



## Developing and Testing a Scale to Measure Need for Drama



Scott Frankowski\*, Amber K. Lupo, Brandt A. Smith, Mosi Dane'El, Corin Ramos, Osvaldo F. Morera

University of Texas at El Paso

### ARTICLE INFO

#### Article history:

Received 15 June 2015

Received in revised form 26 September 2015

Accepted 3 October 2015

Available online 22 October 2015

#### Keywords:

Scale development

Dramatic personality

Compound personality traits

Maladaptive personality

Counterproductive workplace behaviors

### ABSTRACT

We developed and tested a novel scale to measure Need for Drama (NFD), a compound maladaptive personality trait in which people impulsively manipulate others from a position of perceived victimhood. We confirmed a three factor model of NFD consisting of interpersonal manipulation, impulsive outspokenness, and persistent perceived victimhood factors using Mechanical Turk and college student samples. The pattern of correlations between the NFD factors, dark-triad, attitudes toward gossip, and locus of control, suggest that NFD individuals can be characterized as manipulative, gossipy, and reactive. Correlations to Big-5 personality traits indicate NFD individuals are neurotic, lack conscientiousness, and are slightly more disagreeable. Tests of measurement invariance established that the factor structure and factor loadings of NFD are equivalent between men and women. Organizational, social, and personality researchers may find the NFD measure useful as a predictor of counterproductive workplace behaviors and other maladaptive interpersonal interactions. Future directions and limitations are discussed.

© 2015 Elsevier Ltd. All rights reserved.

### 1. Introduction

People with drama-prone personalities generally live chaotic lives and inflict contrived crises on family, friends, and co-workers. In our interpersonal relationships, we would likely identify “dramatic” individuals with their histories of failed relationships and their conflicts with friends and family. Often this interpersonal drama becomes public on social networking sites (Fox, Warber, & Makstaller, 2013; Marshall, Lefringhausen, & Ferenczi, 2015). In the workplace, dramatic individuals are likely to engage in gossip to influence others, create conflicts among co-workers and management, and feel that they are the victims of others' gossip and conflicts (e.g. Ellwardt, Labianca, & Wittek, 2012; Kurland & Pelled, 2000). Ultimately, workplace productivity and group cohesiveness can be adversely impacted by dramatic behaviors (Hogh & Dofradottir, 2001; Takaki et al., 2010).

The Need for Drama (NFD) personality can be defined as a compound personality trait in which individuals impulsively manipulate others from a position of perceived victimization (see Ones, Dilchert, Viswesvaran, & Judge, 2007 for overview on compound traits). Compound personality traits are effective for identifying work-related performance and counterproductive work behaviors (e.g. harassment, gossiping, sabotage, theft), often with greater predictability than using only a five-factor model of personality traits (Scherer, Baysinger, Zolynsky, & LeBreton, 2013). A NFD measure may be useful for organizational researchers in broadening our understanding of compound

personalities within work settings and as a predictor of counterproductive work behaviors. Additionally, the NFD measure may be of interest to researchers investigating maladaptive personality traits in the context of social-networking websites (e.g. online bullying, excessive self-disclosure; cf. Bachrach, Kosinski, Graepel, Kohli, & Stillwell, 2012; Suler, 2004), and intimate relationships (cf. Westen & Arkowitz-Westen, 1998).

Clinicians have studied individuals who engage in clinically relevant dramatic behaviors and labeled them with borderline or histrionic personality disorders (BPD and HPD, respectively; American Psychiatric Association, 2013). Borderline personality disorder is defined by impulsivity, self-harming behaviors, chaos and instability in interpersonal relationships, and feelings of victimization; and HPD is defined by extreme sensitivity to criticism, excessive attention seeking, and need for approval from others. Both BPD and HPD have long been criticized as sex-biased diagnoses that stigmatize women and lead to inferior mental health treatment (Bakkevig & Karterud, 2010; Blashfield, Reynolds, & Stennett, 2012; Flanagan & Blashfield, 2003; Nehls, 1998; Simmons, 1992; Ussher, 2013; Warner, 1979).

Whereas BPD and HPD offer a framework for understanding dramatic personalities, they may not be the most effective for examining dramatic personalities in samples that are not clinically relevant; and may not be suitable as predictors of work-related performance and counterproductive work behaviors (Guenole, 2014). A compound personality trait, such as NFD, is more suitable to assess individuals within work environments. Furthermore, whereas BPD and HPD have a troubled history as sex-biased diagnoses that may be unsuitably applied to organizational and social research questions, we hypothesize that NFD is prevalent equally in men and women in the population and that

\* Corresponding author at: University of Texas at El Paso, Department of Psychology, 500 W. University Avenue, El Paso, Texas 79968.  
E-mail address: [sdfrankowski@gmail.com](mailto:sdfrankowski@gmail.com) (S. Frankowski).

our measure of NFD is suitable for non-clinical research. We expect individuals with greater NFD to share some characteristics with those who exhibit BPD and HPD features, namely susceptibility to interpersonal conflict, manipulative behaviors, impulsive decision-making, and pervasive perceived victimization.

The purpose of the current research was to design and validate a measure of NFD, which would capture three hypothesized factors of the construct: interpersonal manipulation, impulsive outspokenness, and persistent perceived victimhood. In arriving at our definitions and identifying the factors of NFD, we investigated clinical attributes of dramatic personalities, non-clinical dark personality traits, consulted subject matter experts, and discussed attributes of those in our own lives whom we consider dramatic.

*Interpersonal manipulation* (IPM) is a trait that is characterized by a person's willingness to influence other people to behave in a manner serving of the manipulator's goals. Clinically, manipulative behavior is often studied within the context of psychopathic traits (cf. Hare, 1999). Individuals with psychopathic traits are often manipulative, impulsive, callous, lack empathy, and engage in anti-social behaviors. Non-clinically, manipulative behaviors are often studied in the context of the dark-triad of personality traits which include non-clinically relevant psychopathy, Machiavellianism (i.e., cold and calculating manipulation), and narcissism (Paulhus & Williams, 2002). Together, these dark-triad traits align with the antagonism facet within a proposed maladaptive trait model (Guenole, 2014; Skodol et al., 2011). We expect that high NFD individuals will share the manipulative characteristics that define psychopathy, but likely not the callous affectivity (cf. Lishner, Hong, Jiang, Vitacco, & Neumann, 2015).

*Impulsive outspokenness* (IO) is a trait characterized by a person's compulsion to speak out and share opinions, even when inappropriate and without regard to social consequences. This impulsivity overlaps with clinically relevant diagnoses of dramatic personality disorders (American Psychiatric Association, 2013) as well as the impulsivity associated with psychopathy, and the disinhibition and antagonism facets within a maladaptive trait model (Guenole, 2014; Skodol et al., 2011).

*Persistent perceived victimhood* (PPV) is the propensity to constantly perceive oneself as a victim of everyday life circumstances that many people would dismiss as benign. Perceived victimization is one of four clusters of dysphoric states associated with BPD (Zanarini et al., 1998). Furthermore, PPV aligns with negative emotionality in Skodol et al.'s (2011) maladaptive trait model. We expect that high NFD individuals share this trait with BPD and that they use this perceived victimization as justification for manipulative behaviors.

We expect these three factors of NFD to positively intercorrelate and encompass a personality trait that is qualitatively different from clinical personality disorders. In the following studies, we developed and tested the NFD measure, and replicated our findings with multiple samples.

## 2. Study 1

The aim of this study was to corroborate our hypothesized understanding of NFD with the qualitative responses of others who were asked to describe dramatic individuals in their lives. Along with open-ended responses, we also asked people to categorize dramatic individuals in their lives on a set of personality descriptors.

### 2.1. Methods

#### 2.1.1. Participants

Data were collected from 72 MTurk participants; three participants were excluded for not following instructions ( $N = 69$ ,  $M_{age} = 33.28$ ,  $SD_{age} = 12.13$ , 56% female).

#### 2.1.2. Measures and Procedure

After giving informed consent, participants were given the instructions: "Please take a moment to think about a person in your

life (friend, family, co-worker, classmate, acquaintance, etc.) who is very dramatic or prone to drama. Once you have thought of that person, please describe in as much detail as possible their personality and behaviors." Participants were given a multi-line text box to respond and were not limited in how much they could type. Nearly all participants (68 out of 69) wrote more than one sentence.

