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Risk in the face of retribution: Psychopathic individuals persist in financial misbehavior among the Dark Triad



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ABSTRACT

Psychopathy is related to parasitic behavior that is both antisocial and high-risk. Such individuals are unlikely to consider consequences when engaging in selfish financial behavior, even in the face of punishment and financial loss. After completing Dark Triad measures (psychopathy, Machiavellianism, and narcissism), participants were told that everyone could gamble (in a clearly biased game) with the next person's bonus. Participants were then randomly assigned to think their bonus was still intact or nearly depleted. Participants were then given the option to punish the previous participant. Finally, participants were given the option to gamble with the next participant's bonus. Wins benefited current participants, and losses hurt the next participant. Participants were reminded that they could be punished by the next participant and lose everything. Results indicated that all three Dark Triad traits correlated with attempting one round of gambling. However, only individuals high in psychopathy persisted in gambling, leading to greater financial loss of the next participant. These findings highlight the importance of screening for malevolent traits in the financial world, particularly psychopathy.

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1. Introduction

White Collar Crime (WCC) is a growing problem in modern society (Benson & Simpson, 2009). Although definitions of WCC vary (Benson & Simpson, 2009) a common theme across most definitions is that WCC consists of engaging in illegitimate financial behaviors through legitimate financial means. For example, investment bankers misusing funds under their control would be guilty of WCC, however, robbing someone and misusing those funds would not be. The statistics surrounding the perpetration and punishment of WCC are staggering. Wells (2007) estimates more than \$680 Billion is lost annually, with future estimates likely to increase. In fact, WCC is more costly than burglaries, armed robberies, and non-white collar financial offenses (Benson & Simpson, 2009). Worse still is that over 43% of those arrested for WCC are never prosecuted (Ivancevich, Duening, Gilbert, & Konopaske, 2003). In addition, Ivancevich and colleagues found that the majority of those who are successfully prosecuted spend less than 3 years in prison.

In addition to crime, there are a variety of financial behaviors that are selfishly harmful, but not illegal. For example, disguising contract changes or portfolio risks is unethical, but straddles the line of legal behavior (Laczniaik & Inderrieden, 1987). The present paper will focus on *financial misbehavior*, which includes WCC

but is not limited to legal definitions. Although most theories discussing financial misbehavior have been social in nature (e.g., Strain Theory, Learning Theory, and Rational Choice Theory), there are strong theoretical arguments suggesting that individual differences play a role as well (Babiak & Hare, 2006). For example, individuals with antisocial dispositions seem disproportionately attracted to and over-represented in financial positions (Babiak, Neumann, & Hare, 2010).

One trait consistently associated with poorly motivated deviant behavior is psychopathy (Cleckley, 1976). Individuals high in psychopathy lack empathy, honesty, consistency, and respect for rules (Hare & Neumann, 2008). Such individuals are prone to high risk behavior (Newman & Kosson, 1986; Newman, Patterson, & Kosson, 1987). They are also callous, which means their reckless behavior often harms others (Hare, 1996). Furthermore, individuals high in psychopathy are unresponsive to punishment (Newman, 1987) and do not learn from their mistakes (Losel & Schmucker, 2004). As a consequence, such individuals are likely to ignore the risks inherent in certain decisions and misjudge risk of punishment.

Psychology has identified two other personality traits that lead to financial misbehavior: Machiavellianism and narcissism. These three subclinical traits (psychopathy, narcissism, and Machiavellianism) together, have been called the Dark Triad of personality (Paulhus & Williams, 2002). The Dark Triad have each (on their own) been linked to financial misbehavior in business (Babiak, 1995; Johnson, Kuhn, Apostolou, & Hassell, 2013; Tang, Chen, & Sutarso, 2008) and laboratory settings (Berg, Lilienfeld, &

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Waldman, 2014; Brown, Sautter, Littvay, Sautter, & Bearnes, 2010; Gunnthorsdottir, McCabe, & Smith, 2002). In addition, they have been linked with counterproductive behaviors (O'Boyle, Forsyth, Banks, & McDaniel, 2012). These traits are also associated with making selfish financial decisions with other people's money (Jones, 2013a). For example, individuals high in Machiavellianism and psychopathy were likely to risk someone else's money for personal gain. However, among those who took such risks, narcissism predicted the highest losses. In an anonymous and ever-borrowing market, it is critical to know who has access to other people's money. These findings suggest that all three Dark Triad traits would have a toxic impact on the financial system.

