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The impact of social support and coercion salience on Dark Triad decision making

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ABSTRACT

We examined the effect of social support and coercion on risk taking associated with the Dark Triad. Participants brought a picture into the lab of an individual who calmed them (social support) or stressed them (coercion). They were then randomly assigned to place one of these pictures beside a computer screen. Participants completed the Balloon Analogue Risk Task (BART) and IOWA Gambling Task (IGT) with the photograph next to the computer. Results indicated that, overall, coercion resulted in less risky decisions. However, among those high in psychopathy, coercion led to riskier decisions. In contrast, those high in narcissism made less risky choices when primed with social support. Taken together, the Dark Triad may respond differently to different social contexts.

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Risky decisions affect not only the individual engaging in the risky activity, but others close to that individual. For example, in the case of risky driving, individuals who are engaging in reckless driving are not only at risk, but others on the road are at risk as well. However, risk taking is also affected by a given situation. For example, stress associated with being late or heavy traffic may impact one's willingness to engage in risky driving. Similarly, the support of a loved one in the car or soothing music may also impact one's risk taking. In the case of financial risk, whether it is gambling or excessive stock speculation, the presence of social stress or support may impact different people in different ways. In the present study, we focused on two key factors, and their interaction, that may be associated with increased risk taking. The first is dark personalities and the second is the presence of social support or coercion in one's environment.

1. Dark Triad and risk

The Dark Triad includes three personality traits, Machiavellianism, narcissism, and psychopathy (Paulhus & Williams, 2002). Narcissism is characterized by a grandiose, self-centered worldview; such individuals are uniquely ego-driven and reactive to social situations (Jones & Paulhus, 2010). Machiavellianism is characterized by a strategic, long-term orientation; unlike psychopathy, those high in Machiavellianism are able to engage in delay of gratification in order to achieve future goals (Jones, 2016). Finally, psychopathy is characterized by an impulsive and short-term orientation. This orientation leads to erratic behavior and poor impulse control (Jones & Paulhus, 2011). Due to the unique features associated with the different traits, each type of individual is likely to engage in differential levels of risk under different circumstances.

Narcissistic individuals are overconfident, and this overconfidence leads to increases in risky decisions (Foster, Reidy, Misra, & Goff, 2011). Narcissism is particularly toxic in competitive situations (Goncalves & Campbell, 2014). In business situations, it has been shown that those high in narcissism take greater risks; the more power they get, the riskier they become (Chatterjee & Hambrick, 2011). On the other hand, the association between Machiavellianism and risk taking is mixed. Some studies show decreases in risky behavior among Machiavellian individuals in contrast to the other two Dark Triad traits and others show that behavioral and self-reported impulsivity depends on what assessment of Machiavellianism is used (Jones, 2016). Further, previous research has found that Machiavellianism is not uniquely associated with impulsivity (Jones & Paulhus, 2011). Of the three Dark Triad personalities, Machiavellianism is considered to be a more strategic trait (Jones, 2016).

Psychopathic individuals are impulsive and misperceive situational cues leading them to take more risks (Lösel & Schmucker, 2004). Research has shown that those high in psychopathy have attentional deficits. Specifically they misperceive situational cues peripheral to the goal of a task and this inattention leads them to take greater risks (Bernstein, Newman, Wallace, & Luh, 2000). Further, psychopathy has also been associated with reckless impulsivity (Jones & Paulhus, 2011) and reactive aggression in response to direct provocation (Jones & Paulhus, 2010). In

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general, these characteristics lead those high in psychopathy to be reactive to coercive environments, and to take more risks in those circumstances.

2. Social support and coercion

Differential social support and coercion theory is a criminological theory proffered to explain criminal behavior (Colvin, Cullen, & Vander Ven, 2002). This theory posits that action can be compelled through two forces: coercion or social support. In general, coercion can be conceptualized as inducing an individual to action through the pain (emotional or physical) that it causes. More specifically, the two mechanisms through which coercion can be used to compel action are force or fear and anxiety. Coercion has been associated with a greater risk taking in reference to anti-social behavior (Colvin, 2007); this relationship is mediated by low self-control (Baron, 2009).

Social support is characterized by assistance provided by another (Colvin et al., 2002). This assistance can take two forms: expressive or instrumental. Expressive social support is providing emotional assistance, whereas instrumental assistance can involve providing things such as financial support or guidance. Social support has been linked with less risk taking with respects to compliance with directions, and less violence (Colvin, 2007).