On the next page, participants were given the instructions: "Thinking about the person whom you just described, please indicate *three to five* personality or behavioral traits that best describe that person. Please use the *Other* box to write-in traits that are not listed." Following these instructions was a randomized list of 37 descriptors that were taken mostly from BPD and HPD diagnostic criterion. Within the list were also opposing descriptors that were not associated with the dramatic personality disorder traits.

Three independent coders examined the qualitative responses from the participants using a deductive thematic analysis approach (Braun & Clarke, 2006). Sentences that described the person's behavior or personality characteristics were coded with the three hypothesized NFD categories in mind. If a sentence contained multiple descriptors, each descriptor was coded. Some descriptions fell into multiple hypothesized categories of NFD. For example, if a participant described a person who is constantly feeling victimized *and* constantly talking about this perceived victimization, it would be coded into both the PPV and IO categories. If a description did not align with a hypothesized factor, it was inductively coded into an *other* category which the coder identified. Each coder submitted their coding to a judge. Instances in which coders did not agree on the appropriate assignment to the factors were rectified in discussion.

## 2.2. Results and Discussion

At least one instance of manipulative behaviors, impulsive outspokenness, or perceived victimization was present in nearly all (95%) of responses (Table 1). Whereas our hypothesized factors were prevalent in responses, there were very few indications that people viewed dramatic people in their lives as callous or lacking empathy, an indication that the manipulative behaviors associated with NFD differ from the manipulative behaviors associated with psychopathy or Machiavellianism. Furthermore, very few participants described dramatic people in their lives as flirtatious, seductive, provocative, or self-harming – another indication of how non-clinical dramatic personality differs from clinically diagnosed dramatic personality disorders. The responses offer a rich insight into how others view dramatic people in their lives.

Below are some examples of responses with their associated coding:  
*Manipulative:*

"She will make life a living hell for anyone who does not agree completely with her on absolutely everything."

"He liked to start problems on his own, as if he received pleasure from causing rifts between the rest of the roommates and I."

**Table 1**

Frequencies of themes found in qualitative responses.

Category	Number/Percent
<i>Hypothesized categories:</i>	
Manipulative	28 (40.6%)
Impulsive outspokenness	45 (65.2%)
Persistent perceived victimhood	36 (52.0%)
Any hypothesized factor	66 (95.7%)
<i>Other:</i>	
Self-absorbed, narcissistic	13 (18.8%)
Lying/exaggerating	6 (8.7%)
Strong affect	4 (5.7%)

Note. Frequencies reported are the number of participants who described at least one instance of the listed category. *Other* codes with only one or two instances were not included in table.  $N = 69$ .

*Impulsive outspokenness:*

“Every detail of infidelity gets posted on various social networks for the world to see and arguments between her and her boyfriend occur in public places.”

“Whatever is on his mind he will say it no matter who is around to hear it. He lacks the filter that prevents people from blabbing out something offensive about someone to their face.”

*Persistent perceived victimhood:*

“Anything bad that happens sends him into a panic where the next half hour is taken up by him complaining... This happens on a daily basis and sometimes he will talk about his problems and the people that are responsible for them for hours at a time while working.”

“Every tiny thing is a huge problem. No matter what it is, she acts like it's the end of the world.”

Table 2 contains the descriptors that participants chose most frequently for a dramatic person in their life. Examining the most frequently chosen descriptors, persistent perceived victimhood is represented with descriptors like *easily offended*, *sensitive to criticism*, and *plays the victim*. Impulsive outspokenness is represented with the descriptor *prone to outbursts*, and interpersonal manipulation is represented with the descriptor *manipulative*. Other descriptors that people chose often, such as *exaggerated sense of entitlement*, may relate to our three hypothesized factors in that they contribute to manipulative behaviors or perceived victimization.

### 3. Study 2

As a pilot study for the creation of a NFD measure, we created a pool of 97 items that we considered to have face-validity with a dramatic

**Table 2**  
Frequency of descriptors participants chose to define dramatic people in their lives.

Descriptor	N	%
Easily offended	28	39.44%
Sensitive to criticism	27	38.03%
Plays the victim	26	36.62%
Prone to outbursts	26	36.62%
Manipulative	22	30.99%
Exaggerated sense of entitlement	22	30.99%
Shifty moods	21	29.58%
Unstable	21	29.58%
Impulsive	19	26.76%
Shallow	18	25.35%
Low self-esteem	18	25.35%
Blames others for own failures	17	23.94%
Judgmental	15	21.13%
Arrogant	13	18.31%
Disrespectful	12	16.90%
Resentful	11	15.49%
Insincere	10	14.08%
Compulsive	9	12.68%
Scheming	8	11.27%
Flirtatious	5	7.04%
Sincere	4	5.63%
Provocative	4	5.63%
High self-esteem	4	5.63%
Seductive	3	4.23%
Not easily offended	3	4.23%
Self-mutilating	3	4.23%
Shy	2	2.82%
Suggestible	2	2.82%
Respectful	2	2.82%
Calm	2	2.82%
Deep	1	1.41%
Controlled	1	1.41%
Handles criticism well	1	1.41%
Stable	1	1.41%
Non-judgmental	1	1.41%
Accepts responsibility for actions	0	0.00%
Humble	0	0.00%

Note. Participants were asked to choose 3–5 traits that best describes a dramatic person in their lives.  $N = 69$ .

personality and our three hypothesized factors of NFD. Items were created or edited to be answered on a *strongly agree-to-strongly disagree* scale. Items were edited by the first and second authors. We approached item creation with our hypothesized factors of NFD in mind, and categorized items into the associated factors through discussion. We tested these items with a small sample to examine intercorrelations. Our research aim for this pilot study was to retain approximately 7–8 items for each of our hypothesized factors for further testing.

### 3.1. Methods

#### 3.1.1. Participants and procedure

Data were collected from 136 MTurk participants, of which 120 were included in analyses ( $M_{age} = 38.16$ ,  $SD_{age} = 13.15$ , 61% female). Six participants were excluded for foreign IP addresses, six were excluded because they indicated they were not U.S. citizens, and four were excluded for failing an attention check (e.g., “Please leave this question blank, it is to screen out random responders”). After giving informed consent, participants rated the extent to which they agreed with the 97 pilot statements on a 7-point scale (1 – Strongly disagree; 7 – Strong agree) and completed a brief demographics form. All of the pilot items were presented in randomized order for each participant.

### 3.2. Results and discussion

We examined the data for floor and ceiling effects, and some items were eliminated this way (e.g., “Most people would describe me as trustworthy”, a reverse-worded item,  $M = 6.02$ , with only 7.5% responding with a four or lower; or, “People accuse me of spreading rumors”,  $M = 1.95$ , with only 10.9% responding above a three). We also examined item wording and decided that some items may be confusing and should be excluded (e.g., “I've never lost a friend; I've only found out who my real friends are.”).

With the items deductively sorted into our three hypothesized categories of NFD, we then examined how items within categories correlated with one another using SPSS (v.22; IBM Corp, 2013). As the pool of items in each category was large and contained many similarly worded items, we decided not to use an automated program such as Hayes' (2005) ALPHAMAX to retain items, as this would likely lead to including scale items that did not vary in content, but that would lead to a high alpha. Instead, we decided the most efficient way to identify the best items for inclusion was to initially test the reliability with seven items that we previously agreed aligned with one of the three hypothesized categories. For each hypothesized category, the initial alpha value was inadequate ( $< .50$ ). We excluded items based on the *scale if item deleted* output from SPSS and replaced them with other items that we had previously categorized into one of the three hypothesized categories. For similarly worded items, the item that increased alpha reliability the most was retained. Through this process, we reduced the item pool to 22 items for further testing. One item that was mistakenly excluded from this initial testing was also included for further testing (Item 23, Table 3). The hypothesized IPM category included eight items,  $\alpha = .83$ ; the IO category included seven items,  $\alpha = .75$ ; and, the PPV category included seven items,  $\alpha = .82$ . The IPM category strongly correlated with the IO category and PPV category,  $r = .60$  and  $.38$ , respectively,  $ps < .001$ . The IO category also moderately correlated with the PPV category,  $r = .32$ ,  $p < .001$ . With a reduced pool of 23 items, the next step was to identify how items loaded onto latent factors.

