

# Positive and Negative Valence as Personality Disorder Descriptors: Going Above and Beyond the Big Five

Esther Song, Aidan G.C. Wright, Leonard J. Simms

University at Buffalo, The State University of New York

## Introduction

- The Big-Seven model of personality suggests a possible advancement over the Big-Five model, with the addition of two evaluative dimensions - positive valence and negative valence (Tellegen & Waller, 1987).
- Positive valence (PV) and Negative valence (NV)(Waller & Zavala, 1993):
  - PV: extremely positive self-evaluation; e.g. excellent, superior, and impressive (vs. ordinary).
  - NV: extremely negative self-evaluation; e.g. evil, awful, and cruel (vs. decent).
- Multiple studies have been conducted regarding what dimensions of personality pathology PV and NV could help evaluate, but have produced mixed findings and were limited to community and university samples (McCrae & Costa, 1995; Durrett & Trull, 2005; Simms, 2007; Simms, Yufik, & Gros, 2010).
- The Current study further investigated and clarified the evaluative component of PV and NV in personality pathology with patient samples.

## Hypotheses

- PV will be a significant predictor of narcissistic and histrionic personality disorders (PDs), along with personality traits that are associated with these dimensions.
- NV will be nonspecifically related to most PDs, possibly showing a closer relationship to borderline and antisocial PDs.

## Acknowledgments

- Graduate Students: Bill Calabrese, Monica Rudick, Wern How Yam, Kerry Zelazny, Julie Gass
- Project Coordinator: Jane Rotterman
- Funding: NIMH R01 MH080086
- Poster presented at the Celebration of Academic Excellence of University at Buffalo on April 12<sup>th</sup>, 2013.
- Direct email inquiries to the author at [yinsungs@buffalo.edu](mailto:yinsungs@buffalo.edu)

## Method

- Data were drawn from an ongoing study that is developing a computerized adaptive testing (CAT) measure of PD: The CAT-PD project (Simms et al., 2011).
- Participants from a sub-set of 628 recent psychiatric patients (see Table 1).
- Measures:
  - Independent Variables:**
    - NEO Personality Inventory-3 (NEO-PI-3)
    - Evaluative Person Descriptors Questionnaire (EDPQ)
  - Dependent Variables:**
    - Structured Clinical Interview for DSM-IV Axis II disorders (SCID-II)
    - Personality Inventory for DSM-V (PID-5)
    - Pathological Narcissism Inventory (PNI)
- Analyses:
  - Hierarchical linear regressions using NEO-PI-3, PV, and NV scales as predictors of personality pathologies.
    - First step: NEO-PI-3
    - Second step: PV (or NV)

**Table 1**  
Participant Characteristics

N	628
Type	Psychiatric: Mental health tx w/in last 2 yrs.
Sex	64% Female
Race	63% White; 34% Black
Ethnicity	5% Hispanic
Age	M = 42 (±17.6); Range = 18-77

**Table 2**  
PV and NV on SCID-II Scale

SCID scales:	Step 2: PV		Step 2: NV	
	ΔR <sup>2</sup>	F(1,304)	ΔR <sup>2</sup>	F(1,304)
Avoidant	0.01	3.49	0.00	0.47
Dependent	0.00	0.63	0.01	1.64
Obsessive-Compulsive	0.03	9.64	0.00	1.00
Narcissistic	0.02	6.43	0.01	3.78
Borderline	0.00	0.11	0.02	10.36
Histrionic	0.01	4.51	0.00	0.84
Antisocial-Conduct	0.01	2.63	0.06	20.79
Antisocial-Adult	0.02	2.84	0.10	12.76
Paranoid	0.00	1.87	0.00	1.10
Schizotypal	0.02	5.56	0.02	5.45
Schizoid	0.00	0.42	0.00	0.82

