investors whose strategy “worked”<sup>5</sup> would be the most

successful of all. In short, aggressive investors should be overrepresented in both tails of the investment outcome bell curve. Likewise, because narcissism is correlated with aggressive investing, we should expect to find each of these distributional tails occupied by inordinate numbers of narcissists. We are not aware of studies that have examined whether or not this is true, so this seems like a profitable line of future research.

It is also useful to note that aggressive investment strategies should work best in “bull” market conditions (i.e., when most securities gain value). As the old gambling saying goes, you have to play to win. And those who play the most (e.g., invest more money) tend to win the most when the market is strong. On the other hand, when the market is poor (a “bear” market) and most securities are losing value, a cautious investment strategy should work best. Therefore, the aggressive investment strategies of narcissists should help them in bull markets and hurt them in bear markets. We are currently in the process of testing these ideas in the laboratory.

## 5. Limitations and conclusion

The most important limitation of the present studies was that they both relied upon self-report survey data. Do narcissists really focus more on the positive outcomes of their social relationships? Are narcissists really aggressive investors? Perhaps narcissists in the present study answered the way that they did because they wanted to present themselves favorably. This seems unlikely given that prior research suggests a weak and often negative link between narcissism and social desirable responding (Campbell, Rudich, & Sedikides, 2002; Foster & Trimm, 2008; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004). Indeed, narcissism itself is a socially undesirable trait. To acknowledge one’s own narcissism would seem inconsistent with a particularly strong need to present oneself favorably. Nevertheless, we are left with a certain level of ambiguity over what the present studies’ results indicate about narcissism. Future research should address this by examining, for example, how individuals with differing NPI scores actually invest their money. Likewise, studies may investigate how more or less narcissistic individuals actually behave in their social relationships.

In conclusion, the results of the present study largely support predictions of the UAM. Narcissists were approach-oriented toward their friends and their money, and this was explained by their underlying motivational makeup. These results further establish the UAM as a simple yet powerful theoretical tool for narcissism research.

## Acknowledgment

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<sup>5</sup> We put this in scare quotes to emphasize the fact most if not all highly successful investment strategies benefit from sheer luck (Mlodinow, 2008).

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