3. Summary and predictions

Testing the effects of social support and coercion has been difficult, partially due to the multi-faceted nature of these constructs as well as difficulty in defining and obtaining proper operationalizations. For the purpose of this study, we defined social support as being around people who supported the individual; we defined coercion as being around those that stress the individual. To this end, participants were primed with social support or coercion by exposing them to a photograph of an individual that calms or stresses them (respectively), and having participants write a statement about that person. Afterwards, but with the photograph still present, participants engaged in a risk taking activity and completed measures of the Dark Triad.

As psychopathic individuals are aggressively reactive to physical provocation and possess low impulse control (Jones & Paulhus, 2011) and the relationship between coercion and anti-social behavior has been found to be mediated by low self-control (Baron, 2009) we expected those high in psychopathy to take greater risks, especially when primed with coercion. Narcissistic individuals, on the other hand, are reactive to ego provocation; therefore we expected those high in narcissism to take fewer risks when primed with social support.

4. Methods

4.1. Participants

Participants were 87 undergraduate students at a southwestern university. Three participants were excluded because they failed the attention check. A final sample of 84 participants were included in analyses (73.4% female, 87.5% Hispanic, $m_{age} = 20.05$, $sd_{age} = 3.72$).

4.2. Measures

4.2.1. Psychopathy
The Self-Report Psychopathy scale (SRP) was used to measure subclinical psychopathy (Paulhus, Neumann & Hare, in press). The SRP consists of four inter-correlated facets (interpersonal manipulation, callous affect, erratic lifestyle, & anti-social behaviors). For the purposes of our research, we focused on the overall psychopathy composite. The SRP asks participants to rate how much they agree with the items on a 5-point Likert scale (e.g., "I think I could 'beat' a lie detector", "I have been arrested").

4.2.2. Narcissism
The Narcissistic Personality Inventory—13 (NPI-13; Gentile et al., 2013) was used to measure subclinical narcissism. The measure involves asking participants to choose whether a narcissistic or a non-narcissistic statement is more self-descriptive (e.g., "I like to look at my body" or "My body is nothing special").

4.2.3. Machiavellianism
The 20-item Mach-IV (Christie & Geis, 1970) was used to measure Machiavellianism. The Mach-IV has participants rate how much they agree with each item on a 5 point Likert scale (e.g., "It is wise to flatter important people", "Anyone who completely trusts anyone is asking for trouble").

4.2.4. Risk taking
The Balloon Analog Risk Task (BART) and IOWA Gambling Task (IOWA) were used to measure risk taking. In the BART, participants are presented with a balloon and decide how many times to pump up a virtual balloon (Lejuez et al., 2002). With each pump the participant earns money, however, there is also a risk that the balloon will pop. If the balloon pops, the participant does not receive any money gained on that trial. A total of 30 balloons are presented. For the purposes of the present research, we focused on two primary outcomes of the BART: (a) total number of pumps (i.e., *pumps*) (b) total number of exploded balloons (i.e., *explosions*).

In the IOWA, participants are shown four decks of cards (Bechara, Damasio, Tranel, & Damasio, 2005). The participant starts the game with a set amount of money and is tasked to increase their funds as much as possible. Each round, participants must choose one of the decks. Their choice results in the participant increasing or decreasing their total amount of money. Two of the decks are "advantageous" in that they yield less money on any given win, but they also result in less money lost when a lost occurs. In contrast, the other two decks are "disadvantageous" in that they yield more money on any given win, but when one loses, they result in a greater loss. Continued choice from the advantageous deck will result in more money than choosing from the disadvantageous deck. The total number of disadvantageous choices was used to measure risk taking.

4.3. Procedure

Participants were asked to bring two pictures: one of someone that calms them and one of someone that stresses them. They were randomly assigned to one of three conditions: social support (n = 28), coercion (n = 28), or control (n = 28). Those assigned to the social support condition placed the picture of the person that calmed them on a magnetic frame on the left side of their workspace. Participants in the coercion condition placed the picture of the person that stressed them on the magnetic frame. Those assigned to the social support and coercion conditions were then asked to write a paragraph about why the person in the picture stressed or calmed them. After writing the paragraph, participants completed the IOWA Gambling Task and the Balloon Analog Risk Task. Those assigned to the control condition proceeded directly to the risk taking tasks. Finally, participants completed the personality measures and were debriefed.