### 4. Study 3

In this study we conducted an exploratory factor analysis on the 23 items retained from Study 2 in order to identify the underlying latent factors of the items (Fabrigar, Wegener, MacCallum, & Strahan, 1999). The aim of this study was to identify our hypothesized latent factors and to retain items that loaded onto the hypothesized factors (with standardized

Table 3

Rotated factor solution standardized regression coefficients with oblimin rotation using maximum-likelihood estimation.

Item#/hypothesized factor	Abbreviated item statement	F1	F2	F3	F4	F5	Comm
1. IPM	I like to argue with others		.31				.20
2. IPM	<b>It's fun to rile people up</b>		<b>.67</b>				.56
3. IPM	<b>Talk bad about others</b>		<b>.57</b>			.31	.50
4. IPM	<b>I do things to see how others react</b>		<b>.68</b>				.62
5. IPM	Feel bad for other's stress (R)					.53	.30
6. IPM	Guide my friends to make right decision		.47			-.30	.33
7. IPM	I feel bad hurting someone (R)					.70	.52
8. IPM	<b>I play people against each other</b>		<b>.62</b>			.33	.61
9. IO	I like to gossip			.82			.67
10. IO	I enjoy spreading rumors			.41			.37
11. IO	I enjoy talking about others			.73			.56
12. IO	<b>I wait before speaking my mind (R)</b>				.65		.42
13. IO	Share personal problems						.18
14. IO	<b>I pay for speaking my mind</b>				.72		.60
15. IO	<b>It's hard to hold my opinion back.</b>				.72		.52
16. PPV	<b>Friends have stabbed me in back</b>	.67					.44
17. PPV	<b>People talk behind my back</b>	.58					.43
18. PPV	<b>I wonder why crazy things happen to me</b>	.50					.39
19. PPV	<b>People are out to get me</b>	.69					.54
20. PPV	<b>Many people have wronged me</b>	.74					.57
21. PPV	Nobody understands me	.50					.25
22. PPV	I'm in control of all aspects of my life (R)	.37					.19
23. PPV	Hold head high because no one will do it for you						.11

Note. The hypothesized factor listed after the item numbers were chosen when the initial item pool was created in Study 2. Standardized regression coefficients (reported for factors 1–5) of .30 or less were suppressed. F1 is the hypothesized persistent perceived victimhood factor. F2 is the hypothesized interpersonal manipulation factor. F3 is a factor associated with gossiping which is not a hypothesized factor as thus these items were excluded from further analyses. F4 is the hypothesized impulsive outspokenness factor. F5 was not interpretable. Comm is the extracted communality estimates of each item. Bolded items were retained for a confirmatory factor analysis.  $N = 245$ .

regression coefficients greater than .50), and to exclude items that loaded onto latent factors that were not hypothesized or which were uninterpretable. In this study, we also included additional measures to test convergent and discriminant validity (discussed below). After the initial factor analysis, we replicated and extended the convergent and discriminant validity with a separate sample (Section 5.3).

#### 4.1. Methods

##### 4.1.1. Participants

Two-hundred-seventy-four participants were recruited through MTurk. Eight were excluded because they had foreign IP addresses, 12 were excluded because they failed at least one of two attention checks, six were excluded for completing the study more than once (per identical IP addresses; their first completion was retained), and three were excluded for completing the study in less than five minutes. Data from 245 participants were retained ( $M_{age} = 33.9$ ,  $SD_{age} = 13.25$ , 55.1% male).

##### 4.1.2. Procedure

After giving informed consent, participants completed a series of questionnaires. Participants completed the 23 NFD items retained from Study 2. We also included scales to examine convergent and discriminant validity: A shortened Dark-Triad scale (Jones & Paulhus, 2014), shortened Affect Intensity scale (Geuens & De Pelsmacker, 2002), Attitudes toward Gossip (Litman & Pezzo, 2005), and Locus of Control (Levenson, 1974). The order of measures and the item order within measures were randomized<sup>1</sup>

<sup>1</sup> The Cronbach- $\alpha$  reliability values between the measures used and the measures used in the original cited studies were comparable (Table 4). Dark-triad (shortened; Jones & Paulhus, 2014): Study 2  $\alpha$ s - Mach .74, psychopathy .72, narcissism .68; Study 3  $\alpha$ s - Mach .76, psychopathy .73, narcissism .78. Attitudes toward Gossip (Litman & Pezzo, 2005): Study 2  $\alpha$ s - SV subscale .80; MV subscale .80; Study 3  $\alpha$ s - SV subscale .77, MV subscale .55. Shortened Affect Intensity (Geuens & De Pelsmacker, 2002):  $\alpha = .81, .80, .81$ . Locus of Control scale (Levenson, 1974): Kuder-Richardson reliabilities in student sample - internal .64, external .78. Mini IPIP (Donnellan et al., 2006): study 1 - extraversion .77, agreeableness .70, conscientiousness .69, neuroticism .68, openness .65; study 2 - extraversion .82, agreeableness .75, conscientiousness .75, neuroticism .70, openness .70. Rosenberg Self-esteem Scale (Rosenberg, 1979):  $\alpha = .77$  to .88

We conducted an exploratory factor analysis for this study using SAS' *proc factor* (v.9.4; SAS Institute Inc, 2014), with a maximum-likelihood estimation and an oblique rotation. We used an oblique rotation because we predicted the latent factors of NFD to correlate. We retained items that loaded only onto our hypothesized latent factors and which had factor loadings greater than .50.

#### 4.2. Measures used to assess convergent and discriminant validity

##### 4.2.1. Dark-triad

We predicted that the IPM factor of NFD would strongly correlate with the manipulative behaviors associated with psychopathy and Machiavellianism. We predicted the IO factor would positively and strongly correlate with psychopathy as impulsivity is central to both traits. The IO factor, however, should not be associated with Machiavellianism as Machiavellians tend to carefully plan their manipulative actions. We did not have a priori hypotheses about how NFD would correlate with the Narcissism dimension of the dark-triad.

##### 4.2.2. Affect intensity

Individuals with greater affect intensity scores show intense emotional responses to emotion-laden stimuli (Larsen & Diener, 1987). We predicted affect intensity would positively correlate with the IO and PPV factors of NFD, and would not correlate with the IPM factor.

##### 4.2.3. Attitudes toward gossip

Attitudes toward gossip reflect the degree to which an individual endorses the social utility of gossip (i.e., entertainment, learning information about others) and the moral value of gossip (i.e., the ethical use of gossip; Litman & Pezzo, 2005). We hypothesized that individuals with greater scores on IPM value gossip so they can use it to manipulate others, and thus, view their use of gossip as morally justifiable. The IPM factor, therefore, should correlate positively with the social and moral values of gossip. In contrast, individuals with greater scores on IO should find gossip entertaining but, due to their impulsive nature, are not likely to consider the morality of gossip. We therefore predicted IO would correlate with the social value of gossip and would not correlate to the moral value of gossip.

#### 4.2.4. Locus of control

We hypothesized that individuals who score higher on the PPV factor of NFD to perceive the world as happening to them, rather than being active agents in the world. Thus, we predicted that NFD, particularly the PPV factor, would correlate with an external locus of control (Levenson, 1974). Furthermore, we predicted that the internal locus of control subscale would negatively correlate with the PPV factor.

## 5. Results

The Kaiser-Meyer-Olkin test of sampling adequacy indicated there was a sufficient sample to continue the analysis,  $KMO = .79$ . Bartlett's test of sphericity indicated that items significantly correlated,  $\chi^2(253) = 1567.91, p < .001$ . The EFA extracted five latent factors per SAS' proportion criterion, accounting for 54.74% of the total variance. Whereas the goodness-of-fit test was significant,  $\chi^2(148) = 227.72, p < .001$ , indicating additional covariance not accounted for in the extracted factor solution, this was not a major concern as the aim of this study was to simply identify latent factors and their associated item loadings. Note that factor extraction was *not* restricted to the three hypothesized factors in order to identify latent factors and their associated items that were not predicted, and to exclude these factors and items. The first latent factor corresponded to our hypothesized persistent perceived victimhood factor (Eigenvalue: 4.93, 21.45% variance explained). The second latent factor corresponded to interpersonal manipulation (Eigenvalue: 2.54, 11.05% variance explained). The third factor corresponded to endorsement of gossip and spreading rumors (Eigenvalue: 1.81, 7.85% variance explained). We thought these gossiping items would intercorrelate well with other IO items but this was not the case. Thus, we excluded the items loading onto this latent factor from our finalized scale. The fourth factor corresponded to our hypothesized impulsive outspokenness factor (Eigenvalue: 1.79, 7.73% variance explained). The fifth factor was not interpretable (Eigenvalue: 1.53, 6.67% variance explained). Factor loadings of the 23 items can be found in Table 3. Excluding items that did not load onto our hypothesized latent factors well, or loaded onto unhypothesized or uninterpretable factors, reduced the NFD measure to 12 items.

