Facets of grandiose narcissism predict involvement in health-risk behaviors

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A R T I C L E   I N F O

Article history:
Received 5 December 2013
Received in revised form 22 May 2014
Accepted 28 May 2014

Keywords:
Narcissism
Risk-taking
Entitlement
Grandiosity
Exploitativeness

A B S T R A C T

Why do adolescents and young adults engage in risk-taking behaviors? The present study sought to examine the role of grandiose narcissism, as well as narcissistic traits (entitlement, exploitativeness, grandiosity), in the prediction of involvement in risk-taking behaviors. Participants were 630 undergraduates, split into two subgroups, who completed measures assessing likelihood of and actual involvement in risk-taking behaviors, perceived risks and benefits of the behaviors, delay discounting, grandiose narcissism, and narcissistic traits. Greater levels of grandiose narcissism predicted reported likelihood of risk-taking and risk-taking behaviors in the past 30 days. This relationship appears driven by grandiosity and exploitativeness rather than entitlement. Grandiose narcissism and entitlement were independently associated with a preference for smaller, more immediate gains over larger, temporally distant rewards. Implications for understanding reasons behind risk-taking behaviors and future studies of narcissism are discussed.

1. Introduction

1.1. Background

Individuals engage in risky behaviors that can have negative effects on physical and mental health and well-being. For example, 15.1% of individuals aged 18–24 endorsed at least 12 episodes of binge drinking in the past year (Centers for Disease Control [CDC], 2012). Marijuana use is endorsed by 18.5% of young adults (ages 18–25; CDC, 2012), and 20 million new sexually transmitted diseases occur each year (CDC, 2013). Given the high risk to individuals and society as a whole, it is important to understand the factors, such as personality characteristics, that could affect involvement in these risk-taking behaviors.

One such personality characteristic is narcissism. Narcissism can be defined as a personality disorder (i.e., Narcissistic Personality Disorder [NPD]; American Psychiatric Association, 2000), but in a less extreme form (i.e., grandiose narcissism) it is an individual differences variable (Raskin & Terry, 1988) associated with traits such as attention-seeking, feelings of entitlement, and arrogance (Buss & Chiodo, 1991; Campbell, Goodie, & Foster, 2004; Gabriel, Critelli, & Èe, 1994; John & Robins, 1994). Grandiose narcissists exploit others for personal gain (Campbell, Bush, Brunell, & Shelton, 2005), fail to learn from their mistakes (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004), and are motivated by potential rewards (Campbell et al., 2005; Campbell & Foster, 2007; Foster, Misra, & Reidy, 2009; Foster & Trim, 2008).

Grandiose narcissism is associated with several variables that predict risk-taking behaviors. Grandiose narcissists report high levels of impulsivity (Crysel, Crosier, & Webster, 2013; Foster & Trim, 2008; Miller et al., 2009; Vazire & Funder, 2006) and engage in gambling behaviors (Lakey, Rose, Campbell, & Goodie, 2008). Narcissists also tend to discount the future effects of their decisions (Jonason, Koenig, & Tost, 2010) and prefer smaller, more immediate rewards over temporally distant rewards (Crysel et al., 2013; Jonason et al., 2010). In addition, narcissists perceive greater benefits from engaging in risk-taking behaviors (Foster, Shenesey, & Goff, 2009). Higher rates of grandiose narcissism have been shown in aggressive driving (Malta, Blanchard, & Freidenberg, 2005), risky sexual behaviors (Martin, Benotsch, Lance, & Green, 2013), binge drinking (Luhtanen & Crocker, 2005), and risky financial investments (Foster et al., 2009). Thus, it appears that there is a link between grandiose narcissism and involvement in risk-taking behaviors.

One study that examined specific narcissistic traits using subscales of the Narcissistic Personality Inventory (NPI; Raskin &
Terry, 1988), the most commonly used measure of grandiose narcissism, found that exhibition and entitlement predicted risky driving behaviors (Schreer, 2002). Although total NPI scores have adequate psychometric properties, researchers have questioned the use of the subscales of the NPI because inadequate psychometric properties of these subscales make it difficult to assess which particular facet of grandiose narcissism predicts behavior (Brown, Budzak, & Tamborski, 2009). To resolve this problem, researchers have developed scales to assess specific narcissistic traits such as entitlement (Campbell, Bonacci, et al., 2004), exploitativeness (Brunell et al., 2013), and grandiosity (Rosenthal, Hooley, & Steshenko, in preparation). Thus, some scholars have argued that these narrower traits of grandiose narcissism should be assessed in addition to total NPI scores (Brown et al., 2009; Miller, Price, & Campbell, 2012).