5. Results

We first correlated the Dark Triad with the BART (pumps and explosions) as well as the IOWA task. None of the Dark Triad traits had significant bivariate correlations (all $r < .08$ or $> -.08$, all $p > .20$) with the IOWA task or either of the BART outcomes. From there, we conducted a series of hierarchical linear regressions to test the general impact of the Dark Triad, social support, social support/coercion and their interactions on decision making. Step 1 of all regressions included the three Dark Triad traits, dummy1 (social support), dummy2 (social

coercion) and three interactions. Thus, the first regression (Reg1) tested interactions between the Dark Triad and social support (e.g., dummy1 × narcissism, dummy1 × Machiavellianism, and dummy1 × psychopathy), and the second regression tested interactions between the Dark Triad and social coercion (e.g., dummy2 × narcissism, dummy2 × Machiavellianism, and dummy2 × psychopathy). Contrary to predictions, psychopathy had no association with the IOWA task. Further, both Machiavellianism and narcissism were unrelated to the IOWA task. The IOWA outcomes will not be discussed further.

We then examined the BART outcomes in two regressions. In Regression 1, we tested the impact of Dark Triad traits, social support, and the interaction between Dark Triad traits and social support on BART pumps (Table 1). Those in the coercion condition made less risky decisions, $\beta = -0.34$, $p = .017$, $95\%CI = -0.62, -0.06$. There was also a marginally significant interaction between support and narcissism, $\beta = -0.26$, $p = .055$, $95\%CI = -0.52, 0.01$, such that social support decreased risk taking among individuals high in narcissism. To further investigate this interaction, we separated the first 10 and the last 20 rounds. We found that, for the first 10 pumps, there was a significant narcissism × support interaction, $\beta = -0.28$, $p = .030$, $95\%CI = -0.53, -0.03$. However, this effect was weakened across the last 20 pumps, $\beta = -0.23$, $p = .095$, $95\%CI = -0.50, 0.40$, suggesting that social support diminished narcissistic risk taking only initially. Thus, these findings indicate that in the social support condition, individuals high in narcissism are less risk prone; however, the effect of this photo wears off quickly. With respect to BART pumps in Regression 2 (only coercion interactions), there was a significant and negative main effect for social coercion, $\beta = -0.34$, $p = .017$, $95\%CI = -0.63, -0.06$. No other main effects or interactions were significant (Table 1).

We then investigated balloon explosions. Regression 1 (only support interactions) revealed a marginally significant effect of coercion in that coercion predicted fewer explosions, $\beta = -0.28$, $p = .055$, $95\%CI = -0.56, -0.01$. No significant main effects or interactions emerged. Regression 2 (only coercion interactions) found a significant and negative main effect for social coercion on explosions, $\beta = 0.34$, $p = .028$, $95\%CI = -0.59, -0.04$. However, there was also a significant psychopathy × coercion interaction such that individuals high in psychopathy in the coercion condition exploded their balloon significantly more often, $\beta = 0.34$, $p = .037$, $95\%CI = 0.02, 0.65$. Once again, to test this interaction more directly, we focused on the key variables of interest and separated the first 10 and last 20 pumps. This time, the first 10

balloon explosions were unaffected by coercion or the interaction between psychopathy and coercion. However, among the last 20 balloons, the interaction between psychopathy and coercion was marginally significant such that individuals in the coercion condition who were high in psychopathy exploded more balloons, $\beta = 0.31$, $p = .056$, $95\%CI = -0.01, 0.63$. Thus, these findings indicate that individuals high in psychopathy may not be initially affected by the salience of coercion (i.e., a stressful individual). However, over time, such individuals may become increasingly risk-prone and aggressive when reminded of a coercive other.

6. Discussion

We examined the moderating effect of social support and coercion on the Dark Triad. Specifically, we wanted to see if social support and coercion affected risk taking with financial consequences. We predicted that social support would have a mitigating effect on risk taking. Partially consistent with this prediction, we found that social support reduced risk taking among individuals high in narcissism. Similarly, we predicted that social coercion would exacerbate risk taking. Contrary to predictions, social coercion had a main effect such that individuals that were subjected to a coercive photo engaged in less risky behavior. However, the effect of coercion on psychopathy was such that high-psychopathy individuals in the coercion condition suffered more balloon explosions, ostensibly from engaging in higher risk.

That social support led to reduced risk taking for those high in narcissism is consistent with previous research findings that narcissists are reactive to their environment (Chatterjee & Hambrick, 2011). Thus, providing narcissistic individuals with the presence of someone who calms them may quell their need for high levels of risk taking, if only temporarily. This reduction in risk taking may occur because the narcissistic individual may not feel that they have anything to prove in that given moment. Therefore, this finding furthers the idea of the toxicity of social competition in the world of narcissists.

The finding that social coercion was associated with less risk taking initially seems contrary to previous research. Social coercion might be only be associated with risk taking insofar as social coercion has been associated with engagement in anti-social behaviors. However, it is possible that the reduced risk taking was due to activation of the Behavioral Inhibition System (BIS). BIS is activated in response to perceived threats and is associated with avoidant and decreased response behaviors

Table 1
Regression of indices of risk taking on dark triad and social support/coercion.

