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The Dark Triad, Creativity and Morality

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Abstract

The Dark Triad of personality is the combination of narcissism, Machiavellianism, and psychopathy. The associative theory of creativity involves the default mode network of the brain, which is responsible for memory tasks, imagination, and thoughts of self. Since the Dark Triad traits involve inhibitory control and imagination, there is a high likelihood that observed alterations in these processes may be used to predict dark creativity patterns. Malevolent creativity involves using new ideas to complete tasks that will harm others. With creativity not being limited to positive outcomes, aspects of morality are also part of the creative decision-making processes. Morality is a key element of this project since that would affect the creative decision-making process. Therefore, the study of how these three constructs are correlated will shed light on how personality influences creative action.

Keywords: *Dark Triad, malevolent creativity, morality, creativity, personality*

Introduction

Creativity is multifaceted; it cannot be described as one particular action, and it is expressed in a variety of situations. In short, it is characterized as novel ideas or actions, something that has not been done before. The book *Morality and Creativity* (Kapoor & Kaufman, 2022a) placed creativity in the context of morality and ethics. Ethics is a set of principles to live by, and morality is the carrying out of those actions. Those who follow an ethical code for their life and act according to those codes often act kindly, justly, and with concern for how their actions affect others. When one considers how morality (actions) overlap with creativity (novel ideas), the limits of one's actions come into question. Then, one has to figure out where the line is drawn on creativity for the sake of honoring ethical codes.

Robert Sternberg (2021) from Cornell University describes three different kinds of creativity: positive, negative, and neutral. He describes creativity as having three specific constructs: novelty, usefulness, and whether or not it has a good or bad impact. The third construct is where the three types of creativity diverge, with positive creativity having a good impact, negative creativity having a bad impact, and neutral creativity having neither a strong positive nor negative impact. Not all psychologists accept this definition of creativity, as some believe there to be no "dark side" of creativity (Gino & Ariely, 2012) and that there is instead a whole different branch reserved for creativity that causes harm, which is termed malevolent creativity (Beaussart et al., 2013).

Literature Review

The Dark Triad

The Dark Triad of personality is the combination of narcissism, Machiavellianism, and psychopathy. Its study was sparked by two researchers, Paulhus and Williams (2002). They

sought to differentiate between the three main components and identify their correlations. Since

this publication, hundreds of studies have been conducted to examine the Dark Triad (e.g.,

Hartung et al., 2022; Jonason & Jackson, 2016). Two of the most popular measures of the

presence of the Dark Triad are The Dirty Dozen instrument and The Short Dark Triad

instrument, which is used in my research. The strongest traits found in those with the Dark Triad

are disagreeableness, a lack of honesty-humility, a lack of empathy (callousness), and

interpersonal antagonism (Furnham et al., 2013). Due to their positive correlation, there is often

significant overlap between the three Dark Triad factors, which requires multiple regression

models to be used to control for these factors.

Behavioral Responses

These Dark Triad traits involve inhibitory control and imagination. Similarly, the

associative theory of creativity involves the default mode network of the brain, which is

responsible for memory tasks, imagination, and thoughts of self (Beaty & Kenett, 2023). Given

the overlap between the Dark Triad and creative processes (Lebuda et al., 2021), there is a high

likelihood the observed differences in how creative processes are used may be able to predict

dark creativity patterns. For example, malevolent creativity involves using new ideas to complete

tasks that will harm others (Gao et al., 2022; Hao et al., 2016). Because creativity is not limited

to prosocial outcomes, aspects of morality are also part of the creative decision-making processes

(Kapoor & Kaufman, 2022b).

The Current Study

Studying how these three constructs correlate will show how personality influences

creative action. The hypotheses for this study are:

(1) There will be moderately positive correlations between Dark Triad traits and malevolent creativity and a negative correlation between Dark Triad traits and morality.

(2) In the regression, Dark Triad traits will predict morality, but after malevolent creativity is included as a mediator, Dark Triad traits will no longer directly affect morality.

Methodology

Subjects

Participants were recruited (N =128) from three sources: a research participation pool at a small Midwestern university in exchange for course credit, the Prolific database in which participants were offered \$4 to complete the survey, and social media postings. Out of the 128 participants, 75 were obtained through Prolific, 44 through the participation pool, and 9 through social media. The majority of participants were female (84), followed by male (36), and nonbinary (7). One person did not disclose their gender. There were 4 participants under the age of 18. The majority (64) were between 18 and 24, with the remaining participants being above 25 ($M = 28.48$, $SD = 12.117$).