Note: ■ = ΔR<sup>2</sup><0.5; ■ = ΔR<sup>2</sup>≥0.5

**Table 3**  
PV and NV on PID-5 Scale

PID Scales:	Step 2: PV		Step 2: NV	
	ΔR <sup>2</sup>	F(1,311)	ΔR <sup>2</sup>	F(1,311)
<b>Negative Affect:</b>				
Anxiousness	0.00	2.29	0.00	0.02
Emotional Lability	0.01	4.77	0.00	1.68
Hostility	0.00	1.41	0.01	11.64
Perseveration	0.00	1.07	0.01	6.43
Restricted Affectivity	0.02	6.55	0.04	18.94
Separation Insecurity	0.00	1.35	0.00	0.14
Submissiveness	0.00	1.35	0.01	3.04
<b>Detachment:</b>				
Anhedonia	0.00	1.36	0.00	0.90
Depressivity	0.06	51.35	0.02	18.70
Intimacy Avoidance	0.00	0.55	0.01	4.07
Suspiciousness	0.00	1.73	0.01	4.12
Withdrawal	0.00	2.58	0.01	4.56
<b>Antagonism:</b>				
Attention Seeking	0.01	5.72	0.00	0.00
Callousness	0.00	0.39	0.09	62.68
Deceitfulness	0.00	0.08	0.06	38.06
Grandiosity	0.06	27.96	0.00	0.07
Manipulativeness	0.00	0.88	0.03	18.32
<b>Disinhibition:</b>				
distractibility	0.01	4.49	0.00	0.56
Impulsivity	0.01	4.80	0.01	5.57
Irresponsibility	0.01	6.44	0.02	15.06
Rigid Perfectionism	0.00	0.00	0.02	8.80
Risk Taking	0.00	0.00	0.02	10.92
<b>Psychoticism:</b>				
Eccentricity	0.00	0.08	0.02	8.16
Perceptual Dysregulation	0.00	1.08	0.04	16.94
Unusual Belief/Experience	0.00	1.20	0.05	16.97

Note: ■ = ΔR<sup>2</sup><0.5; ■ = ΔR<sup>2</sup>≥0.5

**Table 4**  
PV and NV on PNI Scale

PNI scales:	Step 2: PV		Step 2: NV	
	ΔR <sup>2</sup>	F(1,286)	ΔR <sup>2</sup>	F(1,286)
<b>Narcissistic Grandiosity</b>				
Exploitativeness	0.01	4.35	0.02	10.20
Self-sacrificing Self-enhancement	0.01	3.76	0.00	0.79
Grandiose Fantasy	0.01	4.32	0.00	1.18
<b>Narcissistic Vulnerability</b>				
Entitlement Rage	0.01	2.78	0.01	3.34
Contingent Self-esteem	0.00	0.46	0.01	2.44
Hiding the Self	0.00	0.56	0.01	2.72
Devaluing	0.00	1.04	0.01	4.63
Total	0.01	2.40	0.01	6.29

Note: ■ = ΔR<sup>2</sup><0.5; ■ = ΔR<sup>2</sup>≥0.5

## Results

- SCID-II:
  - PV incrementally predicted obsessive compulsive, narcissistic, histrionic and schizotypal personality disorders, the highest being the obsessive compulsive disorder.
  - NV markedly incrementally predicted antisocial conduct disorder and adult antisocial behavior, and also significantly increased the prediction for narcissistic and borderline PDs.
- PID-5:
  - PV overall showed a weak correlation with the negative affect and disinhibition domains. It yielded a relatively high incremental increase in the depressivity and grandiosity facets.
  - NV was generally related to most of the facets, with more significant prediction of the antagonism and the psychoticism domain.
- PNI:
  - PV significantly increased all of the facets in the narcissistic grandiosity domain, while being non-significant for the narcissistic vulnerability domain.
  - Unlike PV, NV did have an effect in further accounting for the narcissistic vulnerability domain.

## Discussion

- PV and NV generally effectively predicted PDs above and beyond the Big Five.
- The Big-Five appears to be lacking extremely negative components throughout the scale; NV additionally accounted for majority of the facets in the PID-5, suggesting that the Big Five may be insufficiently explaining some extreme symptoms.
- Normal traits may be insufficient for capturing important facets in psychopathology.
- Future work may look at incorporating PV and NV components to PD inventories to more effectively predict PDs.