



## Interpersonal cognitive self-focus as a function of neuroticism: Basal tendencies and priming effects

Adam K. Fetterman\*, Michael D. Robinson

Psychology Department (Dept. 2765), P.O. Box 6050, North Dakota State University, Fargo, North Dakota, 58108-6050, USA

### ARTICLE INFO

#### Article history:

Received 29 June 2011

Received in revised form 22 November 2011

Accepted 24 November 2011

Available online 21 December 2011

#### Keywords:

Neuroticism

Self-focus

Interpersonal

Implicit

Anxiety

### ABSTRACT

Self-focus is one mechanism that may account for the social-evaluative anxiety of individuals high in neuroticism. The present two studies (total  $N = 183$ ) sought to cognitively model interpersonal self-focus. The cognitive task was a simple one in which participants simply categorized dyadic interpersonal pronouns, with reaction times as the dependent measure. When others engage us, the pronoun “me” refers to the other and the pronoun “you” refers to the self. Study 1 found a neuroticism by pronoun interaction on categorization time consistent with implicit interpersonal self-focus at high (but not low) levels of neuroticism establishing a basal tendency. Study 2 examined boundary conditions. Individuals high in neuroticism exhibited implicit self-focus particularly to the extent that they had been primed to think of themselves as submissive rather than dominant in their interpersonal interactions. Implications for understanding neuroticism, self-focus, and relationship functioning are discussed.

© 2011 Elsevier Ltd. All rights reserved.

### 1. Introduction

Neuroticism is predictive of numerous negative emotional states (Watson, 2000) and clinical conditions characterized by negative emotional states (Widiger, Verheul, & van den Brink, 1999). Neuroticism is also predictive of substance abuse and suicide attempts (Lahey, 2009). Many of the outcomes predicted by neuroticism might be understood in terms of higher levels of self-focus, sometimes labeled self-consciousness or self-awareness. Self-focus is typically aversive and tends to magnify negative emotional states (Mor & Winquist, 2002). Tendencies related to self-focus – such as rumination – predispose individuals toward clinical levels of anxiety and depression (Nolen-Hoeksema, 2000). Substance abuse may be precipitated by aversive self-focus (Arnett, 2005) and suicide attempts may represent the ultimate escape from aversive self-focus (Baumeister, 1990).

Consistent with such points, trait measures of self-focus often load onto a neuroticism factor (McCrae & Costa, 1999). Further results are consistent with this mapping. Neuroticism is a positive predictor of trait worry (Muris, Roelofs, Rassin, Franken, & Mayer, 2005), conceptualized in terms of repetitive self-focused processing concerning possible future events (Borkovec & Sharpless, 2004). Neuroticism is a positive predictor of trait measures of rumination (Trapnell & Campbell, 1999), conceptualized in terms

of repetitive self-focused thinking about past events (Nolen-Hoeksema, 2000). Finally, there is some evidence for the idea that trait measures of worry and rumination mediate at least some of the pernicious consequences of neuroticism (Muris et al., 2005).

Whether trait measures capture the dynamics of self-focus is arguable, however. As originally conceived, self-focus is a state, not a trait (Duval & Wicklund, 1972). There is considerable evidence for this idea, in that several manipulations of self-focus have been shown to alter momentary levels of it (Carver & Scheier, 1981). From an assessment-related perspective, it is doubtful that individuals can accurately report on whether they are self-focused or environment-focused at any point in time as such states are likely to be too fleeting and mercurial to be amenable to self-report methods (Dehaene, Changeux, Naccache, Sackur, & Sergent, 2006; Posner & Rothbart, 2007). For such reasons, we developed a novel cognitive assessment of self-focus, one that sought to model interpersonal dynamics.

When others communicate, they use the pronoun “me” to represent themselves and the pronoun “you” to reference the recipient of the communication – i.e., the self (Burgoon, Johnson, & Koch, 1998). One only has to think about dyadic partners using the word “you” to appreciate this point. Following precedent (Fetterman & Robinson, 2010; Fetterman, Robinson, & Gilbertson, submitted for publication), we therefore designed a simple cognitive task in which individuals were asked to quickly categorize such pronouns. The computer was essentially the interaction partner, consistent with a large body of work showing that people conceptualize computers in such terms (Nass & Moon, 2000). This is of course advantageous in cognitively modeling self-focus. Momen-

\* Corresponding author. Address: Psychology Department (Dept. 2765), P.O. Box 6050, North Dakota State University, Fargo, ND 58108-6050, USA. Tel.: +1 701 231 9411; fax: +1 701 231 8426.

E-mail address: [Adam.Fetterman@my.ndsu.edu](mailto:Adam.Fetterman@my.ndsu.edu) (A.K. Fetterman).

tary self-focus in this task would thus consist of faster categorizations of the pronoun “you” relative to “me” when presented on a computer screen.

### 1.1. Hypotheses

Study 1 sought to assess basal relations between neuroticism and cognitive self-focus. We hypothesized that neuroticism would interact with pronoun type to predict categorization speed. More specifically, we hypothesized that individuals high (but not low) in neuroticism would be faster to categorize the self-relevant interaction pronoun (YOU) relative to the other-relevant interaction pronoun (ME). Findings of this type would support the idea that high levels of neuroticism covary with high levels of self-focus, but importantly so in an implicit cognitive manner.