Materials

Dark Triad Traits. The Short Dark Triad questionnaire (Jones & Paulhus, 2014) was used to measure the strength of a person's behavioral tendencies in various situations. An example item reads as follows: "I like to get acquainted with important people." The scale uses a Likert-like scale to measure responses, which range from disagree strongly (1) to agree strongly (5). In this sample, this scale had acceptable reliability ($\alpha = 0.728$).

Malevolent Creativity. To measure malevolent creativity, respondents were asked to complete the Malevolent Creativity questionnaire (Hao et al., 2016). An example item reads as follows: "How often do you fabricate lies to simplify a problem situation?" Participants responded using a

five-point Likert-like scale, which ranged from never (0) to usually (4). For clarity, some

adjustments to the survey were made. In the question, "How often do you have ideas about how

to suppress people who are in your way?" I changed "people who are in your way" to "people

who are interfering with your ability to do what you want". In the question, "How often do you

think about the strategies of hurting others in the rough world?" I changed the word "rough" to

"in everyday life". In the question, "How often do you fabricate lies to simplify a problem

situation?" I changed the word "problem" to "problematic". In the question, "How often do you

tell lies without worrying about being nailed?" I changed the word "nailed" to "caught". In the

question, "How often do you think of ideas on the margins of rules, when conventional ways do

not work?" I changed "ideas on the margins of rules" to "ideas in between the rules". These

alterations avoid confusion about what is being stated and promote more accurate answers. In

this sample, this scale had good reliability ($\alpha = 0.853$).

Morality. To test morality, participants were asked to complete the Moral Foundations

Questionnaire (Graham & Haidt, 2012). The questionnaire asks participants to quantify how

much money it would take for them to complete particular actions. The Likert-like response

scale ranges from $0, doing it for free (1) to never for any amount of money (8). An example

item reads as follows: "Kick a dog in the head, hard". Although the scale was intended to be

scored as several subscales, that solution has not been replicated well (Costa & Moreira, 2023;

De Buick & Pauwels, 2023). The data from Costa & Moreira and this sample form a

single-factor scale with good reliability ($\alpha = 0.857$).

Self Perceived Creativity. To measure general creativity, respondents were asked to complete the

Self-Perceived Creativity questionnaire (Zhou & George, 2001). A seven-point Linkert-like scale

was used, which ranged from not at all like me (1) to very much like me (5). A sample item reads

as follows: "I suggest new ways to achieve goals or objectives". For clarity, in the item, "I suggest new ways to increase quality.", I changed the word "quality" to "the quality of things". This scale has excellent reliability in this sample ($\alpha = 0.934$).

Noun-Verb Association Task. Debate surrounds the best way to measure creativity since it is multifaceted. Things like extroversion, openness to new ideas, and intellect/imagination correlate with higher levels of creativity when using a self-reporting scale. Generally, a Five-Factor Model (FFM) is used to measure creativity, but this model is geared toward positive creativity and not towards malevolent creativity. The FFM questionnaire is a self-perception scale that can lead to discrepancies in results for those with the Dark Triad. The three components of the Dark Tried might result in an inflated sense of self and, therefore, an inaccurate report of their own creativity. To avoid this, I used a noun-verb association task (Prabhakaran & Gray, 2013). This task presented participants with 20 nouns, for which they were asked to generate a creative verb associated with each noun (20 noun-verb pairs). When scoring the responses, the more common the associated verb, the less creativity. Participants were given 8 minutes to complete this section before they were automatically moved on to the next section. This data was then uploaded into the SemDis2024 software (Beaty & Johnson, 2020). The data file was cleaned using the "remove filter and clean" option, the GloVe semantic space, and a multiplicative compositional model. The resulting file was then put into Google Sheets, and the average semantic distance was calculated for each subject.

Procedure

Participants completed the demographic questions and scales. Those who were in the research participation pool received credit following the completion of the survey.

Analysis

Once the scores were calculated, the data was analyzed using a correlation matrix. A linear regression mediation model was used to study the relationships between the Dark Triad, creativity, and morality by examining whether the associations between Dark Triad traits and morality were mediated (substantially overlapped with) creativity. The variance accounted for (R^2) by the Dark Triad and morality model and the full model were examined to infer the additional contribution of creativity to the overall model.