We submitted this 12 item NFD scale to two subject matter experts (SMEs) – a personality and a clinical psychologist –, provided them with our definitions of the three factors of NFD, and asked them to sort the items into the associated factors. The SMEs sorted the items similarly to how the items loaded onto the three hypothesized latent factors.<sup>2</sup> One SME noted that the IPM factor was a facet of IPM that they would term “pleasure in verbally irritating others.”

#### 5.1.1. Convergent and discriminant validity with other measures

The descriptive statistics and Cronbach-alpha reliabilities of the measures used can be found in Table 4. Correlations between the 12-item NFD measure and other measures in this study can be found in Table 5. As expected, the IPM factor of NFD correlated moderately with the IO and PPV factors,  $r = .25$  and  $.33$ , respectively,  $ps < .001$ . The IO factor also correlated moderately with the PPV factor,  $r = .24, p < .001$ .

##### 5.1.1.1. NFD and the dark-triad

As predicted, the full NFD scale strongly and positively correlated with the dark-triad traits. The IPM subscale correlated most strongly with the psychopathy measure, and also correlated moderately-to-strongly with the narcissism and Machiavellianism measures. As predicted, IO

correlated moderately-to-strongly with psychopathy. Impulsive outspokenness weakly correlated with narcissism and Machiavellianism. The PPV factor correlated moderately and positively with the psychopathy and Machiavellianism factors of the dark-triad.

##### 5.1.1.2. NFD and affect intensity

The full NFD measure correlated only weakly with affect intensity. The PPV subscale did not correlate with affect intensity, counter to predictions. As predicted, the IO subscale correlated moderately and positively with affect intensity. As predicted, IPM did not correlate with affect intensity.

##### 5.1.1.3. NFD and attitudes toward gossip

The NFD scale correlated moderately to strongly with both endorsing the moral and social values of gossip. As predicted, the IPM subscale correlated strongly with both the moral and social values of gossip. Furthermore, we predicted the IO subscale would correlate with the social, but not the moral values of gossip. The results support these predictions; although, IO only weakly correlated with the social value of gossip. Impulsive outspokenness did not, however, correlate with endorsing the moral value of gossip. The PPV subscale weakly correlated with endorsing the moral and social values of gossip.

**Table 4**

Means, standard deviations, and Cronbach alpha values of measures used in Studies 3 and 5.

Measure	Mean	SD	Cronbach-Alpha
Need for Drama (full measure)	3.23	0.89	.81
	3.28	1.02	.86
	3.66	0.88	.77
NFD - Interpersonal manipulation	2.68	1.28	.82
	2.66	1.34	.83
	2.92	1.20	.74
NFD - Impulsive outspokenness	3.57	1.23	.73
	3.51	1.24	.70
	3.96	1.27	.65
NFD - Persistent perceived victimhood	3.44	1.21	.79
	3.52	1.33	.84
	4.08	1.15	.73
Psychopathy	2.43	0.98	.78
	2.65	0.93	.77
	2.76	0.95	.69
Narcissism	3.42	1.04	.79
	3.54	0.95	.77
	4.09	0.87	.71
Machiavellianism	4.78	0.93	.63
	4.43	0.91	.61
	4.79	0.77	.49
Gossip - Moral Value	3.23	1.02	.80
	3.20	1.02	.81
	3.08	0.96	.76
Gossip - Social Value	3.44	1.20	.87
	3.22	1.17	.85
	3.48	1.14	.83
Affect Intensity	3.51	0.54	.80
	3.52	0.53	.78
	3.86	0.47	.70
Internal Locus of Control	4.35	0.80	.76
	4.35	0.76	.79
	4.62	0.66	.63
External Locus of Control	3.19	0.70	.87
	3.19	0.71	.87
	3.00	0.63	.82
Openness	3.96	0.75	.75
	3.63	0.86	.58
	2.58	1.01	.84
Extraversion	3.73	0.84	.82
	2.68	0.97	.82
	5.08	1.28	.93
Agreeableness	3.73	0.84	.82
	2.68	0.97	.82
	5.08	1.28	.93
Neuroticism	3.73	0.84	.82
	2.68	0.97	.82
	5.08	1.28	.93
Self-Esteem	3.73	0.84	.82
	2.68	0.97	.82
	5.08	1.28	.93

Note. All items that composed the measures were scored on a seven-point scale. The measures of Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism, and Self-Esteem were only used in Study 3, sample 2. For the other measures, the first row and second row display the descriptives from MTurk samples (Study 3 sample 1,  $N = 245$ ; sample 2,  $N = 359$ ), and the third row, a college sample (Study 5,  $N = 261$ ).

<sup>2</sup> There was one disagreement among the SMEs. One SME categorized item 10 (Fig. 1) as belonging to the IO rather than the PPV factor. The other SME categorized this item into the PPV factor. We originally termed the IO factor as “social impulsivity”; however, one SME noted that we were only assessing an outspokenness facet of social impulsivity.

**Table 5**  
Correlations between NFD and other measures.

	SD3	Psych	Narc	Mach	ATG Moral	ATG Social	AIS	LoC Int.	Loc Ext.	Age
NFD	.58 <sup>c</sup>	.63 <sup>c</sup>	.28 <sup>c</sup>	.43 <sup>c</sup>	.27 <sup>c</sup>	.39 <sup>c</sup>	.15 <sup>a</sup>	-.10	.37 <sup>c</sup>	-.23 <sup>c</sup>
	.57 <sup>c</sup>	.63 <sup>c</sup>	.23 <sup>c</sup>	.23 <sup>c</sup>	.32 <sup>c</sup>	.41 <sup>c</sup>	.25 <sup>c</sup>	-.18 <sup>c</sup>	.37 <sup>c</sup>	-.15 <sup>b</sup>
IPM	.50 <sup>c</sup>	.59 <sup>c</sup>	.23 <sup>c</sup>	.27 <sup>c</sup>	.34 <sup>c</sup>	.39 <sup>c</sup>	.09	-.13 <sup>a</sup>	.35 <sup>c</sup>	-.06
	.67 <sup>c</sup>	.68 <sup>c</sup>	.41 <sup>c</sup>	.44 <sup>c</sup>	.38 <sup>c</sup>	.47 <sup>c</sup>	.00	.07	.27 <sup>c</sup>	-.33 <sup>c</sup>
IO	.66 <sup>c</sup>	.69 <sup>c</sup>	.34 <sup>c</sup>	.47 <sup>c</sup>	.37 <sup>c</sup>	.50 <sup>c</sup>	.13 <sup>a</sup>	-.08	.29 <sup>c</sup>	-.22 <sup>c</sup>
	.53 <sup>c</sup>	.59 <sup>c</sup>	.31 <sup>c</sup>	.27 <sup>c</sup>	.39 <sup>c</sup>	.42 <sup>c</sup>	-.06	-.08	.27 <sup>c</sup>	-.04
PPV	.31 <sup>c</sup>	.37 <sup>c</sup>	.16 <sup>a</sup>	.18 <sup>b</sup>	.06	.17 <sup>b</sup>	.24 <sup>c</sup>	-.06	.13 <sup>a</sup>	.01
	.37 <sup>c</sup>	.40 <sup>c</sup>	.23 <sup>c</sup>	.19 <sup>c</sup>	.24 <sup>c</sup>	.24 <sup>c</sup>	.25 <sup>c</sup>	-.10	.12 <sup>a</sup>	.05
PPV	.30 <sup>c</sup>	.38 <sup>c</sup>	.16 <sup>b</sup>	.10	.22 <sup>c</sup>	.24 <sup>c</sup>	.09	-.10	.18 <sup>b</sup>	.04
	.26 <sup>c</sup>	.29 <sup>c</sup>	.02	.30 <sup>c</sup>	.13 <sup>a</sup>	.19 <sup>b</sup>	.09	-.24 <sup>c</sup>	.41 <sup>c</sup>	-.16 <sup>b</sup>
PPV	.32 <sup>c</sup>	.37 <sup>c</sup>	-.04	.40 <sup>c</sup>	.13 <sup>a</sup>	.20 <sup>c</sup>	.22 <sup>c</sup>	-.25 <sup>c</sup>	.45 <sup>c</sup>	-.15 <sup>b</sup>
	.27 <sup>c</sup>	.33 <sup>c</sup>	.03	.22 <sup>c</sup>	.14 <sup>a</sup>	.17 <sup>b</sup>	.16 <sup>b</sup>	-.10	.33 <sup>c</sup>	-.14 <sup>a</sup>