It is possible that narcissistic traits, including exploitativeness, entitlement, and grandiosity, may differentially predict risk-taking behaviors. Most previous research has focused on assessment of overall grandiose narcissism only. However, individuals endorsing high levels of entitlement and exploitativeness engage in more selfish (Brunell et al., 2013; Campbell, Bonacci, et al., 2004) and unethical behaviors (Tamborski, Brown, & Chowning, 2012). These same characteristics could appear in individuals who engage in high levels of risk-taking behaviors, as they entail short-term positive gains for the individual (e.g., alcohol makes me feel more happy) at the expense of long-term outcomes (e.g., physical consequences to high alcohol consumption). However, to date no studies have examined how narcissistic traits predict involvement in risk-taking behaviors. Examining how both the NPI total score and separate narcissistic traits predict risk-taking behaviors can allow researchers to further understand which aspects of narcissism predict health-risk behaviors and to examine the utility of the NPI to predict these behaviors.

1.2. Objectives and hypotheses

The present study had several aims. First, we sought to replicate previous research utilizing total NPI scores to predict involvement in risk-taking behaviors, as the NPI remains the most commonly used measure of grandiose narcissism (and total scores are both reliable and valid; Miller et al., 2012). We hypothesized that grandiose narcissism would predict involvement in risk-taking behaviors, even after controlling for perceived risks and benefits of the behaviors. Next, we sought to expand previous research by assessing the utility of narcissistic traits of narcissism (namely interpersonal exploitativeness, psychological entitlement, and narcissistic grandiosity) to predict involvement in risky behaviors. We hypothesized that grandiosity and entitlement would predict involvement in risk-taking behaviors in general. We also predicted that exploitativeness would be associated with risky ethical, financial, and social behaviors, due to the potential to exploit others for one's personal gain in these situations. Lastly, we sought to investigate how narcissistic traits related to a preference for more immediate rewards.

2. Methods

2.1. Participants

Participants were 630 undergraduate students (266 male; mean age = 19.16, SD = 3.92) enrolled in psychology courses in which credit was given for participation in research studies. Participants were primarily Caucasian (74%). Participants were split into two subgroups: those who completed just the NPI (n = 436) and those who completed the NPI and measures of narcissism facets (n = 194).

2.2. Measures

Domain-Specific Risk-attitude Scale (DOSPERT). The DOSPERT was designed to assess risk-taking behaviors across five domains: Ethical (illegal/lying/cheating behaviors), Financial (gambling, risky lending practices, and risky financial ventures), Health/Safety (substance use and other health-risk behaviors), Recreational (risky sport- and non-sport behaviors), and Social (admitting differences from friends/family; Weber, Blais, & Betz, 2002). The present study utilized the revised, 30-item version of this scale (Blais & Weber, 2006). All three subscales were administered: likelihood of engaging in, perceived risk associated with, and perceived benefit associated with the risky behavior. Participants responded using the following scales: Likelihood (1 = extremely unlikely, 7 = extremely likely), Risk (1 = not at all risky, 7 = extremely risky), and Benefit (1 = no benefits at all, 7 = great benefits). Average scores were calculated, with higher values indicating greater likelihood of involvement, perceived risk, or perceived benefit of the behavior. Internal consistency was moderate to high (Likelihood: α = .65–.85; Risk: α = .77–.85; Benefit: α = .69–.89).

Cognitive Appraisal of Risky Events (CARE). The CARE was developed to assess involvement in risk-taking behaviors, including illicit drug use, aggressive/illegal behaviors, risky sexual behaviors, alcohol use, involvement in high-risk sports, and risky academic/work behaviors (Fromme, Katz, & Rivet, 1997). The three subsections assess: frequency in the past 30 days, and perceived risk and benefit of the behavior. Participants responded to each of the 30 items with the following scales: 30-day frequency (1 = 0 times, 7 = 100 or more times), and risk/benefit (1 = not at all likely, 7 = extremely likely). Average scores were calculated for each subscale, with higher values indicating greater involvement or likelihood of experiencing a risk/benefit associated with the behavior. Internal consistency was moderate to high (30-day frequency: α = .71–.82; Risk: α = .79–.95; Benefit: α = .81–.91).