As aforementioned, all three traits have been independently associated with financial misbehavior and WCC. For example, Machiavellianism is a contributing factor to unethical business behaviors (Trevino & Youngblood, 1990). However, Machiavellianism differs from psychopathy and narcissism in several key ways. First, unlike psychopathy and narcissism, Machiavellianism has no unique relationship with aggression (Jones & Paulhus, 2010) or impulsivity (Jones & Paulhus, 2011a). Moreover, Machiavellianism is associated with normal levels of executive functioning (Jones, 2014). As a consequence, individuals high in Machiavellianism generally take political or strategic roads to malevolence, rather than aggressive or violent ones (Jones, 2013b). Thus, their strategic disposition leaves individuals high in Machiavellianism likely to engage in planful and cautious misbehavior (Cooper & Peterson, 1980; Williams, Nathanson, & Paulhus, 2010). In sum, Machiavellianism is associated with strategic manipulation, whereas psychopathy and narcissism are not.

Narcissism has also been associated with unethical financial behavior (Duchon & Drake, 2009). However, unlike individuals high in psychopathy or Machiavellianism, those high in narcissism are identity focused (Jones & Paulhus, 2011b), have impulsivity stemming from overconfidence rather than poor self-control (Jones & Paulhus, 2011a), and only respond aggressively to ego threat (Jones & Paulhus, 2010). In addition, individuals high in narcissism are self-deceptive (Paulhus & Williams, 2002), charming in short-term encounters (Paulhus, 1998), and overconfident (Campbell, Goodie, & Foster, 2004). Because of their ego focus, individuals high in narcissism tend to engage in financial misbehaviors stemming from overconfidence and entitlement (Foster, Reidy, Misra, & Goff, 2011) rather than strategy (i.e., Machiavellianism) or erratic antisociality (i.e., psychopathy).

2. Summary and predictions

Individuals high in psychopathy are predicted to behave selfishly when they have access to someone else's money. Although all three Dark Triad traits are selfish, individuals high in psychopathy are also reckless, antisocial, and unresponsive to potential punishment. Thus, individuals high in psychopathy are likely to impulsively harm others for selfish gain, making them likely to engage in antisocial risk in the face of punishment. By contrast, individuals high in Machiavellianism do not engage in needless risks because of their strategic disposition (Jones & Paulhus, 2009), making them unlikely to persist in financial misbehavior in the face of punishment. Finally, it is unclear what the association between narcissism and financial misbehavior in the face of punishment will be.

3. Methods

3.1. Participants

A Mechanical Turk (MTurk) sample of 237 adults (50.2% men; 69% European Heritage; $M_{age} = 30.88$ $SD = 10.75$) were recruited

for an online study entitled “bankers and betting – a game for real money.” However, as noted below, participants who did not follow instructions were removed, leaving a final sample of 187 adults (49.7% men; $M_{age} = 31.97$ $SD = 10.97$; 79% European Heritage). MTurk is a rich source of diverse and reliable adult participants (Buhrmester, Kwang, & Gosling, 2011; Paolacci, Chandler, & Ipeirotis, 2010). MTurk was also ideal for the present study because of its pay structure and the ability to “bonus” workers.

3.2. Measures

3.2.1. Psychopathy

In order to briefly assess psychopathy, the 28-item short form of the Self-Report Psychopathy Scale (SRP) was used (Paulhus, Neumann, & Hare, 2014). This short SRP assesses the four inter-correlated facets of psychopathy (manipulation, callousness, erratic lifestyle, and antisocial behavior), using seven items per facet. This short form can be obtained by contacting the authors of the SRP manual. Items for all measures were assessed on a 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) Likert scale unless otherwise indicated, and all items were properly reverse coded before being averaged into a composite. The SRP-SF had good internal consistency ($\alpha = .92$, $Mean = 2.04$, $SD = .60$), and was correlated positively with Machiavellianism, $r = .70$, $p < .001$, and narcissism, $r = .46$, $p < .001$.

3.2.2. Machiavellianism

The Mach-IV was used to assess Machiavellianism (Christie & Geis, 1970). The Mach-IV is a 20-item assessment focusing on three aspects of the Machiavellian character: Amorality, tactics, cynical worldview. The Mach-IV is widely used and has strong validity evidence behind it (Jones & Paulhus, 2009). The Mach-IV had good internal consistency in the present study ($\alpha = .87$, $Mean = 2.76$, $SD = .55$), and was positively correlated with narcissism, $r = .38$, $p < .001$.