Variable	Pumps (first 10 rounds)	Pumps (last 20 rounds)	Pumps (all)	Explosions (first 10 rounds)	Explosions (last 20 rounds)	Explosions (all)
	B (95% CI)	B (95% CI)	B (95% CI)	B (95% CI)	B (95% CI)	B (95% CI)
Regression 1						
Psychopathy	−.28 (−0.58, 0.03)	−.15 (−0.48, 0.17)	−.20 (−0.52, 0.12)	−.13 (−0.47, 0.20)	−.24 (−0.57, 0.08)	−.24 (−0.57, 0.09)
Narcissism	−.07 (−0.32, 0.18)	−.10 (−0.37, 0.16)	−.10 (−0.36, 0.17)	.14 (−0.14, 0.41)	.03 (−0.24, 0.30)	.08 (−0.19, 0.35)
Machiavellianism	.24 (−0.04, 0.52)	.16 (−0.13, 0.46)	.20 (−0.10, 0.49)	−.06 (−0.36, 0.25)	.15 (−0.15, 0.45)	.09 (−0.21, 0.39)
Support	−.12 (−0.38, 0.13)	−.18 (−0.25, 0.10)	−.17 (−0.44, 0.10)	−.08 (−0.36, 0.20)	−.20 (−0.47, 0.08)	−.18 (−0.46, 0.09)
Coercion	***−.34* (−0.60, −0.07)***	***−.32* (−0.60, −0.04)***	***−.34* (−0.62, −0.06)***	−.14 (−0.43, 0.14)	***−.28* (−0.57, −0.00)***	***−.28⁺ (−0.56, 0.01)***
Psychop. × support	−.23 (−0.52, 0.08)	−.08 (−0.40, 0.25)	−.13 (−0.45, 0.19)	−.01 (−0.33, 0.32)	−.18 (−0.51, 0.15)	−.14 (−0.47, 0.18)
Narc. × support	***−.28* (−0.53, −0.03)***	−.23 (−0.50, 0.40)	***−.26† (−0.52, 0.01)***	.07 (−0.20, 0.35)	−.19 (−0.45, 0.08)	−.11 (−0.38, 0.16)
Mach × support	.25 (−0.03, 0.53)	.17 (−0.13, 0.47)	.21 (−0.09, 0.50)	.18 (−0.12, 0.49)	−.18 (−0.12, 0.47)	.21 (−0.09, 0.51)
Regression 2						
Psychopathy	−.11 (−0.43, 0.20)	−.08 (−0.40, 0.25)	−.09 (−0.41, 0.23)	−.07 (−0.39, 0.25)	−.04 (−0.36, 0.29)	−.06 (−0.37, 0.26)
Narcissism	.02 (−0.22, 0.27)	−.01 (−0.26, 0.25)	−.00 (−0.25, 0.25)	.09 (−0.16, 0.34)	.06 (−0.19, 0.31)	.08 (−0.17, 0.33)
Machiavellianism	.08 (−0.20, 0.35)	.09 (−0.20, 0.38)	.09 (−0.20, 0.38)	−.11 (−0.40, 0.17)	.08 (−0.21, 0.37)	.01 (−0.27, 0.29)
Support	−.14 (−0.40, 0.13)	−.18 (−0.46, 0.10)	−.18 (−0.45, 0.10)	−.15 (−0.42, 0.13)	−.21 (−0.48, 0.07)	−.22 (−0.49, 0.05)
Coercion	***−.34* (−0.61, −0.07)***	***−.32* (−0.60, −0.04)***	***−.34* (−0.63, −0.06)***	−.20 (−0.48, 0.08)	−.30 (−0.58, −0.02)	***−.31* (−0.59, −0.04)***
Psychop. × coercion	.27 (−0.04, 0.58)	.13 (−0.20, 0.45)	−.18 (−0.14, 0.50)	.24 (−0.08, 0.56)	***.31† (−0.01, 0.63)***	***.34* (0.02, 0.65)***
Narc. × coercion	.07 (−0.18, 0.32)	.10 (−0.16, 0.35)	***−.09* (−0.16, 0.35)***	−.22 (−0.48, 0.03)	−.07 (−0.32, 0.18)	−.15 (−0.40, 0.10)
Mach × coercion	−.20 (−0.48, 0.08)	−.05 (−0.34, 0.24)	−.10 (−0.39, 0.18)	−.23 (−0.52, 0.05)	−.01 (−0.30, 0.27)	−.11 (−0.38, 0.18)

* $p < .05$.
† $p < .056$.
⁺ $p < .10$.