Delay Discounting Task. The 27-item delay discounting task revised by Kirby, Petry, and Bickel (1999) was utilized. Participants selected between smaller, more immediate rewards and larger, delayed rewards. Previous research has shown associations with impulsivity and drug use (Bickel, Oudum, & Madden, 1999; Kirby et al., 1999; Madden, Petry, Badger, & Bickel, 1997). K-values were calculated for each participant, with higher values indicating a preference for smaller, more immediate gains.

Narcissistic Personality Inventory (NPI). The NPI contains 40 items (Raskin & Terry, 1988) that ask respondents to choose between two options (e.g., “I think I am a special person” versus “I am no better or worse than most people”). Narcissistic responses are assigned scores of 1 and non-narcissistic responses are assigned a 0. Scores are summed, with higher scores reflecting higher levels of narcissism. Mean NPI score in the present sample was 16.14 (SD = 10.15). Internal consistency was high (α = .85).

Narcissistic Grandiosity Scale (NaGS). The NaGS (Rosenthal et al., in preparation) consists of 16 grandiose adjectives (e.g., “envied,” “superior”). Respondents used 7-point scales (1 = “not at all” and 7 = “extreme”) to indicate the degree to which they believed the adjectives were self-descriptive. Higher summed scores indicate greater levels of grandiosity. Mean NaGS score in the present sample was 50.44 (SD = 21.12). Internal consistency was high (α = .96).

Interpersonal Exploitativeness Scale (IES). The IES (Brunell et al., 2013) is a six-item measure assessing the extent to which people are inclined to exploit or take advantage of others (e.g., “Vulnerable people are fair game”). Participants rated their agreement or disagreement with each statement on a 7-point scale (1 = “strong disagreement” and 7 = “strong agreement”). Higher summed scores
indicate greater levels of exploitativeness. Mean IES score in the present sample was 16.70 (SD = 8.97). Internal consistency was high (α = .89).

Psychological Entitlement Scale (PES). The PES (Campbell, Bonacci, et al., 2004) was used to assess feelings of entitlement. Participants utilized a 7-point scale (1 = “strong disagreement” and 7 = “strong agreement”) to rate the degree to which the nine statements reflect self-beliefs (e.g., “I deserve more things in my life”). Higher summed scores indicate higher levels of entitlement. Mean PES score in the present sample was 29.05 (SD = 11.33). Internal consistency was high (α = .87).

2.3. Procedure

The study was approved by the University’s Institutional Review Board, and written informed consent was obtained. Participants completed the NPI, NaGS, IES, PES, delay discounting task, DOSPERT, and CARE in a counterbalanced order as part of a larger study. Only a subset of participants (n = 194) completed the NaGS, IES, and PES. Multiple participants skipped items/sections on the CARE, resulting in only 416 completed questionnaires.

2.4. Data analysis

A series of linear regression analyses were conducted for the five DOSPERT and six CARE domains. Due to significant correlations between gender and the DOSPERT, gender (coded women 1 and men 2) was entered in Step 1. Perceived risk and benefit were entered in Step 2 (Step 1 for CARE variables). To examine how grandiose narcissism affected risk-taking, NPI scores were entered in Step 3 (Step 2 for CARE variables). In a separate set of regressions focused on narcissistic traits, gender was entered in Step 1 (DOSPERT only), perceived risk and benefit in Step 2, and NaGS, IES, and PES scores were simultaneously entered in Step 3. No multicollinearity concerns were noted (largest variance inflation factor = 2.25). Correlations were calculated between the delay discounting task and scores on the remaining measures.

3. Results

3.1. Results with the NPI

NPI scores significantly predicted risky financial, health/safety, and social behaviors on the DOSPERT (Table 1). The NPI was not predictive of risky ethical or recreational behaviors. Higher levels of perceived benefit and lower levels of perceived risks predicted all risk-taking behaviors on the DOSPERT.