3.2.3. Narcissism

Narcissism was measured using the NPI-16 (Ames, Rose, & Anderson, 2006). The NPI-16 is a shortened version of the full 40-item Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979). The NPI-16 asks participants to choose which of two statements (one narcissistic and one non-narcissistic) is more self-descriptive. Narcissistic items were coded as “2” and non-narcissistic items were coded as “1.” After reverse scoring appropriate items, all items were then averaged into an internally consistent composite ($\alpha = .79$, $Mean = 1.27$, $SD = .21$).

3.3. Design and procedure

The procedures followed closely that of Jones (2013a). Participants first filled out basic personality and demographic assessments. On MTurk, bonuses can be given to workers for exceptional work, which is payment above and beyond the agreed upon payment for a task. However, in the present research, the bonuses were used as part of the study. Participants were also told that everyone received a \$2.50 bonus, just for being in the study. Participants were told, however, that every participant was able to gamble with the *next* participant's bonus. In this game of risk, losses (−\$0.25 for losing a round) cost the next participant (but did not affect the current participant), and wins (+\$0.50) were deposited into the current participant's bonus (and did not affect the next participant). Participants were told that, if they chose to gamble, there would be five “companies” in which they could invest (represented by question mark icons on the screen; no

further information was given). One company would earn money; the other four would lose money. The participant's task was to choose the winning company (i.e., 1/5 chance). The winning companies were randomized. Participants were allowed to gamble as many or as few rounds as they wished.

In the present study, however, all participants were told that they *also* had the power to eliminate the entire bonus belonging to the previous participant. This procedure was modeled after the ultimatum game in behavioral economics (Guth, Schmittberger, & Schwarze, 1982). The ultimatum game is where one participant decides how much of a fixed amount of money to keep and how much to give to the next participant. The next participant, however, can reject the offer, in which case neither party gets any money (Henrich et al., 2001; Thaler, 1988).

As a final manipulation, participants were made aware of how much of their money the previous participant gambled away (or not). In reality, participants were randomly assigned to believe their bonus was left intact by the previous participant (\$2.50 left) or was mostly gambled away (\$0.50 left). These conditions were coded as: 1 = \$2.50 left; 2 = \$0.50 left. Accordingly, participants were then given the option to punish that person through the option, which read: "eliminate bonus" (1 = yes, 0 = no). Participants were told that clicking "yes" would result in all money that the previous participant had (from their bonus and winnings from gambling) would be eliminated. However, participants were also told that if they chose this punishment option, they would not receive what was left over from the previous participant (\$2.50 or \$0.50). In the same way, participants were made aware that, although they *have* the option to gamble with the next person's bonus, one could also potentially lose everything if the *next* participant chooses to click "yes" to "eliminate bonus."

3.4. Dependent variables

3.4.1. Bonus elimination

The first dependent variable was whether or not individuals would eliminate the bonus of the previous participant. Responses were dichotomously scored (1 = *eliminate*; 0 = *do not eliminate*).

3.4.2. Risk or not

The second dependent variable was whether or not participants made the final decision to gamble. In other words, choosing to enter the gambling game (or not) coded in a dichotomous (1 = *yes*, 0 = *no*) fashion.

3.4.3. Money remaining

The final dependent variable was computed as the overall amount of money remaining that belongs to the next participant. It should be noted that we also assessed this outcome with number of rounds gambled, and the results were similar. In order to emphasize the realistic consequences, we keep the variable at the level of at money remaining.

3.4.4. Manipulation checks

Because of the complexity of the paradigm, the instructions were broken into two parts and a series of questions (which served as manipulation checks) followed the instructions to ensure understanding. These questions for the first set of instructions were: (A) "Have you read and do you understand the situation outlined above?" (1 = **yes**, 2 = no, 3 = I read it, but I'm still confused). (B) If the previous person did not gamble with your money, how much do you get as a bonus?" (1 = **\$2.50**, 2 = nothing, 3 = \$.50). (C) If you click "eliminate bonus" how much do you get from the previous person? (1 = \$2.50, 2 = **nothing**, 3 = \$.50). (D) If you click

"eliminate bonus" how much of a bonus does the previous person get?" (1 = \$2.50, 2 = **nothing**, 3 = \$.50).

The manipulation check questions for the second set of instructions were: (A) "Have you read and do you understand the situation outlined above?" (1 = **yes**, 2 = no, 3 = I read it, but I'm still confused). (B) "If you do not gamble, how much money does the next person automatically get?" (1 = **\$2.50**, 2 = nothing, 3 = \$.50). (C) "If the participant after you is unhappy and clicks "eliminate bonus" how much of a bonus will you get?" (1 = \$2.50, 2 = **nothing**, 3 = \$.50).

