



# The Dark Side of Entrepreneurs' Creativity: Investigating How and When Entrepreneurs' Creativity Increases the Favorability of Potential Opportunities That Harm Nature

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## Abstract

Entrepreneurs' creativity is the starting point of opportunity identification, exploitation, and innovation, so it is generally lauded by journalists, citizen observers, practitioners, and scholars. However, they may overstate the benefits of creative entrepreneurs while neglecting their potential costs. Building on moral disengagement theory, we theorize that a creative mindset enables entrepreneurs to generate reasons to justify their potentially environment-destroying behaviors (i.e., nature disengagement), which in turn increases their favorability of potential opportunities that harm nature. We first developed and validated a scale for measuring nature disengagement and then conducted two randomized between-subject experiments with active entrepreneurs. The empirical results largely supported our theoretical model of the dark side of creativity in the entrepreneurship context.

## Keywords

creativity, entrepreneur, nature disengagement, opportunity evaluation, experiment

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**Figure 1.** Theoretical model.

## Moral Disengagement Theory and Nature Disengagement

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*Hypothesis 3: Nature disengagement mediates the effect of entrepreneurs' creative mindset on the favorability of potential opportunities that harm nature.*

## Overview of the Current Research

### Pilot Study

#### Phase I: Item Generation, Content Validity Assessment, and Exploratory Factor Analysis

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## **Phase 2: Confirmatory Factor Analysis and Criterion-Related Validity Assessment**

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*strongly disagree*     *strongly agree*

*never*     *always*;

1	2	3	4	5	6	7	8	9	10
$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$
$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$	$\chi^2$
df	df	df	df	df	df	df	df	df	df
p	p	p	p	p	p	p	p	p	p
r	r	r	r	r	r	r	r	r	r
p <	p <	p <	p <	p <	p <	p <	p <	p <	p <

### Study I Method

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#### Participants



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## Procedures and Experimental Design



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*Project 2: Tourism Project (Water Pollution)*

*Project 3: Indoor Polar Museum Project (Animal Cruelty)*

## **Measures**

*Opportunity Evaluation*

**Table 1.** Means, Standard Deviations, and Correlations for the Variables in Study 1.

Variable	Mean	SD	1	2	3	4
1.Entrepreneurs' creative mindset	0.50	0.50				
2.Entrepreneurs' nature disengagement	2.07	0.73	.23**			
3.Opportunity evaluation in Project 1	2.77	0.95	.22**	.42***		
4.Opportunity evaluation in Project 2	2.74	0.93	.19*	.46***	.42***	
5.Opportunity evaluation in Project 3	2.52	0.96	.04	.49***	.53***	.33***

Note. *N* = 136. \* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.

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### Analytical Strategy

### Study I Results

#### Efficacy of Manipulation Check

*N* *p*

#### Tests of the Hypotheses

*p*

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**Table 2.** the Effect of Entrepreneurs' Creative Mindset on Entrepreneurs' Nature Disengagement and Opportunity Evaluation in the Three Projects in Study 1.

Variables	Nature disengagement	Opportunity evaluation in project 1		Opportunity evaluation in project 2		Opportunity evaluation in project 3	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Entrepreneurs' creative mindset	0.33** (0.12)	0.42** (0.16)	0.25 (0.15)	0.35* (0.16)	0.17 (0.15)	0.08 (0.16)	-0.14 (0.15)
Entrepreneurs' nature disengagement			0.50** (0.10)		0.55*** (0.10)		0.66*** (0.10)
Constant	1.90*** (0.09)	2.56*** (0.11)	1.60*** (0.22)	2.56*** (0.11)	1.51*** (0.22)	2.48*** (0.12)	1.23*** (0.22)
R <sup>2</sup>	.05	.05	.19	.04	.21	.00	.24
R <sup>2</sup>			.14**		.17***		.24***
F	7.35**	7.03**	15.96***	4.99*	18.21***	0.26	21.22***

Note. N = 136. Standard errors in parentheses. R<sup>2</sup> was calculated based on the parameters in Model 2, Model 4, and Model 6, respectively. \* p < .05. \*\* p < .01. \*\*\* p < .001.

## Supplementary Analyses

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## Study 2 Method

### Participants

### Procedures and Experimental Design

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**Table 3.** Means, Standard Deviations, and Correlations for the Variables in Study 2.