Mediation

I conducted my analysis in jamovi (The jamovi project, 2024) using the *jamm* module (Gallucci, 2020). I first ran the bivariate correlations between all of the scales to be included in the linear regression. The first block of predictors were the Dark Triad personality traits– Machiavellianism, psychopathy, and narcissism. The second block included the mediating variables – self-perceived creativity, the noun-verb association task score, and malevolent creativity. The outcome measure was morality. I examined the variance of morality accounted for by each successive model. In the full model, I tested the degree to which the Dark Triad's relationship to morality was mediated by creativity.

Results

Zero-Order Correlations

The means and standard deviations for the variables are reported in Table 1. The bivariate zero-order correlations were calculated and are also shown in Table 1. Machiavellianism ($r = -0.314$, $p < .001$), psychopathy ($r = -0.347$, $p < .001$), and malevolent creativity ($r = -0.498$, $p < .001$) all had significant, negative correlations with morality. Malevolent creativity was significantly negatively correlated with Machiavellianism ($r = 0.562$, $p < .001$) and psychopathy

($r = 0.6375$, $p < .001$). The only significant correlation found for narcissism was with

self-perceived creativity ($r = 0.452$, $p < .001$).

Linear Regression

Without mediators in the model, the three dark triad traits accounted for 16.7% of the variance in

morality. The three dark personality traits accounted for 48.8% of the variance in malevolent

creativity ($R^2 = 0.488$, $F = 39.4$, $p < .001$), 6.4% of the variance in semantic distance creativity

($R^2 = 0.0649$, $F = 2.85$, $p < .04$), and 21.2% of the variance in self-perceived creativity ($R^2 =$

0.212, $F = 11.1$, $p < .001$). The full model with all the predictor and mediator variables accounted

for 30.1% of the variance in morality (See Table 3).

Mediation

The weights associated with each path in the full model are reported in Table 2. The total effect

of the three components of the Dark Triad on morality showed significant effects for narcissism

and psychopathy and a marginal effect for Machiavellianism.

Of the nine possible mediation paths (Table 2), only the mediations of the effects of

Machiavellianism and psychopathy on morality by malevolent creativity were significant

(Machiavellianism indirect effect: $\beta = -0.15$, SE = 0.079, 95% CI [-0.4, -0.09], p = .002;

psychopathy indirect effect: $\beta = -0.22$, SE = 0.12, 95% CI [-0.65, -0.19], p < .001, respectively).

As a result, the direct effect of Machiavellianism was not significant ($\beta = 0.007$, $z = 0.077$, $p =$

0.939). The direct effect of psychopathy was also non-significant ($\beta = -0.088$, $z = -0.88$, $p = 0.381$).

This is evidence of a substantial mediation of Machiavellianism and psychopathy by malevolent

creativity.

Discussion

This study examined the relationship between Dark Triad personality traits and morality while being mediated by creativity levels. A hierarchical regression model was used to measure this relationship. I found that dark personality traits accounted for 48.8% of the variance in malevolent creativity. The traits only accounted for 6.5% of the variance in semantic distance and 21.2% of the variance in self-perceived creativity. Of the nine mediation paths (three predictor variables–Machiavellianism, psychopathy, and narcissism–by three creativity mediators–malevolent creativity, semantic distance, and self-perceived creativity), only two were significant. The first mediation pathway was Machiavellianism via malevolent creativity. Malevolent creativity accounted for 15% of the variance in Machiavellianism. It also accounted for 22% of the variance found in psychopathy. In the full model, malevolent creativity is a strong mediator of Machiavellianism and psychopathy when predicting morality levels.

One limitation of this study is that openness to new experiences was not controlled for. Having this control might result in higher significance levels of narcissists. Despite this limitation, this study enhances the current understanding of how the Dark Triad personality interacts with creativity.

