Power motivations and risk sensitivity and tolerance.

Ithurburn, Andrew[1], Pedersen M.E., Julie[1], & Moore, and Adam[1]

[1] The University of Edinburgh

Abstract

In the present research, we sought to examine through two experiments the interaction between power motives (dominance, prestige, and leadership) and risk taking behaviors. In study 1 we discovered that individuals high in dominance power motive were more likley to enage in financiall, ethical and health and safety based risk sitations.

Keywords: keywords

Table 1

*Fixed Effects: DoPL * General Risk*

Parameter	Estimate	Est.Error	CI (95%)
Intercept	0.26	0.12	0.02 - 0.5
Dominance	0.26	0.10	0.07 - 0.46
Gender	-0.55	0.16	-0.87 - -0.23

Note. The above represents fixed effects, confidence interevals low and high for a basic bayesian model of Dominance, Prestige, and Leadership predicting general risk preference. Matching signs for confidence intervals is displayed in the table.

Table 2

DOSPERT and DoPL Interaction: Experiment 1

Parameter	Estimate	Est.Error	CI (95%)
DOSPERT Recreation Preference * Intercept	0.33	0.12	0.11 - 0.56
DOSPERT Ethical Preference * Dominance	0.42	0.08	0.26 - 0.58
DOSPERT Financial Preference * Dominance	0.22	0.08	0.06 - 0.38
DOSPERT Social Preference * Dominance	0.24	0.08	0.07 - 0.4
DOSPERT Social Preference * Gender	-0.39	0.18	-0.75 - -0.03
DOSPERT Health And Safety Preference * Dominance	0.37	0.08	0.21 - 0.53
DOSPERT Recreation Preference * Dominance	0.47	0.08	0.32 - 0.62
DOSPERT Recreation Preference * Gender	-0.70	0.17	-1.03 - -0.38
DOSPERT Recreation Preference * Age	0.22	0.09	0.06 - 0.39

Note. Fixed effect results of Dominance, Prestige, and Leadership with gender interactions predicting each of the individual Domain Specific Risk Taking (DOSPERT) domains.

Table 3

DOSPERT Benefit and Perception: Experiment 1

Parameter	Estimate	Est.Error	CI (95%)
DOSPERT Risk Likelihood * Intercept	0.25	0.11	0.03 - 0.47
DOSPERT Risk Perception * Intercept	-0.25	0.13	-0.5 - -0.01
DOSPERT Risk Benefit * Intercept	0.26	0.12	0.01 - 0.5
DOSPERT Risk Likelihood * Dominance	0.41	0.09	0.23 - 0.59
DOSPERT Risk Likelihood * Gender	-0.50	0.15	-0.8 - -0.21
DOSPERT Risk Perception * Dominance	-0.28	0.10	-0.49 - -0.08
DOSPERT Risk Perception * Gender	0.45	0.17	0.12 - 0.77
DOSPERT Risk Benefit * Dominance	0.26	0.10	0.08 - 0.46
DOSPERT Risk Benefit * Gender	-0.57	0.16	-0.88 - -0.27

Note. Fixed effect results of Dominance, Prestige, and Leadership with gender interactions predicting the perceptions and benefits of risk.

Table 4

DOSPERT Benefit and Perception: Experiment 1

Parameter	Estimate	Est.Error	CI (95%)
DOSPERT Risk Likelihood * Dominance	0.65	0.13	0.39 - 0.91
DOSPERT Risk Likelihood * Gender	-0.48	0.15	-0.77 - -0.19
DOSPERT Risk Likelihood * Dominance : Gender	-0.49	0.18	-0.84 - -0.14
DOSPERT Risk Perception * Dominance	-0.30	0.15	-0.6 - -0.02
DOSPERT Risk Perception * Gender	0.44	0.16	0.12 - 0.77
DOSPERT Risk Benefit * Dominance	0.40	0.14	0.13 - 0.68
DOSPERT Risk Benefit * Gender	-0.56	0.16	-0.88 - -0.25

Note. Fixed effect results of Dominance, Prestige, and Leadership with gender interactions predicting the perceptions and benefits of risk.

Table 5

*General Risk * DoPL: Experiment 2*

Parameter	Estimate	Est.Error	CI (95%)
Intercept	0.75	0.19	0.38 - 1.11
Dominance	0.33	0.08	0.17 - 0.49
Age	-0.02	0.01	-0.04 - -0.01

Note. Fixed effect results of Dominance, Prestige, and Leadership with gender interactions predicting general risk preference.