Variable	Mean	SD	1	2	3	4
1.Entrepreneurs' creative mindset	0.50	0.50				
2.Entrepreneurs' nature disengagement	2.19	0.83	.26**			
3.Opportunity evaluation in the antienvironmental project	2.86	1.02	.24**	.42***		
4.Opportunity evaluation in the neutral project	3.85	0.84	.01	-.01	.27**	
5.Opportunity evaluation in the pro-environmental project	4.23	0.82	-.05	-.12	.07	.69***

Note. N = 116. \* p < .05. \*\* p < .01. \*\*\* p < .001.

### Study 2 Results

#### Efficacy of the Manipulation Check

Entrepreneurs' creative mindset (M = 0.50, SD = 0.50, N = 116, *p* < .001) was significantly lower than the control group (M = 1.50, SD = 0.50, N = 116, *p* < .001).

#### Tests of the Hypotheses

As shown in Table 3, there were significant positive correlations between entrepreneurs' creative mindset and opportunity evaluation in the antienvironmental project (*r* = .24, *p* < .01), opportunity evaluation in the neutral project (*r* = .01, *p* > .05), and opportunity evaluation in the pro-environmental project (*r* = -.05, *p* > .05). There were significant positive correlations between entrepreneurs' nature disengagement and opportunity evaluation in the antienvironmental project (*r* = .42, *p* < .001), opportunity evaluation in the neutral project (*r* = -.01, *p* > .05), and opportunity evaluation in the pro-environmental project (*r* = -.12, *p* > .05). There were significant positive correlations between opportunity evaluation in the antienvironmental project and opportunity evaluation in the neutral project (*r* = .27, *p* < .01) and opportunity evaluation in the pro-environmental project (*r* = .69, *p* < .001). There were no significant correlations between opportunity evaluation in the neutral project and opportunity evaluation in the pro-environmental project (*r* = .07, *p* > .05). The indirect effect of entrepreneurs' creative mindset on opportunity evaluation in the pro-environmental project was significant and positive (*b* = .07, *p* < .05), indicating that the indirect effect of entrepreneurs' creative mindset on opportunity evaluation in the pro-environmental project was significant and positive. The indirect effect of entrepreneurs' nature disengagement on opportunity evaluation in the pro-environmental project was not significant (*b* = -.12, *p* > .05), indicating that the indirect effect of entrepreneurs' nature disengagement on opportunity evaluation in the pro-environmental project was not significant.

#### Supplementary Analyses

**Table 4.** The Effect of Entrepreneurs' Creative Mindset on Entrepreneurs' Nature Disengagement and Opportunity Evaluation in the Three Projects in Study 2.

Variables	Nature disengagement		Opportunity evaluation in the anti-environmental Project			Opportunity evaluation in the neutral project			Opportunity evaluation in the environmental project		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7				
Entrepreneurs' creative mindset	0.43 <sup>***</sup> (0.15)	0.49 <sup>**</sup> (0.18)	0.29 (0.18)	0.02 (0.16)	0.02 (0.16)	-0.08 (0.15)	-0.03 (0.16)				
Entrepreneurs' nature disengagement			0.47 <sup>***</sup> (0.11)		-0.01 (0.10)		-0.11 (0.10)				
Constant	1.98 <sup>***</sup> (0.11)	2.62 <sup>***</sup> (0.13)	1.68 <sup>***</sup> (0.24)	3.84 <sup>***</sup> (0.11)	3.87 <sup>***</sup> (0.22)	4.26 <sup>***</sup> (0.11)	4.48 <sup>***</sup> (0.22)				
R <sup>2</sup>	0.07	0.06	0.20	0.000	0.000	0.002	0.01				
R <sup>2</sup>			0.14 <sup>***</sup>		0.000		0.01				
F	8.06 <sup>***</sup>	6.98 <sup>**</sup>	13.85 <sup>***</sup>	0.01	0.01	0.27	0.81				

Note. N = 116. Standard errors in parentheses. R<sup>2</sup> was calculated based on the parameters in Model 2, Model 4, and Model 6, respectively. \*p < .05. \*\*p < .01. \*\*\*p < .001.



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### Discussion

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### Implications for Theory

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## Strengths, Limitations, and Future Directions

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