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Table 1. *Correlation matrix for Dark Triad traits, creativity measures, and morality.*

	M	*SD*	1.	2.	3.	4.	5.	6.
1. Morality	6.28	1.08	-					
2. Dark Mach	2.91	0.66	-.314***	-				
3. Dark Narc	2.72	0.61	.134	.029	-			
4. Dark Psycho	1.96	0.56	-.347***	.492***	.219*	-		
5. Mal. Creativity	0.76	0.53	-.498***	.562***	.105	.637***	-	
6. Perc. Creativity	3.29	0.90	.050	-.069	.452***	.030	.043	-
7. Task Creativity	0.79	0.07	-.161	.113	-.200*	-.074	-.047	-.020

* $p < .05$, ** $p < .01$, *** $p < .001$

Note. Dark Mach: Dark Triad Machiavellianism; Dark Narc: Dark Triad Narcissism; Dark Psycho: Dark Triad Psychopathy; Mal. Creativity: Malevolent Creativity; Perc. Creativity: Self-Perceived Creativity; Task Creativity: average semantic distance on the verb generation creativity task. Table 1 shows that Machiavellianism and psychopathy are significantly negatively correlated with morality and significantly positively correlated with malevolent creativity. Narcissism was also significantly positively correlated with self-perceived creativity.

Table 2. *Indirect, component, direct, and total effects of the full regression model.*

Indirect and Total Effects

Type	Effect	Estimate	SE	95% C.I. (a) Lower	95% C.I. (a) Upper	β	z	p
Indirect	DARKMAC-MEAN ⇒ MALCREATE-MEAN ⇒ MORALSACRED-MEAN	−0.24777	0.07895	−0.40252	−0.0930	−0.15064	−3.1382	0.002
	DARKMAC-MEAN ⇒ AveSemDis ⇒ MORALSACRED-MEAN	−0.05113	0.03631	−0.12229	0.0200	−0.03109	−1.4083	0.159
	DARKMAC-MEAN ⇒ CREATIVE-MEAN ⇒ MORALSACRED-MEAN	0.00265	0.00940	−0.01577	0.0211	0.00161	0.2820	0.778
	DARKPSYCHO-MEAN ⇒ MALCREATE-MEAN ⇒ MORALSACRED-MEAN	−0.42293	0.11691	−0.65206	−0.1938	−0.21876	−3.6177	< .001
	DARKPSYCHO-MEAN ⇒ AveSemDis ⇒ MORALSACRED-MEAN	0.04128	0.03872	−0.03460	0.1172	0.02135	1.0663	0.286
	DARKPSYCHO-MEAN ⇒ CREATIVE-MEAN ⇒ MORALSACRED-MEAN	0.00211	0.00827	−0.01409	0.0183	0.00109	0.2550	0.799
	DARKNARC-MEAN ⇒ MALCREATE-MEAN ⇒ MORALSACRED-MEAN	0.00751	0.05281	−0.09601	0.1110	0.00427	0.1421	0.887
	DARKNARC-MEAN ⇒ AveSemDis ⇒ MORALSACRED-MEAN	0.05457	0.03628	−0.01653	0.1257	0.03106	1.5042	0.133
	DARKNARC-MEAN ⇒ CREATIVE-MEAN ⇒ MORALSACRED-MEAN	−0.02124	0.06861	−0.15571	0.1132	−0.01209	−0.3095	0.757
Component	DARKMAC-MEAN ⇒ MALCREATE-MEAN	0.26480	0.05920	0.14877	0.3808	0.32807	4.4731	< .001
	MALCREATE-MEAN ⇒ MORALSACRED-MEAN	−0.93569	0.21247	−1.35212	−0.5193	−0.45915	−4.4039	< .001
	DARKMAC-MEAN ⇒ AveSemDis	0.02019	0.01119	−0.00174	0.0421	0.17853	1.8043	0.071
	AveSemDis ⇒ MORALSACRED-MEAN	−2.53181	1.12386	−4.73453	−0.3291	−0.17412	−2.2528	0.024
	DARKMAC-MEAN ⇒ CREATIVE-MEAN	−0.08425	0.12407	−0.32742	0.1589	−0.06168	−0.6791	0.497
	CREATIVE-MEAN ⇒ MORALSACRED-MEAN	−0.03147	0.10151	−0.23042	0.1675	−0.02613	−0.3100	0.757
	DARKPSYCHO-MEAN ⇒ MALCREATE-MEAN	0.45200	0.07125	0.31236	0.5916	0.47645	6.3442	< .001
	DARKPSYCHO-MEAN ⇒ AveSemDis	−0.01631	0.01347	−0.04271	0.0101	−0.12264	−1.2104	0.226
	DARKPSYCHO-MEAN ⇒ CREATIVE-MEAN	−0.06699	0.14932	−0.35965	0.2257	−0.04173	−0.4487	0.654
	DARKNARC-MEAN ⇒ MALCREATE-MEAN	−0.00802	0.05641	−0.11859	0.1025	−0.00930	−0.1422	0.887
	DARKNARC-MEAN ⇒ AveSemDis	−0.02155	0.01067	−0.04246	−6.47e−4	−0.17837	−2.0206	0.043
	DARKNARC-MEAN ⇒ CREATIVE-MEAN	0.67493	0.11823	0.44319	0.9067	0.46256	5.7085	< .001
Direct	DARKMAC-MEAN ⇒ MORALSACRED-MEAN	0.01192	0.15457	−0.29104	0.3149	0.00725	0.0771	0.939
	DARKPSYCHO-MEAN ⇒ MORALSACRED-MEAN	−0.17100	0.19518	−0.55355	0.2115	−0.08845	−0.8761	0.381
	DARKNARC-MEAN ⇒ MORALSACRED-MEAN	0.29144	0.15367	−0.00974	0.5926	0.16588	1.8966	0.058
Total	DARKMAC-MEAN ⇒ MORALSACRED-MEAN	−0.28695	0.15376	−0.58831	0.0144	−0.17434	−1.8663	0.062
	DARKPSYCHO-MEAN ⇒ MORALSACRED-MEAN	−0.53677	0.18439	−0.89817	−0.1754	−0.27861	−2.9110	0.004
	DARKNARC-MEAN ⇒ MORALSACRED-MEAN	0.33456	0.14653	0.04736	0.6218	0.19037	2.2832	0.022