Table 6

DOSPERT Risk Likelihood and Benefit Mediation: Experiment 2

Parameter	Estimate	Est.Error	CI (95%)
DOSPERT Risk Likelihood * DOSPERT Risk Benefit	0.54	0.05	0.44 - 0.63
DOSPERT Risk Likelihood * PNI	0.16	0.04	0.07 - 0.24
DOSPERT Risk Benefit * PNI	0.21	0.05	0.11 - 0.31

Note. Fixed effect results of Narcisism as a mediation in a model predicting risk likelihood through risk benefit.

Table 7

DOSPERT Risk Likelihood and Benefit Mediation: Experiment 2

Parameter	Estimate	Est.Error	CI (95%)
DOSPERT Risk Likelihood * DOSPERT Risk Benefit	0.50	0.05	0.4 - 0.6
DOSPERT Risk Likelihood * PNI	0.11	0.05	0.02 - 0.2
DOSPERT Risk Likelihood * Dominance	0.16	0.05	0.05 - 0.26
DOSPERT Risk Benefit * PNI	0.12	0.05	0.02 - 0.23
DOSPERT Risk Benefit * Dominance	0.24	0.06	0.12 - 0.36

Note. Fixed effect results of Narcisism and Dominance as a mediation in a model predicting risk likelihood through risk benefit.

Table 8

DOSPERT Risk Likelihood and Benefit Mediation: Experiment 2

Parameter	Estimate	Est.Error	CI (95%)
DOSPERT Risk Likelihood * DOSPERT Risk Benefit	0.50	0.05	0.41 - 0.6
DOSPERT Risk Likelihood * Dominance	0.16	0.05	0.06 - 0.27
DOSPERT Risk Likelihood * PNI	0.10	0.05	0.02 - 0.19
DOSPERT Risk Benefit * PNI	0.12	0.05	0.02 - 0.23
DOSPERT Risk Benefit * Dominance	0.24	0.05	0.13 - 0.35
Dominance * PNI	0.48	0.05	0.37 - 0.58

Note. Fixed effect results of Narcisism and Dominance as a mediation in a model predicting risk likelihood through risk benefit.

Table 9

General Correlation Matrix | Experiment 1

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
16. DoPL	0.26**	0.20*	0.21*	0.27**	0.19*	0.27**	0.27**	2.51E-03	0.41***	0.38***	0.24**	0.38***	0.73***	0.73***	0.73***	1
15. Dominance	0.26**	0.31***	0.23**	0.20*	0.14	0.29***	0.25**	-0.12	0.42***	0.18	5.10E-03	0.13	0.27**	0.37***	1	
14. Prestige	0.22**	0.07	0.16	0.26**	0.20*	0.18*	0.22**	0.13	0.31***	0.38***	0.43***	0.45***	0.36***	1		
13. Leadership	0.13	0.05	0.08	0.17	0.09	0.14	0.12	0.02	0.19*	0.31**	0.16	0.29**	1			
12. UMS	0.15	-3.31E-03	0.14	0.17	0.22**	0.05	0.16	0.23**	0.23**	0.95***	0.76***	1				
11. UMS Intimacy	0.06	-0.07	0.06	0.1	0.11	-0.04	0.07	0.26**	0.06	0.53***	1					
10. UMS Affiliation	0.17	0.03	0.15	0.18*	0.24**	0.09	0.18*	0.19*	0.28**	1						
9. DOSPERT Risk Likelihood	0.59***	0.49***	0.55***	0.55***	0.46***	0.55***	0.58***	-0.17	1							
8. DOSPERT Risk Perception	-0.09	-0.34***	-0.19*	-0.01	8.61E-04	-0.16	-0.05	1								
7. DOSPERT Risk Benefit	1.00***	0.82***	0.86***	0.84***	0.88***	0.87***	1									
6. DOSPERT Ethical Preference	0.88***	0.75***	0.77***	0.65***	0.69***	1										
5. DOSPERT Financial Preference	0.87***	0.67***	0.68***	0.67***	1											
4. DOSPERT Social Preference	0.84***	0.59***	0.69***	1												
3. DOSPERT Health/Safety Preference	0.87***	0.69***	1													
2. DOSPERT Recreation Preference	0.83***	1														
1. DOSPERT General Preference	1															

Note. * denotes significance level. 1 = DOSPERT General Preference, 2 = DOSPERT Recreation Preference, 3 = DOSPERT Health/Safety Preference, 4 = DOSPERT Social Preference, 5 = DOSPERT Financial Preference, 6 = DOSPERT Ethical Preference, 7 = DOSPERT Risk Benefit, 8 = DOSPERT Risk Perception, 9 = DOSPERT Risk Likelihood, 10 = UMS Affiliation, 11 = UMS Intimacy, 12 = UMS, 13 = Leadership, 14 = Prestige, 15 = Dominance, 16 = DoPL

Table 10

General Correlation Matrix | Experiment 2

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
17. Ethical Preference	0.68***	0.67***	0.42***	0.68***	-0.30***	0.18**	-0.05	-0.02	-0.14*	-0.1	0.02	0.33***	0.08	0.28***	0.56***	0.38***	1
16. Financial Preference	0.60***	0.68***	0.37***	0.68***	-0.09	0.05	0.02	0.06	-0.08	0.1	0.06	0.14*	0.23***	0.27***	0.25***	1	
15. Health/Safety Preference	0.71***	0.74***	0.44***	0.74***	-0.24***	0.15**	-0.02	0.02	-0.12*	0.01	-0.07	0.27***	0.28***	0.50***	1		
14. Recreation Preference	0.68***	0.70***	0.43***	0.70***	-0.23***	0.13*	0.05	0.09	-0.07	0.12*	-0.01	0.21***	0.38***	1			
13. Social Preference	0.43***	0.56***	0.22***	0.56***	0.08	0.27***	0.28***	0.27***	0.24***	0.32***	0.22***	0.09	1				
12. Dominance	0.33***	0.30***	0.35***	0.30***	-0.19***	0.47***	0.11*	0.13*	0.01	0.29***	0.30***	1					
11. Prestige	0.03	0.06	0.17**	0.06	0.05	0.45***	0.66***	0.62***	0.55***	0.46***	1						
10. Leadership	0.08	0.13*	0.14*	0.13*	0.07	0.29***	0.42***	0.40***	0.35***	1							
9. UMS Affiliation	-0.12*	-0.06	-0.09	-0.06	0.19***	0.34***	0.74***	0.56***	1								
8. UMS Intimacy	0.09	0.12*	0.21***	0.12*	0.03	0.27***	0.97***	1									
7. UMS Sum	0.04	0.08	0.14**	0.08	0.07	0.31***	1										
6. B-PNI	0.17**	0.22***	0.26***	0.22***	0.04	1											
5. Risk Perception	-0.58	-0.23***	-0.39***	-0.23***	1												
4. Risk Benefit	0.92***	1.00***	0.56***	1													
3. Risk Sum	0.62***	0.56***	1														
2. General Expected Benefits	0.92***	1															
1. General Risk Preference	1																

Note. * denotes significance level.

Table 11

General Correlation Matrix | Experiment 2

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13
13. Dominance	0.18**	0.15*	0.49***	0.30***	0.52***	0.30***	0.34***	0.44***	0.36***	0.46***	0.29***	0.30***	1
12. Leadership	0.30***	0.26***	0.51***	0.07	0.22***	0.04	0.05	0.12	0.48***	0.29***	0.46***	1	
11. Prestige	0.46***	0.38***	0.34***	0.16*	0.40***	0.19**	0.32***	0.32***	0.53***	0.45***	1		
10. B-PNI	0.65***	0.63***	0.48***	0.76***	0.79***	0.73***	0.74***	0.92***	0.80***	1			
9. Grandiosity	0.75***	0.79***	0.66***	0.42***	0.50***	0.34***	0.43***	0.51***	1				
8. Vulnerability	0.45***	0.41***	0.28***	0.82***	0.82***	0.84***	0.79***	1					
7. Contingent Self-Esteem	0.42***	0.33***	0.19**	0.56***	0.57***	0.55***	1						
6. Devaluing	0.35***	0.28***	0.14	0.58***	0.63***	1							
5. Entitlement Rage	0.42***	0.35***	0.35***	0.50***	1								
4. Hiding the Self	0.33***	0.37***	0.23***	1									
3. Exploitativeness	0.26***	0.24***	1										
2. Grandiose Fantasy	0.45***	1											
1. Self-Sacrificing and Self-Enhancement	1												

Note. * denotes signficance level