(Carver & White, 1994). It is possible that the social coercion prime was perceived as a threat and activated the BIS, which then led to the lower rates of responding. In contrast, higher levels of psychopathy have been associated with less BIS activation and sensitivity to frustration (Hughes, Moore, Morris, & Corr, 2012). Therefore, those high in psychopathy might have perceived social coercion as a frustration, leading to activation of the BAS and their increased risk taking.

Given this research is exploratory, future research is needed to replicate these findings with different operationalizations of social support and coercion. Further, future research should also examine the relative efficacy of social support from different sources. For example, the effect of social support from society might be different than the effect of an individual that calms one down. Nevertheless, these findings add to the literature of how Dark Triad individuals interact with social environments, such that support and coercion induce/reduce risk taking. Further, the interaction between social support and dark personalities is important insofar as socially supportive techniques are used to reduce criminal behavior. In total, it is clear that more attention should be paid to the social situations individuals are in when examining risk behaviors, especially among the Dark Triad.

References

Baron, S.W. (2009). Differential coercion, street youth, and violent crime. *Criminology, 47*, 239–268.

Bechara, A., Damasio, H., Tranel, D., & Damasio, A.R. (2005). The Iowa gambling task and the somatic marker hypothesis: Some questions and answers. *Trends in Cognitive Sciences, 9*, 159–162.

Bernstein, A., Newman, J.P., Wallace, J.F., & Luh, K.E. (2000). Left-hemisphere activation and deficient response modulation in psychopaths. *Psychological Science, 11*, 414–417.

Carver, C.S., & White, T.L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology, 67*, 319–333.

Chatterjee, A., & Hambrick, D.C. (2011). Executive personality, capability cues, and risk taking how narcissistic CEOs react to their successes and stumbles. *Administrative Science Quarterly, 56*, 202–237.

Christie, R., & Geis, F. (1970). *Studies in Machiavellianism.* New York: Academic Press.

Colvin, M. (2007). Applying differential coercion and social support theory to prison organizations: The case of the penitentiary of New Mexico. *The Prison Journal, 87*, 367–387.

Colvin, M., Cullen, F.T., & Vander Ven, T. (2002). Coercion, social support, and crime: An emerging theoretical consensus. *Criminology, 40*, 19–42.

Foster, J.D., Reidy, D.E., Misra, T.A., & Goff, J.S. (2011). Narcissism and stock market investing: Correlates and consequences of cocksure investing. *Personality and Individual Differences, 50*, 816–821.

Gentile, B., Miller, J.D., Hoffman, B.J., Reidy, D.E., Zeichner, A., & Campbell, W.K. (2013). A test of two brief measures of grandiose narcissism: The narcissistic personality inventory-13 and the Narcissistic Personality Inventory-16. *Psychological Assessment, 25*, 1120–1136.

Goncalves, M.K., & Campbell, L. (2014). The Dark Triad and the derogation of mating competitors. *Personality and Individual Differences, 67*, 42–46.

Hughes, K. A., Moore, R. A., Morris, P. H., & Corr, P. J. (2012). Throwing light on the dark side of personality: Reinforcement sensitivity theory and primary/secondary psychopathy in a student population. *Personality and Individual Differences, 52*(4), 532–536.

Jones, D.N. (2016). The nature of Machiavellianism: Distinct patterns of misbehavior. In V. Zeigler-Hill, & D.K. Marcus (Eds.), *The dark side of personality*. American Psychological Association.

Jones, D.N., & Paulhus, D.L. (2010). Different provocations trigger aggression in narcissists and psychopaths. *Social Psychological and Personality Science, 1*, 12–18.

Jones, D.N., & Paulhus, D.L. (2011). The role of impulsivity in the Dark Triad of personality. *Personality and Individual Differences, 51*, 679–682.

Lejuez, C.W., Read, J.P., Kahler, C.W., Richards, J.B., Ramsey, S.E., Stuart, G.L., ... Brown, R.A. (2002). Evaluation of a behavioral measure of risk taking: The Balloon Analogue Risk Task (BART). *Journal of Experimental Psychology: Applied, 8*, 75–84.

Lösel, F., & Schmucker, M. (2004). Psychopathy, risk taking, and attention: A differentiated test of the somatic marker hypothesis. *Journal of Abnormal Psychology, 113*, 522–529.

Paulhus, D.L., & Williams, K.M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*, 556–563.

Paulhus, D.L., Neumann, C.S., & Hare, R.D. (2015). *Self Report Psychopathy (SRP) scale.* Toronto: Multi-Health Systems (in press).