



What Contributes to Death Anxiety?

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Introduction

- Death anxiety refers to the negative emotions associated with contemplating death (Lonetto & Templer, 1986).
- Death anxiety is considered a transdiagnostic construct central to the development and maintenance of many psychological disorders (Iverach et al., 2014). Being that death anxiety is a universal experience with clear clinical implications, further research aimed at identifying factors influencing individual death anxiety levels is critical.
- Much of this research has examined personality differences as a potential explanation for the variance in death anxiety severity. Specifically, neuroticism, a personality trait associated with negative emotionality and decreased stress resistance (Widiger & Oltmanns, 2017), has received considerable attention. In fact, many studies suggest that neuroticism is one of the best predictors of death anxiety (Frazier et al., 1989). However, the psychological mechanisms through which neuroticism influences death anxiety remain largely unexplored.
- Rumination is a way of responding to distress and is characterized by a repetitive and passive focus on the causes and consequences of the source of that distress (Nolen-Hoeksema et al., 2008). A distinction between two facets of rumination is relevant to this study: deliberate and intrusive rumination. Deliberate rumination differs from intrusive rumination in that it is characterized by more meaningful and constructive thoughts (Zia et al., 2018).
- The relationship between rumination and death anxiety has been documented with findings suggesting that deliberate rumination is negatively associated with death anxiety, while intrusive rumination is positively associated.
- To date, very little research has examined potential mediators in the relationship between death anxiety and neuroticism. However, prior research demonstrates how cognitive vulnerability processes can impact the relationship between neuroticism and negative psychological outcomes. For example, Roelofs et al. (2008) found that the relationship between neuroticism and generalized anxiety is mediated by the tendency to ruminate in both clinical and non-clinical populations.

Hypotheses

- 1) Intrusive rumination, but not deliberate rumination, will be positively associated with death anxiety and neuroticism
- 2) Intrusive rumination will mediate the relationship between neuroticism and death anxiety

Methods

Participants

- The sample for the study included 78 IUPUC students over the age of 18. A total of 63 participants were female, 15 were male.

Measures

- *Demographic Information*. Age, Gender, Race/Ethnicity, Religious Affiliation
- *Templer Death Anxiety Scale (DAS: Templer, 1970)*. 15-item, $\alpha = 0.62$
- *Event-Related Rumination Inventory (ERRI; Cann et al., 2011)*. 20-item, $\alpha = 0.94$
- *Big Five Aspects Scale (BFAS; DeYoung et al., 2007)*. 20-item, $\alpha = 0.85$
- *The Big Five Inventory–2 Short Form (BFI-2-S; Soto & John, 2017)*. 30-item, $\alpha = 0.87$

Results

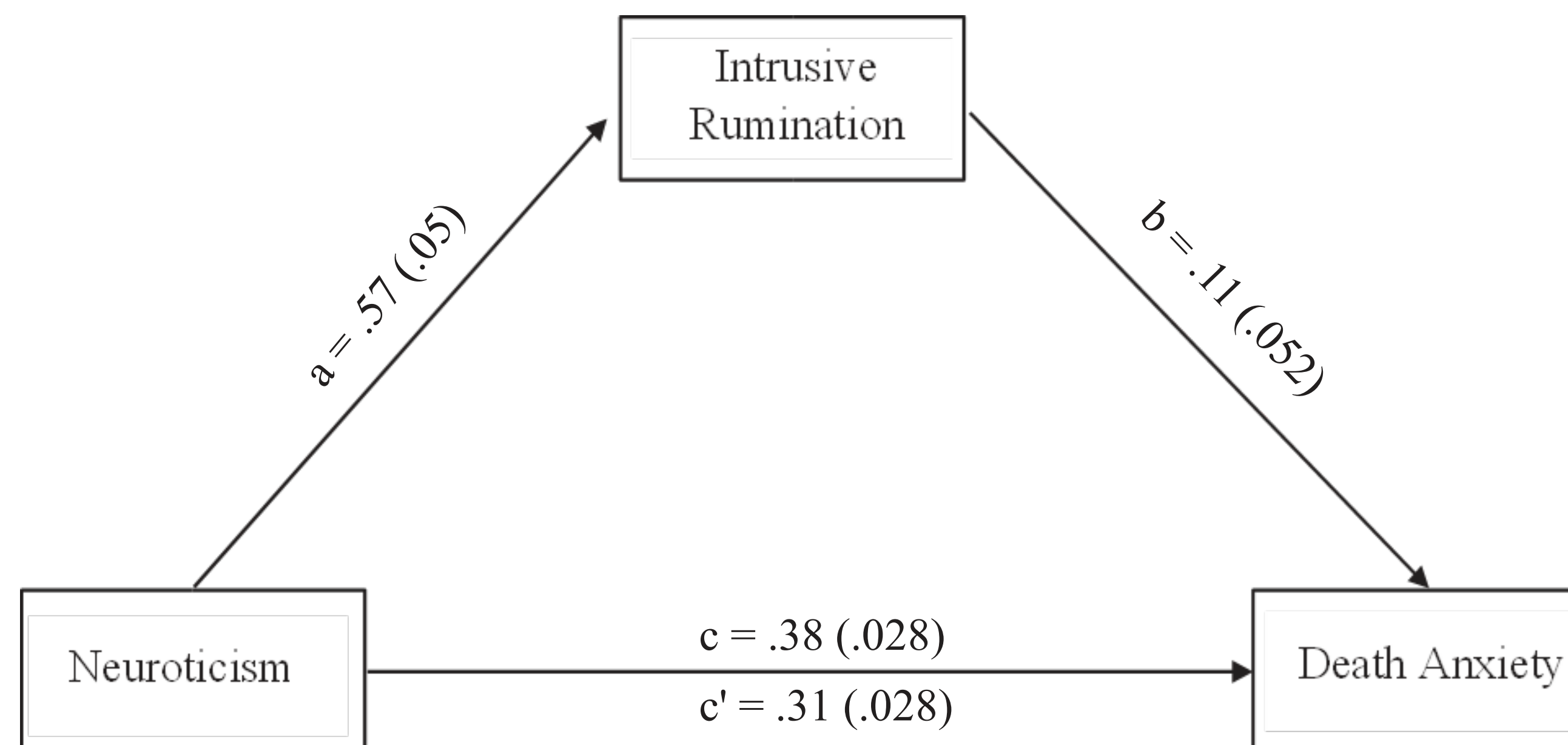
Table 1. Descriptive statistics and bivariate correlations.