Using the CARE (Table 2), NPI scores significantly predicted recent use of illegal drugs and alcohol. Higher levels of perceived benefits predicted all risk-taking behaviors on the CARE. Lower levels of perceived risks predicted recent involvement in high-risk sports and risky academic/work behaviors.

Finally, correlations with the delay discounting task were assessed. Higher NPI scores were associated with a preference for smaller, more immediate rewards (Table 3).1

3.2. Results with the narcissistic traits

Next, the regressions were repeated with narcissistic traits instead of the NPI. Interpersonal exploitativeness predicted a greater likelihood of involvement in risky ethical and financial behaviors on the DOSPERT (Table 1). In addition, narcissistic gran-

1 Linear regressions provided similar outcomes to the presented correlations.
Recreational diosity predicted greater likelihood of involvement in risky ethical, financial, and social behaviors.

Using the CARE (Table 2), interpersonal exploitativeness predicted involvement in high-risk sports. In addition, narcissistic grandiosity predicted recent involvement with illegal drugs and aggressive/illegal behaviors.

Finally, correlations with the delay discounting task were assessed (Table 3). Higher levels of psychological entitlement were
Correlations between delay discounting and narcissism variables. The relationships with narcissistic grandiosity (associated with a preference for smaller, more immediate rewards. 

$p = .079$) and interpersonal exploitativeness ($p = .063$) were not significant.

<table>
<thead>
<tr>
<th>Variable</th>
<th>$F$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$R$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit</td>
<td>8.519**</td>
<td>.060</td>
<td>.008</td>
<td>.113</td>
<td>.216***</td>
</tr>
<tr>
<td>Risk</td>
<td>5.925**</td>
<td>.070</td>
<td>.070</td>
<td>.129</td>
<td>.187**</td>
</tr>
<tr>
<td>Benefit</td>
<td>5.388***</td>
<td>.148</td>
<td>.078</td>
<td>.112</td>
<td>.163^*</td>
</tr>
</tbody>
</table>

Note: $n = 416$ for NPI analyses, $n = 162$ for trait analyses. NPI = Narcissistic Personality Inventory; PES = Psychological Entitlement Scale; EIS = Interpersonal Exploitativeness Scale; NaGS = Narcissistic Grandiosity Scale.

$p < .05$.

** $p < .01$.

*** $p < .001$.

Table 3

Correlations between delay discounting and narcissism variables.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Delay</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. NPI</td>
<td>.099^*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. PES</td>
<td>.282**</td>
<td>.205^*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. NaGS</td>
<td>.172^*</td>
<td>.327**</td>
<td>.604***</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. EIS</td>
<td>.182^*</td>
<td>.213**</td>
<td>.608***</td>
<td>.385***</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Delay = Delay Discounting Task; NPI = Narcissistic Personality Disorder; PES = Psychological Entitlement Scale; NaGS = Narcissistic Grandiosity Scale; EIS = Interpersonal Exploitativeness Scale.

$p < .05$.

** $p < .01$.

*** $p < .001$.

The present study sought to replicate and expand upon previous research investigating the role of grandiose narcissistic traits in risk-taking behaviors. The first aim was to replicate previous research utilizing the NPI. We found that a higher level of grandiose narcissism predicted greater recent use of illegal drugs and alcohol, as well as greater predicted involvement in risky financial, health/safety, and social behaviors. These findings are consistent with previous research showing traits of grandiose narcissism predict involvement in risky behaviors (e.g., Lakey et al., 2008; Luhtanen & Crocker, 2005; Malta et al., 2005; Martin et al., 2013). We also found grandiose narcissism relates to different domains of the DOSPERT, rather than just DOSPERT total risk-taking (independent of specific domains; Foster et al., 2009). In addition, individuals reporting higher grandiose narcissism preferred smaller, immediate rewards to larger but distant rewards, consistent with previous research utilizing a different delay discounting procedure (Crysel et al., 2013; Jonason et al., 2010). This focus on immediate rewards may help explain why individuals showing narcissistic traits engage in risk-taking behaviors. If the focus is more on potential rewards than risks (e.g., Campbell et al., 2005; Foster et al., 2009), and more benefits are seen from risk-taking behaviors (Foster et al., 2009), then engaging in these behaviors could result in a myopic focus on immediate, positive consequences.