<sup>a</sup>  $p < .05$ , <sup>b</sup>  $p < .01$ , <sup>c</sup>  $p < .001$ . Note. The correlations in the first and second row are from MTurk samples (Study 3 sample 1,  $N = 245$ ; sample 2,  $N = 359$ ). The correlations in the third row are from a college sample (Study 5;  $N = 261$ ). NFD = Need for Drama. IPM = Interpersonal manipulation factor of NFD. IO = Impulsive outspokenness factor of NFD. PPV = Persistent perceived victimhood factor of NFD. SD3 = Shortened Dark-triad scale. Psych = Psychopathy factor of the SD3. Narc = Narcissism factor of the SD3. Mach = Machiavellianism factor of the SD3. ATG Moral = Moral factor of the Attitudes toward Gossip Scale. ATG Social = Social factor of the Attitudes toward Gossip scale. AIS = Affect Intensity Scale. LoC Int = Internal Locus of Control. LoC Ext. = External Locus of Control.

#### 5.1.1.4. NFD and locus of control

The full NFD scale correlated moderately-to-strongly with the external subscale of the locus of control. We predicted the full NFD measure would correlate negatively with an internal locus, however, there was not evidence for this association. As predicted, the PPV subscale correlated positively and moderately with an external locus of control. Furthermore, in support of predictions, the PPV subscale correlated negatively and moderately with an internal locus of control.

## 5.2. Discussion

We excluded items loading onto the unhypothesized latent factor associated with gossiping and an uninterpretable fifth factor and retained items associated with the three hypothesized factors of NFD. Thus, we retained 12 items for the finalized NFD scale (bolded items in Table 3). In Study 4 we conduct a confirmatory factor analysis to confirm the factor structure of these 12 items with a separate sample and to test the gender invariance of the NFD measure.

This 12 item NFD measure demonstrated appropriate and mostly predicted convergent and discriminant validity with other measures. Based on the moderate to strong correlations between the full NFD measure and other measures, high NFD individuals can be characterized as manipulative, gossipy, and reactive (Table 5). All three factors of NFD correlated moderately-to-very strongly with psychopathy and Machiavellianism, the manipulative factors of the dark-triad. Of interest are the moderately strong correlations between the PPV factor and the IPM factor, psychopathy, and Machiavellianism. These associations are an indication that perceived victimization is cyclical and results from the manipulative actions of high NFD individuals. The IPM factor correlated most strongly with both dimensions of attitudes toward gossip, but the IO and PPV factors correlated fairly weakly with both gossip factors. This may indicate that NFD individuals mostly use gossip as a tool of manipulation, and that impulsive outspokenness alone does not lead to gossiping about others. Interestingly, the NFD measure as a whole did not correlate with an internal locus of control, but did correlate strongly with an external locus. High NFD individuals seem to see the world as happening to them, which likely makes them reactive to perceived slights. That there were only weak negative correlations between NFD factors and an internal locus indicates that high NFD individuals may be reactive, yet still feel agentic, which could be a cause of cyclical drama in their lives. We expected stronger correlations between the IO/PPV factors and affect intensity; however, only IO correlated moderately with affect intensity. This provides evidence that high NFD individuals are not causing drama based solely on intense affective reactions to events.

## 5.3. Replication and extension of convergent and discriminant validity

With a separate MTurk sample ( $N = 359$ )<sup>3,4</sup> we replicated and extended the convergent and discriminant validity of the 12-item NFD measure. Along with the measures included in the previous study, we also included a measure of the Big-5 personality traits (Mini IPIP; Donnellan, Oswald, Baird, & Lucas, 2006) for which we hypothesized NFD would be characterized by low conscientiousness, low agreeableness, and high neuroticism. We also included a measure of self-esteem (Rosenberg, 1979), for which we hypothesized that NFD would be negatively correlated.

### 5.3.1. Results

The IPM factor of NFD correlated strongly with the IO and PPV factors,  $r_s = .48$  and  $.41$ , respectively,  $p_s < .001$ . The IO factor also correlated moderate-to-strongly with the PPV factor,  $r = .34$ ,  $p < .001$ . Replications of correlations between the NFD measure and measures used in the previous study can be found in Table 5. This study included a measure of the Big-5 personality traits and self-esteem. As predicted, NFD correlated moderately-to-strongly and positively with neuroticism, and moderately and negatively with conscientiousness. Interestingly, the negative association between NFD and agreeableness was fairly weak, with only the IPM factor moderately correlating. As expected, NFD correlated negatively and strongly with self-esteem, with the PPV factor correlating very strongly. See Table 6

**Table 6**

Correlations with big-five personality traits and self-esteem.

	Open	Conscientious	Extroversion	Agreeable	Neurotic	Self-esteem
NFD	-.06	-.34 <sup>c</sup>	.09	-.16 <sup>b</sup>	.46 <sup>c</sup>	-.39 <sup>c</sup>
IPM	-.08	-.35 <sup>c</sup>	.11 <sup>a</sup>	-.25 <sup>c</sup>	.25 <sup>c</sup>	-.24 <sup>c</sup>
IO	.00	-.21 <sup>c</sup>	.26 <sup>c</sup>	-.10	.25 <sup>c</sup>	-.14 <sup>b</sup>
PPV	-.06	-.23 <sup>c</sup>	-.14 <sup>b</sup>	-.03	.57 <sup>c</sup>	-.52 <sup>c</sup>

<sup>a</sup>  $p < .05$ , <sup>b</sup>  $p < .01$ , <sup>c</sup>  $p < .001$ . Note. MTurk participants from Study 6. NFD = Need for Drama; IPM = Interpersonal Manipulation; IO = Impulsive outspokenness; PPV = Persistent perceived victimhood.  $N = 351$ .

<sup>3</sup> Data were collected from 365 MTurk participants. Data from six participants were excluded because they had foreign IP addresses. Thus a total of 359 participants were used for analyses ( $M_{age} = 35.74$ ,  $SD_{age} = 12.97$ , 53.48% female; 3 participants did not indicate their gender).

<sup>4</sup> These data were part of a factorial experiment in which NFD was used to predict gossiping behavior. The results of this experiment are not reported here as they are out of the scope of the current paper; however, they are being written for a future manuscript submission. The measures reported appeared after the dependent variables but did not differ as a function of the experimental conditions.

### 5.3.2. Discussion

This study added to this research by examining the relationships between NFD and Big-5 personality traits and self-esteem. In terms of the Big-5, high NFD individuals are high on neuroticism, low on conscientiousness, and slightly more disagreeable. These associations are similar to characteristics of those who display negative urgency, the tendency to act impulsively and without consideration when distressed (Settles et al., 2012). Negative urgency predicts alcohol and drug use, risky sexual behavior, and aggression. Behaviors associated with negative urgency tend to occur when individuals are experiencing intense affect. In contrast, NFD tended to correlate only weakly to moderately with affect intensity. Future research ought to explore whether NFD predicts risky and unhealthy behaviors similar to negative urgency. Similar relationships would indicate that the impulsivity facet of NFD extends beyond outspokenness.

## 6. Study 4

In Study 3, we reduced the NFD measure to 12 items that loaded onto our three intercorrelated hypothesized factors. In the present study, our aim was to confirm the model fit of this twelve-item measure with a new sample. We hypothesized that the three factors of NFD (IPM, IO, and PPV) all load onto a higher order NFD latent factor, and thus this is the model we tested. In this study we also tested the measurement invariance of this model between men and women. As discussed in the introduction, clinical measures of dramatic personality disorders tend to be sex-biased with more women diagnosed than men. We hypothesized that our NFD scale is appropriate for use among men and women and can thus be used to investigate gender differences.

### 6.1. Methods

#### 6.1.1. Participants and procedure.

Data were collected from 512 MTurk participants. Two participants were excluded because they identified as transgender or gender-variant. Two participants did not indicate their gender and were also excluded. Six participants were excluded because they were non-U.S. citizens and another six participants were excluded as duplicates (based on IP address). A confirmatory factor analysis was performed with 494 participants ( $M_{age} = 32.80$ ,  $SD_{age} = 11.43$ , 56.05% male). After giving informed consent, participants completed the 12-item NFD measure and a brief demographics questionnaire

The model tested was a three factor model in which IPM, IO, and PPV latent factors all load onto a higher order NFD latent factor. Model fit was assessed in M-Plus 6.12 using robust maximum-likelihood estimation (Muthén & Muthén, 2011). A multiple group analysis was used for testing measurement invariance between men and women (Steenkamp & Baumgartner, 1998). Hu and Bentler's (1999) combined criteria ( $CFI \geq .90$ ;  $RMSEA \leq .06$ ;  $SRMR \leq .08$ ) were used to assess model fit. Nested models were compared by assessing change in CFI and RMSEA, with change values less than or equal to .01 and .015, respectively, indicating a non-significant change in model fit, and by assessing the change in  $\chi^2$  using the Satorra-Bentler (S-B)  $\chi^2$  difference test (SBDiff; Crawford & Henry, 2003; Satorra & Bentler, 2001).

### 6.2. Results

First, model fit was assessed for the total sample; this model fit the data well (see Table 6 for all model fit indices). The full 12-item measure had good reliability,  $\alpha = .84$ ; and each subscale had acceptable reliability, IPM  $\alpha = .80$ , IO  $\alpha = .72$ , and PPV  $\alpha = .84$ . Replicating Study 3, IPM correlated moderately-to-strongly with IO and PPV,  $r_s = .35$  and  $.42$ , respectively,  $p_s < .001$ . Impulsive outspokenness also correlated moderately with PPV,  $r = .29$ ,  $p < .001$ . Second, model fit was assessed separately for men and women; these models also demonstrated good fit, justifying testing invariance between men and women. Third, the

factor structure was constrained to be the same for men and women (i.e., configural invariance). This model demonstrated adequate fit, indicating equivalent factor structure for both genders. Fourth, the factor loadings were constrained to equality between genders (i.e., pattern or weak factorial invariance). This model fit the data well and the change in model fit was not significant ( $\Delta CFI = .002$ ;  $\Delta RMSEA = .001$ ;  $\Delta S-B \chi^2 = 16.00$ ,  $p = 0.19$ ), indicating that the factor loadings are equivalent for men and women. Fifth, the item intercepts were constrained to equality between groups (i.e., strong factorial invariance). Although fit indices indicated adequate model fit per Hu and Bentler's combined criteria, the change in model fit from the pattern invariance model was significant (Table 7). These changes in the fit indices indicated that a model constraining item intercepts to equality between groups provided worse model fit than a model allowing item intercepts to vary between groups.

To follow-up this test of strong factorial invariance, we allowed the latent item intercepts to differ across groups and then tested which intercepts differed between men and women. Wald comparison tests indicated that intercepts for men and women differed significantly for all four of the IPM items and item 4 on the PPV factor (Table 8). For these items, the intercepts for men were greater than those for women. Altogether, strong factorial invariance between men and women was not supported. We followed the recommendations of Steenkamp and Baumgartner (1998), where these authors state that latent mean differences can be examined after establishing both pattern factorial invariance (metric invariance; invariance of the factor loadings) and strong invariance (scalar invariance; invariance of the latent item intercepts). Because all four of the IPM items had varying intercepts, we did not pursue latent mean differences across groups.

### 6.3. Discussion

This study confirmed the model fit of the 12-item NFD measure (Fig. 1). We established pattern invariance of NFD between genders, meaning that the factor loadings did not differ between men and women. There was, however, a significant change in model fit between the pattern and strong invariance models with the pattern invariance model showing better fit. Thus, strong invariance for men and women was not supported. This finding suggests that it may not be appropriate to compare mean levels of NFD between genders. Clinical research has shown that BPD in men presents with greater antisocial personality disorders compared to women (Johnson et al., 2003). Jones and Paulhus (2014) also found consistent gender differences in the dark-triad such that men scored significantly higher on all three sub-scales. Similar to BPD and dark-triad traits, NFD in men may present with greater antisocial and manipulative behaviors than it does in women. This would be an indication that there is not measurement bias in the NFD measure and rather that there are gender differences in the true scores of the IPM subscale of NFD (cf. Millsap, 2007).

## 7. Study 5

The purpose of this final study was to confirm the factor structure of the NFD measure and replicate convergent and discriminant validity of the measure with a separate sample. The previous studies used MTurk samples in which participants are typically in their 30s, predominantly White, and have likely completed hundreds of psychological studies through the MTurk system (Shapiro, Chandler, & Mueller, 2013; Stewart et al., in press). In the present study, participants were college-aged students, mostly Latino, and a majority are bilingual (English/Spanish). Replicating the model fit and convergent and discriminant validity with this sample will be evidence of the generalizability of the NFD measure. We hypothesized that the factor structure of NFD would fit these data well and that the associations between NFD and other measures would replicate the associations found in Study 3.

**Table 7**  
Model fit indices for invariance models.

Model	S-B $\chi^2$	df ( $\Delta$ )	S-B $\chi^2$ diff	CFI ( $\Delta$ )	RMSEA ( $\Delta$ )	SRMR ( $\Delta$ )	Alpha
CFA total sample	113.676*	51	–	0.962	0.050	0.045	.84
CFA men	104.970*	51	–	0.941	0.062	0.056	.84
CFA women	62.102	51	–	0.984	0.032	0.050	.84
Configural Invariance	166.152*	102	–	0.960	0.050	0.053	
Pattern Invariance	182.589*	114 (12)	16.00	0.958 (.002)	0.049 (.001)	0.063 (.01)	
Strong Invariance	256.730*	126 (12)	79.85*	0.919 (.039)	0.065 (.016)	0.078 (.015)	

\*  $p < .001$ . Note. S-B  $\chi^2$  diff was calculated using the Satorra-Bentler  $\chi^2$  difference test (SBDiff; Crawford & Henry, 2003; Satorra & Bentler, 2001). The S-B  $\chi^2$  difference test indicates that strong gender invariance is not supported. Reliability values for the NFD subscales are as follows: IPM: men = .79, women = .77; IO: men = .70, women = .74; PPV: men = .83, women = .85.  $N = 494$ .

## 7.1. Method

### 7.1.1. Participants

Data were collected from 352 participants at the University of Texas at El Paso. El Paso lies on the U.S./Mexico border and the majority of students are bilingual Latinos. Thus, confirming the scale model with this sample provides external validity by generalizing to a majority non-White sample. Data from 24 non-U.S. citizen participants were excluded. Sixty-seven participants failed one or both attention checks and were excluded (i.e., they answered questions such as “Please leave this item blank, it is here to exclude random responses”). The high rate of attention check failure was likely due to the study being conducted online with the assurance that responses are anonymous. Data from 261 participants were included in analyses ( $M_{age} = 20.49$ ,  $SD_{age} = 4.20$ , 67.31% female).

### 7.1.2. Procedure

After giving informed consent, participants completed the 12-item NFD scale (Fig. 1), and the same measures used in Study 3 (sample 1). All measures were presented in a randomized order.

## 7.2. Results

### 7.2.1. Study 5 Model fit

Model fit was assessed in M-Plus 6.12 using robust maximum-likelihood estimation (Muthén & Muthén, 2011). Hu and Bentler's (1999) combined criteria ( $CFI \geq .90$ ;  $RMSEA \leq .06$ ;  $SRMR \leq .08$ ) were used to assess model fit. The model of the three latent factors (IPM, IO, and PPV) loading onto the higher order NFD factor provided acceptable fit of the data. While the Chi-square test was significant,  $\chi^2(51) = 94.67$ ,  $p < .001$ , the RMSEA, SRMR and CFI all indicate acceptable fit, RMSEA =

.057,  $CI90 = [.039, .075]$ ,  $CFI = .915$ ,  $SRMR = .058$ . The full scale and each subscale had acceptable alphas (Table 4). Consistent with the previous studies, the IPM factor significantly correlated moderately-to-strongly with the IO and PPV factors,  $r = .37$  and  $.31$ , respectively,  $ps < .001$ . The IO factor also correlated with the PPV factor,  $r = .21$ ,  $p < .001$ .

### 7.2.2. Correlations with other measures

All correlations between the NFD measure and other measures can be found in Table 5. Correlations with other measures in this study largely replicated the Study 3.

## 7.3. Discussion

Study 5 confirmed the factor structure of the NFD measure with a sample of young, mostly Latino, college students. The factor model of NFD fit this college sample well; although, the alpha reliabilities of the full measure and subscales were adequate but lower than the MTurk samples (Table 4).

The means with this college sample were higher on all three subscales of NFD compared to MTurk samples (Table 4).<sup>5</sup> Whereas there were no, or very weak, associations between the NFD factors and age in this study – likely because of the lack of variance in age with a college sample – studies with the MTurk samples indicate that the measure tends to be moderately and negatively correlated with age, with the IPM factor being most strongly associated (Table 5). Thus, mean differences in NFD between the college sample and MTurk samples are likely due to age differences in the samples. In comparison, impulsivity and self-harming behaviors associated with clinical personality disorders tend to decrease with age; however, anxiety and depression persist (Stapp & Pilkonis, 2008).

## 8. General Discussion

Future research ought to explore NFD as a predictor of maladaptive behaviors in work and other interpersonal contexts. Guenole (2014) suggests that a maladaptive trait model (Skodol et al., 2011) be embraced by organizational researchers to understand personality in work settings. The NFD compound personality aligns well with the antagonism, disinhibition, and negative emotionality facets of this trait model. Psychopathy, a trait that aligns with the antagonism facet of the maladaptive trait model, is positively associated with counterproductive work behaviors (Smith & Lilienfeld, 2013); however, psychopathic traits, namely a callous affect and calmness under pressure, can be beneficial in certain work settings (e.g. military service, surgery; Lilienfeld, 1994; Skeem, Polaschek, Patrick, & Lilienfeld, 2011).

<sup>5</sup> t-tests reveal that these differences are all significant at  $p < .05$ , except for comparing the college sample (Study 5) to Study 3 sample 2 on the IPM factor,  $p > .10$ .

**Table 8**  
Unstandardized intercept estimates by gender.

Item	Estimate (SE)		Wald Test
	Men	Women	
IPM 1	3.878 (0.107)	2.813 (0.117)	45.231**
IPM 2	2.728 (0.104)	2.235 (0.105)	11.073**
IPM 3	3.468 (0.101)	2.641 (0.109)	30.942**
IPM 4	2.738 (0.098)	2.079 (0.091)	24.321**
IO 1	3.105 (0.085)	3.310 (0.103)	2.348
IO 2	3.511 (0.094)	3.264 (0.106)	3.061
IO 3	4.004 (0.101)	4.067 (0.119)	0.160
PPV 1	4.000 (0.105)	4.218 (0.127)	1.748
PPV 2	3.521 (0.087)	3.478 (0.113)	0.090
PPV 3	3.786 (0.102)	3.606 (0.124)	1.246
PPV 4	3.175 (0.098)	2.857 (0.113)	4.551*
PPV 5	3.579 (0.094)	3.500 (0.116)	0.280

\*\*  $p < .001$ ; \*  $p < .05$ . Note.  $df = 1$  for all Wald tests. IPM = Interpersonal Manipulation; IO = Impulsive outspokenness; PPV = Persistent perceived victimhood.  $N = 494$ .



- 
1. Sometimes it's fun to get people riled up
  2. Sometimes I say something bad about someone with the hope that they find out what I said.
  3. I say or do things just to see how others react.
  4. Sometimes I play people against each other to get what I want.
  5. I wait before speaking my mind (R).
  6. I always speak my mind but pay for it later.
  7. It's hard for me to hold my opinion back.
  8. People who act like my friends have stabbed me in the back.
  9. People often talk about me behind my back.
  10. I often wonder why such crazy things happen to me.
  11. I feel like there are people in my life who are out to get me.
  12. A lot of people have wronged me.
- 

**Fig. 1.** Finalized Need for Drama Scale. *Note.* Items are scored on a 1–7 point scale (Strongly Disagree to Strongly Agree). Item five is reverse scored. Items 1–4 load onto the Interpersonal manipulation latent factor, items 5–7 load onto the impulsive outspokenness latent factor, and items 8–12 load onto the persistent perceived victimhood latent factor. The factors are intercorrelated and load onto the higher order Need for Drama latent factor. In all studies, item order was randomized.

The concept of remaining calm under pressure is antithetical to the NFD personality. Furthermore, qualitative responses from Study 1 did not suggest that NFD individuals are callous (see also Lishner et al., 2015). The strong positive associations between NFD and dark-triad traits may be only capturing shared variance in manipulateness.

As discussed in the introduction, BPD and HPD have been strongly criticized as sex-biased diagnoses in which women are much more likely to be diagnosed than men. Our tests of measurement invariance show that the factor structure and factor loadings of NFD do not differ between genders. Future research can contrast negative stereotypes of women (e.g. excessive emotionality) with tests of predictive gender invariance in the manifestation of NFD in work and other interpersonal contexts (cf. Millsap, 2007). Furthermore, future research ought to investigate the discriminant validity of NFD with BPD and HPD. Whereas self-harming behavior and promiscuity are prominent characteristics of these clinical personality disorders; we suspect, based partly on qualitative responses in Study 1, that they are not in NFD.

Moderate NFD associations with narcissism (Table 5) along with qualitative responses from others (Table 1) suggest that self-focus may be a facet of NFD not assessed with the current measure. Need for Drama's moderate associations with narcissism appear to be attenuated by the PPV factor which showed no associations with narcissism across studies. Persistent perceived victimization, however, does seem to be a self-focused trait, likely lacking any feelings of grandiosity associated with narcissism. Self-esteem's strong negative correlations with PPV may also be an indication of self-focus (cf. Watkins & Teasdale, 2004). Self-focus manifested as self-absorption and narcissism would also align with the antagonism facet of a maladaptive trait model (Skodol et al., 2011). Future research ought to investigate self-focus as a facet of the NFD personality.

This research was limited as all measures used were self-report. When examining an interpersonal maladaptive trait like NFD, participants may be inclined to respond in a socially desirable manner (Crowne & Marlowe, 1960). To note, however, all participants completed these studies on their own computers on their own time, and were assured that they were anonymous. Regardless, future research should include a measure of social desirability that could serve to strengthen the construct and discriminant validity of the NFD measure. Furthermore, future research ought to compare self-reports with knowledgeable others' reports as a method of examining socially desirable responding on the NFD measure.

In the preceding studies we developed and validated a novel scale to measure Need for Drama. The NFD personality ought to provide those in

organizational, social, and personality research fields a tool for research into maladaptive traits and behaviors.