	Mean	SD	1	2	3
1. Neuroticism	64.73	13.03			
2. Death Anxiety	22.30	2.76	.376*		
3. Intrusive Rumination	19.67	7.01	.567*	.295*	
4. Deliberate Rumination	20.09	7.38	.233*	.092	.490*

Note. * $p < .05$

Table 1. shows the descriptive and bivariate analysis results. The results showed significant, positive relationships between death anxiety, neuroticism, and intrusive rumination.

Table 2. Mediation effect of intrusive rumination in the relationship between neuroticism and death anxiety.



Note: Values given are standardized coefficients. Values in parenthesis are standard error coefficients.

Table 2. shows the mediation results.

- To test the hypothesis 2) a bivariate regression was performed to determine the total effect (c) between neuroticism and death anxiety. Results showed a statistically significant total effect ($\beta = .376$, $SE = .023$, $p < .001$).
- A bivariate regression was performed to estimate the direct effect (a) of neuroticism on intrusive rumination. Results showed a statistically significant direct effect ($\beta = .567$, $SE = .052$, $p < .001$).
- A multiple regression was performed to test the direct effect (c') of neuroticism on death anxiety. Results showed a statistically significant direct effect ($\beta = .312$, $SE = .028$, $p = .021$).
- A multiple regression was performed to test the direct effect (b) of intrusive rumination on death anxiety. Results did not show a statistically significant direct effect ($\beta = .112$, $SE = .052$, $p = .397$). Since the direct effect of intrusive rumination on death anxiety was not statistically significant, mediation is not inferred.
- However, the Sobel test and the bootstrapping method (with $n = 1000$) were used to test the statistical significance of the indirect effect. Results from the Sobel test ($B = .0136$, $SE = .0164$, $z = .8321$, $p = .4053$) and the bootstrapped approach (95% CI [-0.0121, 0.0459]) indicated that the indirect effect between neuroticism and death anxiety via intrusive rumination was not statistically significant.

Discussion

- Consistent with hypothesis 1, death anxiety and deliberate rumination were not associated. However, unexpectedly, deliberate rumination and death anxiety were positively associated. These results suggest that highly neurotic individuals may still engage in deliberate ruminative thinking.
- Inconsistent with hypothesis 2, intrusive rumination did not mediate the relationship between neuroticism and death anxiety. Results indicated that any association between intrusive rumination and death anxiety is due to its association with neuroticism. Therefore, intrusive rumination cannot explain the relationship between neuroticism and death anxiety. However, neuroticism can explain the relationship between intrusive rumination and death anxiety.
- These findings conflict with prior research which has found that rumination mediates the relationship between neuroticism and generalized anxiety. It is possible that the experience of death anxiety was not captured by the DAS scale.
- Future research should explore alternate explanations for the relationship between death anxiety and neuroticism.