Recent research on MTurk suggests that these checks are vital in complex experimental research (Crump, McDonald, & Gureckis, 2013). Moreover, sometimes high rates of data have to be removed depending on the study, because of the online and rapid nature of the MTurk participants' participation. Across the manipulation checks, 50 participants (21%) were eliminated because they did not respond appropriately to one or more of the questions (appropriate responses are in **bold**).

4. Results

All statistics were run in SPSS 20.0 and R to establish identical results across packages. Proper bootstrapping techniques were conducted when computing 95% confidence intervals. Only 28% of participants made the decision to gamble with the next participants' bonus. This rate was low compared to previous research (i.e., 50%) with conditions of no punishment (Jones, 2013a). There was also an effect for deciding to gamble by condition such that 38% individuals in the \$.50 condition decided to gamble whereas only 12% gambled in the \$2.50 condition, $\chi^2(1, 187) = 15.59, p < .001$. Interestingly, however, the money left to the next participant (among those who decided to gamble) did not differ between the two conditions ($t(50) = 1.20, p = .23$).

4.1. Bonus elimination

Individuals in the \$.50 condition were more likely to eliminate the bonus of the individual before them (18%) compared to individuals in the \$2.50 condition (5%), $\chi^2(1, 187) = 6.52, p = .013$. Overall, narcissism had the highest correlation with eliminating the previous person's bonus ($r = .17, p = .024$), compared to psychopathy and Machiavellianism ($r = .09, p = .23, r = .07, p = .33$, respectively). Although, binary logistic regression (condition, age, gender, narcissism, Machiavellianism, and psychopathy) found being in the \$.50 condition was the only significant predictor of eliminating someone else's bonus ($B = 0.61; SE = 0.29; Wald = 4.44; Exp(B) = 1.85; p = .035$).

4.2. Gambling

In the overall sample, all three of the Dark Triad traits significantly correlated with gambling at least one round. Age, gender, condition (\$2.50 vs. \$.50), and the Dark Triad traits were then entered into a binary logistic regression to examine impact on decision to gamble (or not). Results indicated that only condition (2.50 vs. 0.50) was a significant predictor of gambling in regression (see Table 1). such that individuals who had full bonuses were less likely to risk gambling with someone else's money. However, none of the Dark Triad traits significantly predicted gambling (or not). Importantly, condition did not interact with any of the Dark Triad traits.

None of the Dark Triad traits correlated with money lost, although psychopathy had the highest non-significant correlation (see Table 2). Interestingly, the correlation of each facet of psychopathy with the outcome was significant and moderate except for antisocial behavior (manipulation = .23, callousness = .22,

Table 1
Predicting one's choice to gamble with (or not) someone else's money under risk of punishment.

Decision to gamble (1 = yes, 0 = no)	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Exp(B)</i>	<i>p</i>
Condition (1 = \$0.50, 2 = \$2.50)	−0.29*	−0.83	0.22	14.20	0.44	<0.001*
Gender (1 = m, 2 = f)	0.02	−0.52	0.41	1.67	0.59	0.196
Age	−0.12	−0.10	0.22	0.19	0.91	0.663
Psychopathy	0.23*	0.29	0.29	1.01	1.34	0.315
Machiavellianism	0.22*	0.08	0.20	0.14	1.08	0.712
Narcissism	0.18*	0.34	0.27	1.55	1.40	0.213

* $p < .05$.

Table 2
Predicting how much of someone else's money was lost from gambling under risk of punishment.

Money lost	<i>r</i>	<i>B</i>	<i>SE</i>	<i>t</i>	95% <i>CI</i>	<i>p</i>
Condition (1 = \$0.50, 2 = \$2.50)	−0.17	−0.30	0.19	−1.54	−0.78, 0.05	0.132
Gender (1 = m, 2 = f)	−0.06	−0.40	0.31	−1.28	−1.14, 0.29	0.206
Age	−0.19	−0.30	0.18	−1.62	−0.63, 0.17	0.111
Psychopathy	0.18	0.51	0.23	2.21	−0.01, 1.03	0.032*
Machiavellianism	0.08	−0.16	0.20	−0.78	−0.51, 0.30	0.440
Narcissism	0.02	−0.16	0.14	−1.14	−0.47, 0.12	0.260

* $p < .05$.

erratic lifestyle = .20, antisocial behavior = .07). Recent work suggests that corporate psychopathy may have different elements other than antisocial behavior (Mathieu, Hare, Jones, Neumann, & Babiak, 2013).

Age, gender, condition (2.50 vs. 0.50) and the three Dark Triad traits were entered into a Hierarchical Linear Regression predicting money lost.¹ Like before, condition did not interact with any of the Dark Triad traits. Therefore, the interactions were removed from the model. The final regression revealed a single main effect for psychopathy such that individuals higher in psychopathy lost more of the next person's money.

5. Discussion

Participants high in the Dark Triad traits were likely to gamble with someone else's money, which replicated previous research (Jones, 2013a). However, even when these individuals had their bonuses untouched (as evidenced by the lack of interaction with condition) they did not curtail their selfish behavior. However, importantly, individuals high in psychopathy went further and persisted in risky gambling at the detriment of someone else, a risk for which they could have been punished. However, those high in narcissism and Machiavellianism did not lose much of someone else's money under threat of punishment.

This positive association between psychopathy and money lost, even when there was risk of retribution, demonstrates the behavioral inflexibility of psychopathy (Yang, Raine, Colletti, Toga, & Narr, 2011). This finding also supports the notion that those high in take large risks, and sometimes undermine their own self interest in doing so (Newman, 1987). Also as predicted, Machiavellianism was unrelated (in fact slightly negative) with money lost. This finding also supports what we know about Machiavellianism; such individuals will not take unnecessary risks when the rewards are not sufficient (Fehr, Samsom, & Paulhus, 1992). Finally, although predictions were uncertain, individuals high in narcissism did not persist in risking someone else's money in the face of punishment.

¹ The findings were similar if analyses were conducted on number of rounds gambled as well. Note that the high correlation between Machiavellianism and psychopathy prompted analyses removing Machiavellianism, which resulted in increased support for the hypothesis.

This finding makes sense given that individuals high in narcissism usually do not cheat unless they are egotistically invested (Jones & Paulhus, 2011b).

These findings highlight the selfish nature of the Dark Triad traits. In their groundbreaking book, "Snakes in Suits," Babiak and Hare (2006) outline the psychopathic behavior often found among those who engage in financial misbehavior for selfish gain. It is clear that financial misbehavior of a psychopathic flavor sometimes pays off, but psychopathic individuals are self-destructive in many ways, and their risks do often catch up with them. However, very often these discoveries are not made until the individual has already done great harm. Risky use of other people's money under high risk of retaliation seems to be a strong indicator of self-destructive tendencies. Thus, I would argue psychopathy is unique in business settings insofar as it is a trait that is both toxic to both the self and the organization. Those high in this trait take unnecessary risks for minimal gain, often leaving a wake of destruction (even self-destruction). By contrast, the toxic effects of narcissism and Machiavellianism may depend more on the situation rather than being universally toxic. In fact, individuals high in psychopathy may take from others in selfish fashion and view punishment as merely a hazard of doing business.

With respect to punishment, it seems logical that increased punishments would deter WCC, given the low probability of prosecution and high potential payoffs in WCC (Ivancevich et al., 2003). However, there may be some cases where tougher punishments lead to ethical leaks elsewhere (Tyler & Jost, 2007). In fact, among individuals focused solely on profit, punishment and regulation are sometimes factored into overall expense (Gneezy & Rustichini, 2000). These may be especially true when individuals high in psychopathy are making financial decisions.

One limitation of the present study was the large number of participants that had to be eliminated due to misunderstanding the instructions. Although this finding is typical of MTurk research (Crump, McDonnell, & Gureckis, 2013), it nevertheless raises questions about the attention level of participants. By contrast, one advantage about the online nature of the study is that it mirrors modern business. Future research should assess personality traits among those who have mishandled other people's money, and investigate those who seek positions where they will be handling other people's money. It seems clear that there are certain situa-

tions and traits that may create unfortunate outcomes for those who entrust their finances to others.

6. General conclusion

Individuals high in psychopathy are likely to make poor financial decisions. In particular, individuals high in any of the Dark Triad traits are likely to engage in selfish and callous financial behavior (Jones, 2013). In particular, when no threat of punishment exists, all three types of individuals produce some negative financial outcome for others, when entrusted with someone else's money. However, the present study extends this research demonstrating that individuals high in psychopathy will persist in financial misbehavior, even in the presence of clear and likely punishment. These findings, in a practical sense, emphasize the importance of reputation and screening in the financial world. Mismanaging someone else's money often costs the owner of the funds much more than it does the steward of the funds. As a consequence, individuals need to be cautious who their money is entrusted to, especially with respect to psychopathy.

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