## References

- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.). Washington, DC: Author.
- Bachrach, Y., Kosinski, M., Graepel, T., Kohli, P., & Stillwell, D. (2012, June). Personality and patterns of Facebook usage. In Proceedings of the 4th Annual ACM Web Science Conference (pp. 24–32). ACM.
- Bakkevig, J. F., & Karterud, S. (2010). Is the Diagnostic and Statistical Manual of Mental Disorders, histrionic personality disorder category a valid construct? *Comprehensive Psychiatry*, 51(5), 462–470.
- Blashfield, R. K., Reynolds, S. M., & Stennett, B. (2012). The death of histrionic personality disorder. In T. Widiger (Ed.), *The Oxford Handbook of Personality Disorders* (pp. 603–627). Oxford University Press.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Crawford, J. R., & Henry, J. D. (2003). The Depression Anxiety Stress Scales (DASS): Normative data and latent structure in a large non-clinical sample. *British Journal of Clinical Psychology*, 42, 111–131.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24(4), 349.
- Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The mini-IPIP scales: tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment*, 18(2), 192.
- Ellwardt, L., Labianca, G. J., & Wittek, R. (2012). Who are the objects of positive and negative gossip at work?: A social network perspective on workplace gossip. *Social Networks*, 34(2), 193–205.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272.
- Flanagan, E. H., & Blashfield, R. K. (2003). Gender bias in the diagnosis of personality disorders: The roles of base rates and social stereotypes. *Journal of Personality Disorders*, 17(5), 431–446.
- Fox, J., Warber, K. M., & Makstaller, D. C. (2013). The role of Facebook in romantic relationship development: An exploration of Knapp's relational stage model. *Journal of Social and Personal Relationships*, 30(6), 771–794.
- Geuens, M., & De Pelsmacker, P. (2002). Developing a short Affect Intensity Scale. *Psychological Reports*, 91, 657–670.
- Guenole, N. (2014). Maladaptive personality at work: Exploring the darkness. *Industrial and Organizational Psychology*, 7(1), 85–97.
- Hare, R. D. (1999). *Without Conscience: The Disturbing World of the Psychopaths among Us*. Guilford Press.
- Hayes, A. F. (November 2005). *Paper presented at the meeting of the Midwestern Association for Public Opinion Research*. Chicago, IL.
- Hogh, A., & Dofradottir, A. (2001). Coping with bullying in the workplace. *European Journal of Work and Organizational Psychology*, 10(4), 485–495.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55.
- Released IBM Corp (2013). *IBM SPSS Statistics for Windows, Version 22.0*. Armonk, NY: IBM Corp.
- Johnson, D. M., Shea, M. T., Yen, S., Battle, C. L., Zlotnick, C., Sanislow, C. A., ... Zanarini, M. C. (2003). Gender differences in borderline personality disorder: Findings from the Collaborative Longitudinal Personality Disorders Study. *Comprehensive Psychiatry*, 44(4), 284–292.

- Jones, D. N., & Paulhus, D. L. (2014). Introducing the short dark-triad (SD3): A brief measure of dark personality traits. *Assessment, 21*(1), 28–41.
- Kurland, N. B., & Pelled, L. H. (2000). Passing the word: Toward a model of gossip and power in the workplace. *Academy of Management Review, 25*(2), 428–438.
- Larsen, R. J., & Diener, E. (1987). Affect intensity as an individual difference characteristic: A review. *Journal of Research in Personality, 21*(1), 1–39.
- Levenson, H. (1974). Activism and powerful others: Distinctions within the concept of internal-external control. *Journal of Personality Assessment, 38*(4), 377–383.
- Lilienfeld, S. O. (1994). Conceptual problems in the assessment of psychopathy. *Clinical Psychology Review, 14*(1), 17–38.
- Lishner, D. A., Hong, P. Y., Jiang, L., Vitacco, M. J., & Neumann, C. S. (2015). Psychopathy, narcissism, and borderline personality: A critical test of the affective empathy-impairment hypothesis. *Personality and Individual Differences, 86*, 257–265.
- Litman, J. A., & Pezzo, M. V. (2005). Individual differences in attitudes towards gossip. *Personality and Individual Differences, 38*(4), 963–980.
- Marshall, T. C., Lefringhausen, K., & Ferenczi, N. (2015). The Big Five, self-esteem, and narcissism as predictors of the topics people write about in Facebook status updates. *Personality and Individual Differences, 85*, 35–40.
- Millsap, R. E. (2007). Invariance in measurement and prediction revisited. *Psychometrika, 72*(4), 461–473.
- Muthén, L. K., & Muthén, B. O. (2011). *Mplus User's Guide* (Sixth Edition). Los Angeles, CA: Muthén & Muthén.
- Nehls, N. (1998). Borderline personality disorder: Gender stereotypes, stigma, and limited system of care. *Issues in Mental Health Nursing, 19*(2), 97–112.
- Ones, D. S., Dilchert, S., Viswesvaran, C., & Judge, T. A. (2007). In support of personality assessment in organizational settings. *Personnel Psychology, 60*(4), 995–1027.
- Paulhus, D. L., & Williams, K. M. (2002). The dark-triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*(6), 556–563.
- Rosenberg, M. (1979). *Conceiving the Self*. New York: Basic Books.
- SAS Institute Inc (2014). *SAS/STAT*. Cary, NC: SAS Institute Inc.
- Satorra, A., & Bentler, P. M. (2001). A scaled difference chi-square test statistic for moment structure analysis. *Psychometrika, 66*(4), 507–514.
- Scherer, K. T., Baysinger, M., Zolynsky, D., & LeBreton, J. M. (2013). Predicting counterproductive work behaviors with sub-clinical psychopathy: Beyond the Five Factor Model of personality. *Personality and Individual Differences, 55*(3), 300–305.
- Settles, R. E., Fischer, S., Cyders, M. A., Combs, J. L., Gunn, R. L., & Smith, G. T. (2012). Negative urgency: a personality predictor of externalizing behavior characterized by neuroticism, low conscientiousness, and disagreeableness. *Journal of Abnormal Psychology, 121*(1), 160.
- Shapiro, D. N., Chandler, J., & Mueller, P. A. (2013). Using Mechanical Turk to study clinical populations. *Clinical Psychological Science, 1*(2), 213–220.
- Simmons, D. (1992). Gender issues and borderline personality disorder: Why do females dominate the diagnosis? *Archives of Psychiatric Nursing, 6*(4), 219–223.
- Skeem, J. L., Polaschek, D. L., Patrick, C. J., & Lilienfeld, S. O. (2011). Psychopathic personality bridging the gap between scientific evidence and public policy. *Psychological Science in the Public Interest, 12*(3), 95–162.
- Skodol, A.E., Clark, L.A., Bender, D.S., Krueger, R.F., Morey, L.C., Verheul, R.,... & Oldham, J.M. (2011). Proposed changes in personality and personality disorder assessment and diagnosis for DSM-5 Part I: Description and rationale. *Personality Disorders: Theory, Research, and Treatment, 2*(1), 4.
- Smith, S. F., & Lilienfeld, S. O. (2013). Psychopathy in the workplace: The knowns and unknowns. *Aggression and Violent Behavior, 18*(2), 204–218.
- Steenkamp, J. B. E., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research, 25*(1), 78–107.
- Stapp, S. D., & Pilkonis, P. A. (2008). Age-related differences in individual DSM criteria for borderline personality disorder. *Journal of Personality Disorders, 22*(4), 427.
- Stewart, N., Ungemach, C., Harris, A. J., Bartels, D. M., Newell, B. R., Paolacci, G., & Chandler, J. (2015). The average laboratory samples a population of 7,300 Amazon Mechanical Turk workers. *Judgment and Decision Making* (in press).
- Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behavior, 7*(3), 321–326.
- Takaki, J., Taniguchi, T., Fukuoka, E., Fujii, Y., Tsutsumi, A., Nakajima, K., & Hirokawa, K. (2010). Workplace bullying could play important roles in the relationships between job strain and symptoms of depression and sleep disturbance. *Journal of Occupational Health, 52*(6), 367–374.
- Ussher, J. M. (2013). Diagnosing difficult women and pathologising femininity: Gender bias in psychiatric nosology. *Feminism & Psychology, 23*(1), 63–69.
- Warner, R. (1979). Racial and sexual bias in psychiatric diagnosis: psychiatrists and other mental health professionals compared by race, sex, and discipline. *The Journal of Nervous and Mental Disease, 167*(5), 303–310.
- Watkins, E., & Teasdale, J.D. (2004). Adaptive and maladaptive self-focus in depression. *Journal of Affective Disorders, 82*(1), 1–8.
- Westen, D., & Arkowitz-Westen, L. (1998). Limitations of Axis II in diagnosing personality pathology in clinical practice. *American Journal of Psychiatry, 155*(12), 1767–1771.
- Zanarini, M. C., Frankenburg, F. R., DeLuca, C. J., Hennen, J., Khera, G. S., & Gunderson, J. G. (1998). The pain of being borderline: dysphoric states specific to borderline personality disorder. *Harvard Review of Psychiatry, 6*(4), 201–207.