



## Introduction

- Research has shown that neuroticism and introversion are related to anxiety disorders (Chatterjee & Kacker, 2020; Norton & Mehta, 2007; Watson et al., 2022)
- Research has shown that neuroticism is associated with the anxiety-related mechanisms of anxiety sensitivity (AS; Cox et al., 1999), intolerance of uncertainty (IU; Yang et al., 2015), and metacognitions about worry (Wells, 1999, 2002)
- The aim of this study was to examine the unique associations between AS, IU, and metacognitions about worry with neuroticism and introversion

## Methods

### Samples:

1. 624 community-based adults;  
Mage = 43.2; 51.1% Female; 52.9% White
2. 1020 university students;  
Mage = 20.8; 75.7% Female; 51.2% White

**Data Collection:** Self-report surveys were completed online via Qualtrics

### Measures:

1. Big Five Inventory-2
  - Neuroticism (BFI-N)
  - Introversion (BFI-I)
2. Anxiety Sensitivity Index-3
  - ASI-Physical concerns (ASI-P)
  - ASI-Social concerns (ASI-S)
  - ASI-Cognitive concerns (ASI-C)
3. Intolerance of Uncertainty Scale-18
  - IUS-Prospective (IUS18-P)
  - IUS-Inhibitory (IUS18-I)
4. Metacognitions Questionnaire-30
  - Positive beliefs about worry (PBW)
  - Negative beliefs about worry (NBW)

## Neuroticism Seeks Certainty; Introversion Fears Judgment

Sample 1; DV = Neuroticism

	R <sup>2</sup>	R <sup>2</sup> Change	t	pr
Step 1	.09	.09***		
Age			-5.84***	-.23
Sex			-3.93***	-.16
Edu			-1.85	-.07
Step 2	.67	.58***		
Age			-1.93	-.08
Sex			-1.17	-.05
Edu			-2.56*	-.10
BFI-I			5.95***	.23
ASI-P			-1.27	-.05
ASI-S			1.12	.05
ASI-C			1.65	.07
IUS18-P			4.24***	.17
IUS18-I			6.35***	.25
PBW			-0.87	-.04
NBW			7.16***	.28

Sample 2; DV = Neuroticism

	R <sup>2</sup>	R <sup>2</sup> Change	t	pr
Step 1	.09	.09***		
Age			-4.02***	-.13
Sex			-9.03***	-.28
Employ			-0.14	-.00
Step 2	.56	.47***		
Age			-1.85	-.06
Sex			-5.44***	-.17
Employ			1.66	.05
BFI-I			7.23***	.22
ASI-P			0.42	.01
ASI-S			0.53	.02
ASI-C			2.49*	.08
IUS18-P			3.16**	.10
IUS18-I			4.19***	.13
PBW			-1.81	-.06
NBW			12.42***	.37

Sample 1; DV = Introversion

	R <sup>2</sup>	R <sup>2</sup> Change	t	pr
Step 1	.01	.01		
Age			2.07*	.08
Sex			-0.92	-.04
Edu			-1.61	-.06
Step 2	.13	.12***		
Age			2.89**	.12
Sex			-0.45	-.02
Edu			-0.40	-.02
BFI-N			5.95***	.23
ASI-P			-1.30	-.05
ASI-S			3.36***	.14
ASI-C			-2.45*	-.10
IUS18-P			-5.05***	-.20
IUS18-I			2.98**	.12
PBW			-1.19	-.05
NBW			-2.47*	-.10

Sample 2; DV = Introversion

	R <sup>2</sup>	R <sup>2</sup> Change	t	pr
Step 1	.00	.00		
Age			-1.30	-.04
Sex			-0.76	-.02
Employ			-1.40	-.04
Step 2	.24	.24***		
Age			0.56	.02
Sex			2.02*	.06
Employ			-1.03	-.03
BFI-N			7.23***	.22
ASI-P			-1.90	-.06
ASI-S			3.04**	.10
ASI-C			-1.11	-.04
IUS18-P			-3.07**	-.10
IUS18-I			10.08***	.31
PBW			-0.84	-.03
NBW			-3.90***	-.12

\* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$

## Results

- When including anxiety-related beliefs, the demographic variables were not consistently associated with neuroticism or introversion
- In both samples, when controlling for demographics and introversion, prospective IU, inhibitory IU, and negative beliefs about worry were associated with neuroticism
- In both samples, when controlling for demographics and neuroticism, AS social concerns and inhibitory IU were associated with introversion
- Further, contrary to expectations, prospective IU and negative beliefs about worry were negatively associated with introversion in both samples

## Discussion

- Our findings indicate that a core aspect of being high in neuroticism is having a high need for certainty and being worried about much you worry
- Additionally, individuals with high introversion report significant behavioural inhibitions and heightened sensitivity to others' judgments
- Further, the results from our study raise the possibility that extraverted people have concerns about future uncertainties and how much they worry
- The results from our study suggest that clinicians may wish to screen for these beliefs amongst individuals high in neuroticism and introversion