Note. Confidence intervals computed with method: Standard (Delta method)
*Note.* Betas are completely standardized effect sizes

Note. Table 2 shows that no personality traits showed significant direct effects. Indirect paths from Machiavellianism through malevolent creativity and psychopathy through malevolent creativity were significant. Malevolent creativity was significantly negatively associated with morality.

Table 3. *R-squared values and significance for the full regression model and subsets of the full regression model.*

Model	R-squared	F	df1	df2	p
Total Effect	0.167	8.28	3	124	<.001
Malevolent Creativity	0.488	39.4	3	124	<.001
Semantic Distance	0.0649	2.85	3	123	0.04
Self Percieved Creativity	0.212	11.1	3	124	<.001
Full Model	0.301	8.61	6	120	<.001

Note. The table shows that all relationships were significant, but malevolent creativity accounted for most of the variance. Semantic Distance accounted for the least amount of variance and was not significant at the $p= .05$ level.

Figure 1. *Full Regression Model*
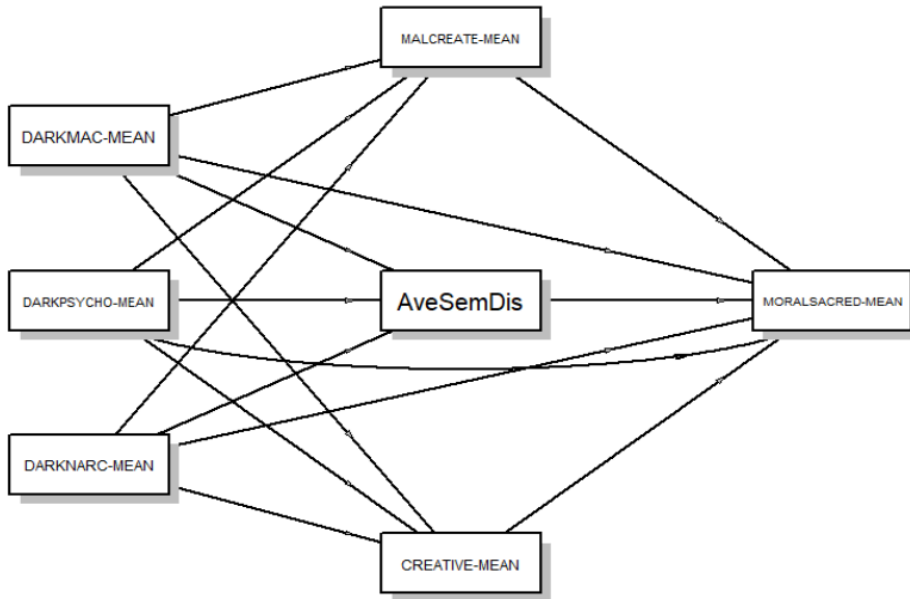
Note. This figure shows the Dark personality traits as the predictors, the creativity tests as the mediators, and morality as the outcome variable. The nine relationships between personality, creativity, and morality are shown through their direct and indirect models.