Our second aim was to assess how narcissistic traits—entitlement, exploitativeness, and grandiosity—differentially related to risk-taking behaviors, as most previous research has focused on NPI total score. The present results indicate that high levels of exploitativeness are predictive of greater risky ethical and financial behaviors. Individuals who score higher on exploitativeness may feel that they can use others to further/improve themselves, thus engaging in risky endeavors to bring about personal gain at the expense of others. Individuals high in grandiosity also reported greater involvement with illegal drugs and aggressive behaviors, as well as ethical, financial, and social risk-taking behaviors. Individuals who endorse greater levels of grandiosity may believe that no harm can come to them, in turn failing to evaluate potential short-term and long-term risks and thus engaging in higher levels of risk-taking behaviors. Finally, individuals who endorse high levels of entitlement, indicating a belief that they were “owed” something, preferred more immediate to delayed (but larger) rewards. Although we were unable to replicate a previous finding that entitlement was predictive of risky behaviors (Schreer, 2002), we have shown that individuals high in exploitativeness engage in more unethical behaviors (Tamborski et al., 2012). Thus, measurement of narrower traits of narcissism can be used to predict involvement in different risk-taking behaviors and may provide more information than reliance on the NPI total score. However, entitlement, exploitativeness, and grandiosity are not limited to just narcissism, as they are also consistent with other Cluster B personality disorders (APA, 2000). Thus, our results may not be specific to narcissism per se, but to overlapping Cluster B personality characteristics in general.

The present study utilized two separate measures of risk-taking behavior: the DOSPERT, which assess the likelihood of engaging in a behavior in the near future, and the CARE, which assesses frequency of involvement in the previous 30 days. These measures assess different types of risk-taking behaviors, and were used in conjunction in the present study to more fully assess risk-taking. Both grandiose narcissism and two of its facets, exploitativeness and grandiosity, were related to the DOSPERT and the CARE, indicating that this trait was associated with both self-reported likelihood and actual risk-taking behavior. However, because the present study relied on self-report, we cannot be certain that these estimates were accurate. In the future, utilizing additional means of assessing involvement in risk-taking behaviors (such as daily diaries) could be included.

Collectively, the present results indicate that narcissistic traits can predict likelihood of engaging in risk-taking behaviors. However, reliance on the NPI to assess the construct of narcissism could miss important information about how different aspects of grandiose narcissism, such as exploitativeness and grandiosity, affect risk-taking behaviors. Thus, grandiose narcissism should be assessed through a multi-faceted approach, utilizing the NPI in addition to other scales, as it is possible a component of narcissism...
related to various risk-taking behaviors may not be adequately assessed with the NPI alone (e.g., Brown et al., 2009).

4.1. Limitations

First, we relied on self-report of both narcissism characteristics and involvement in risk-taking behaviors. Assessment of the construct utilizing multiple methods would help to confirm the present findings, and could include the use of behavior diaries and completion of tasks that assess risk-taking behaviors in a lab-based setting. Second, participants were primarily female and Caucasian. It would be important to follow-up on these findings with a sample that includes more males, as gender was associated with responses on the DOSPERT. Third, many of the $R^2$ values associated with the narcissism predictors were small, indicating they only accounted for a small increase in the prediction of risk-taking behaviors beyond that of gender and perceived risk/benefit. Finally, a significant difference was noted in the NPI scores between participants who completed just the NPI ($M = 15.41, SD = 7.03$) and participants who completed the NPI and measures of the facets ($M = 17.76, SD = 14.86$). $t(628) = −2.687, p = .007.$ It is possible that our results may have been affected by the lower levels of narcissism in the NPI-only subset of participants.

4.2. Conclusions

The present results indicate that grandiose narcissism and its facets, grandiosity and exploitativeness, can predict involvement in risk-taking behaviors among college students. As many risk-taking behaviors have a high probability of short- and long-term negative outcomes to one’s physical and mental health and well-being, it is vitally important that the personality characteristics that predict behaviors be discovered. More effective prevention and treatment programs can then be designed. It is important for future research to more fully examine the relationship between grandiose narcissism and risk taking, such as by assessing pathological narcissism as well as grandiose narcissism and its facets.

References