Self-focus is quite malleable, however (Carver & Scheier, 1981; Wicklund, 1979). Accordingly, Study 2 sought to examine the malleability of relations between neuroticism and cognitive self-focus. Toward this end, we randomly assigned individuals to write about a situation in which they were dominant versus submissive in the past prior to assessing cognitive self-focus. Submissive interactions tend to engender self-focus, among other effects (Lee-Chai & Bargh, 2001). Accordingly, we hypothesized that individuals higher in neuroticism would exhibit higher levels of cognitive self-focus (and thus be faster to categorize the pronoun YOU relative to ME) particularly to the extent that they were primed with submissive rather than dominant thoughts on the basis of autobiographical recall.

## 2. Study 1

The focus of Study 1 was on basal relations between neuroticism and cognitive self-focus. Accordingly, no priming manipulations occurred. We hypothesized that higher levels of neuroticism would be associated with greater levels of cognitive self-focus, defined in terms of relatively faster categorizations of the self-relevant pronoun relative to the other-relevant pronoun.

## 3. Method

### 3.1. Participants and assessment procedures

Participants were 103 (60 female) undergraduate volunteers from North Dakota State University who received course credit. They were run in groups of 6 or less on personal computers. The cognitive task was administered first to preclude trait-related priming effects on implicit task performance (Robinson & Neighbors, 2006).

### 3.2. Cognitive self-focus task

The task consisted of 120 trials and the program used Eprime software. On each trial, the word “YOU” or “ME” was presented at center screen on a randomized basis, with replacement. Participants were asked to categorize the pronoun as “you” or “me” using a serial response box as quickly and accurately as possible. Mappings were counterbalanced such that half of the participants were to press the 1 key in response to one pronoun and the other half of the participants were to press the 5 key in response to the same pronoun. Such mappings were displayed on the computer screen to reduce memory load. Stimuli varied in font size (either 15.5 or 20.5 Times New Roman font), but such variations were merely to keep the task “interesting” and are not relevant to the present predictions.

We sought to ensure a high degree of accuracy on the task so that categorization times would be the more informative measure

(Sanders, 1998). Accordingly, we penalized inaccurate categorizations with a 1000 ms “Incorrect!” visual error message. By contrast, accurate categorizations were followed by a brief 150 ms delay prior to the next trial. Categorization accuracy was accordingly quite high in the task ( $M = 97\%$ ).

Categorization times were handled in a standard manner (Robinson, 2007). Trials associated with inaccurate responses were dropped. Categorization times were then log-transformed to reduce positive skew (Ratcliff, 1993). Finally, log-transformed times 2.5 SDs faster and slower than the mean were replaced by such 2.5 SD outlier values. Such transformed categorization times were then averaged as a function of the within-subject ME versus YOU design. Raw millisecond times were similarly averaged for presentation purposes.

### 3.3. Neuroticism assessment

Participants completed Goldberg’s (1999) 10-item broad-bandwidth neuroticism scale, which correlates very highly with the NEO-PI neuroticism scale (Costa & McCrae, 1992), other neuroticism scales as well (John & Srivastava, 1999), and has exhibited excellent reliability and predictive validity in a number of studies (Goldberg et al., 2006). In more specific terms, participants were asked to rate the extent (1 = very inaccurate; 5 = very accurate) to which eight statements characteristic of high levels of neuroticism (e.g., “get stressed out easily”) and two statements characteristic of low levels of neuroticism (e.g., “am relaxed most of the time”) generally describe the self. The latter two items were reverse-scored and a composite score was created by averaging across items ( $\alpha = .90$ ;  $M = 2.48$ ;  $SD = .79$ ).

## 4. Results

Neuroticism was hypothesized to moderate the speed with which the pronouns were categorized in a manner suggesting greater cognitive self-focus at higher levels of neuroticism. This interactive hypothesis was examined in a General Linear Model (GLM) analysis as a function of the within-subject factor of pronoun (YOU versus ME) and z-scored variations in neuroticism (Aiken & West, 1991), with log-transformed categorization time means as the dependent measure. There was no main effect for Neuroticism in this analysis,  $F < 1$ , nor was there a main effect for Pronoun,  $F < 1$ . Of more importance, the Neuroticism by Pronoun interaction was significant,  $F(1, 102) = 4.03$ ,  $p < .05$ , partial eta

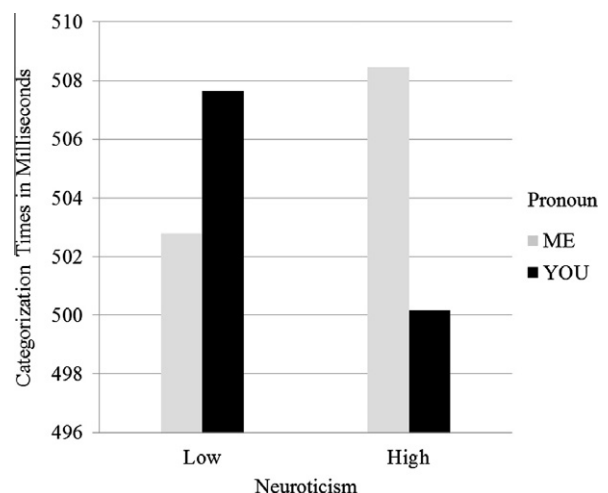


Fig. 1. Cognitive self-focus by neuroticism, Study 1.

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات