Personality and Individual Differences 45 (2008) 345–349

Contents lists available at ScienceDirect

Personality and Individual Differences

journal homepage: www.elsevier.com/locate/paid

Do neuroticism and extraversion explain the negative association between self-concealment and subjective well-being?

Andreas Wismeijer [a,*], Marcel van Assen [b]

[a] Department of Clinical Psychology, Tilburg University, P.O. Box 90153, 5000 LE Tilburg, The Netherlands
[b] Department of Methodology and Statistics, Tilburg University, The Netherlands

ARTICLE INFO

Article history:
Received 29 January 2008
Received in revised form 23 April 2008
Accepted 7 May 2008
Available online 24 June 2008

Keywords:
Self-concealment
Neuroticism
Extraversion
Well-being
Structural equation modeling
Mediation
Personality

ABSTRACT

The present investigation empirically examined if the negative association between self-concealment and subjective well-being is spurious because it results from the associations of both variables with their common causes neuroticism and extraversion. We concluded from applying structural equation modeling to the data obtained from two independent student samples that neuroticism, but not extraversion, explains part of the negative association between self-concealment and subjective well-being. More than 60% of the negative association between self-concealment and subjective well-being could not be explained by Neuroticism. Implications of our findings for both research and clinical therapy are discussed.

1. Introduction

Self-concealment (SC; Larson & Chastain, 1990) refers to the personality characteristic to conceal information from others, as opposed to regarding secrecy as a function of mainly situational determinants. The concept of SC is derived from the trait component of inhibition as studied by Pennebaker (1989) and is defined as the "predisposition to actively conceal from others personal information that one perceives as distressing or negative" (Larson & Chastain, 1990, p. 440). Self-concealed personal information is a subset of private personal information, consciously accessible to the individual and actively kept from the awareness of others. It is negative in valence and, if disclosed at all, usually only confided to a small number of persons because of its highly intimate content (Larson & Chastain, 1990). Since its introduction by Larson and Chastain (1990) the concept of SC has been commonly applied, predominantly in clinical psychological studies on anxiety and depressive symptoms as will be discussed below.

1.1. Self-concealment as a predictor of subjective well-being

Several studies have shown that SC is positively associated with various measures of psychological distress such as anxiety (e.g., Pennebaker, Colder, & Sharp, 1990; Ritz & Dahme, 1996), depression (e.g., Kelly & Achter, 1995), maladjustment (e.g., Kawamura & Frost, 2004), and overall psychological distress (e.g., Cramer, 1999). Further, recently Wismeijer, van Assen, Sijtsma, and Vingerhoets (submitted for publication) found SC to be negatively related with self-reported life satisfaction, psychological well-being, health status, and positively with fatigue.

1.2. Neuroticism and extraversion as predictors of subjective well-being

The Big Five personality factors Neuroticism (N), or emotional stability, and Extraversion (E) are reported as the two most important predictors of subjective well-being (SWB) (DeNeve & Cooper, 1998; Diener, 2000; Vittersø, 2001). In particular, N has been shown to be positively associated with anxiety (e.g., Weinstock & Whisman, 2006), the experience of negative affect (e.g., Hutchinson & Williams, 2007), worrying (e.g., Muris, Roelofs, Rassin, Franken, & Mayer, 2005), and a wide array of psychosomatic symptoms (Rosmalen, Neeleman, Gans, & de Jonge, 2007). To conclude, N is negatively related with SWB.

In contrast, E has been repeatedly shown to exert a positive effect on SWB (Argyle & Lu, 1990; Spangler & Palrecha, 2004). For instance, Zelenski and Larsen (1999) found that positive events triggered more happiness in Extraverts than in Introverts. However, Vittersø and Nilsen (2002) have argued that the predictive effect of E on SWB is considerably inflated if N is not controlled for. Therefore, they stress that both N and E should be assessed and

* Corresponding author. Tel.: +31 13 466 2988; fax: +31 13 466 2067.
E-mail address: a.a.j.wismeijer@uvt.nl (A. Wismeijer).

0191-8869/$ - see front matter © 2008 Elsevier Ltd. All rights reserved.
doi:10.1016/j.paid.2008.05.002

added simultaneously to any model that attempts to predict SWB, instead of one or the other.

1.3. Neuroticism and extraversion as predictors of self-concealment

There is reason to assume that N and E may predict SC, although no literature exists that studied this directly. First, both SC and N reflect the experience of negative affect and self-consciousness, and are associated with psychological and psychosomatic complaints. Further, both high self-concealers (Wismeijer et al., submitted for publication) and neurotics (Muris et al., 2005) tend to adopt a ruminative response style. Finally, both constructs have been repeatedly shown to be negatively associated with perceived social support (e.g., Cepeda-Benito & Short, 1998; Kelly & Achter, 1995). Because of their similarities in content and effects, we hypothesize that N has a positive effect on SC.

In contrast, we contend that E is negatively associated with SC. For instance, social interactions form a vital positive source of stimulation for extraverts, but seem to form a threat and negative source of stimulation for self-concealers (Pachankis, 2007). As a result, extraverts actively look for and create social situations to participate in, whereas self-concealers avoid them.

1.4. Do neuroticism and extraversion explain the negative effect of self-concealment on subjective well-being?

The two previous subsections suggest that N and E are associated with both SC and SWB. Since N is assumed to be positively associated with SC, and negatively to SWB, N may be responsible for the negative association between SC and SWB. The same conclusion may hold for E, since E is negatively associated with SC and positively associated with SWB. Hence, the negative association between SC and SWB might be spurious and be explained by their common causes N and E. If N and E are indeed the common causes, then there is no (or a much smaller) association between SC and SWB after controlling for N and E. This model is depicted by the arrows in Fig. 1.

However, it is also possible that part of the negative association between SC and SWB cannot be explained by N and E. This is the case if (1) there are aspects of SC that are related to SWB but are not related to N and E, or (2) if SC has an opposite association with SWB than would be expected from both variables' associations with N and E. Evidence in these directions indeed exists for N and, to a lesser extent, for E. First, SC reflects avoiding negative social evaluation (Larson & Chastain, 1990), whereas N focuses on emotional reactivity in response to negative environmental stimuli (e.g., Larsen & Ketelaar, 1991). That is, in contrast to N, the social avoidance motivation represents a cardinal component of SC, and this motivation can be expected to be negatively related to SWB. Second, neurotics are known for over-reporting physical and psychological complaints (Rosmalen et al., 2007), whereas self-concealers can be expected to under-report these symptoms, since they tend to conceal personally distressing information. Third, high self-concealers have a negative attitude towards seeking counseling and have negative expectations about counseling (Cepeda-Benito & Short, 1998; Kelly & Achter, 1995). The inverse has been reported for N (Schaub & Tokar, 1999), whereas positive attitudes towards and expectations about counseling are positively related to well-being. Finally, extraverts generally tend to have and convey to others a more positive image of themselves (Hurley, 1998), which is a determinant of SWB, whereas self-concealers (who generally do not have a positive self-image (Cramer & Lake, 1998) essentially also convey a more positive image of themselves to others, but for fear to overtly discuss their flaws.

To conclude, we hypothesize that N and E will explain part of the negative association between SC and SWB, but that, after controlling for N and E, SC will still be negatively related to SWB because of the specific associations between SC and SWB that cannot be explained by N and E.

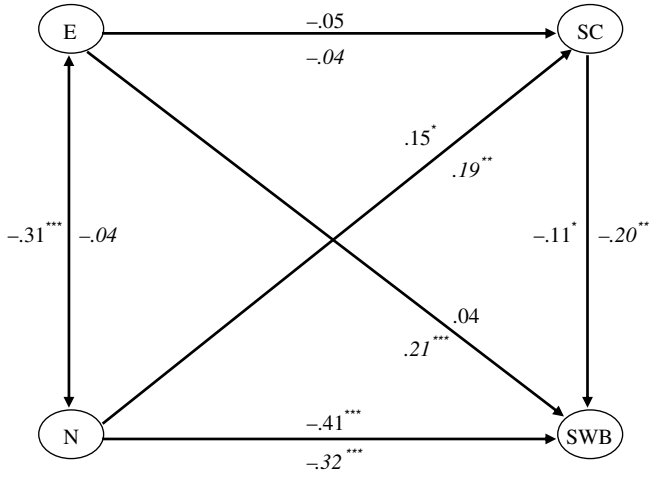

Fig. 1. Hypothesized model and standardized estimates of parameters in the structural model part for both samples. *Note*: The arrows show the directions of causality of the hypothesized model. The left and upper values correspond to the estimates for the first sample, the values in italics to the estimates for the second sample. All tests are one-tailed; $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$. E = Extraversion; SC = Self-concealment; N = Neuroticism; SWB = Subjective Well-Being.

2. Method

2.1. Participants and procedure

Two samples were considered. The two samples consisted of social and behavioral sciences students from a Dutch university. The participants in the first sample were 395 undergraduate students (134 men, 261 women), and in the second sample 325 other undergraduate students (136 men, 189 women). The mean ages of the two samples were 22.10 (SD = 2.59) and 21.83 years (SD = 2.15), respectively.

The scales measuring SC, N, E, and SWB (described below) were part of larger questionnaires. Completing the questionnaire and analyzing the data were requirements for passing an obligatory course on questionnaire construction in the academic years 2004–2005 (first sample) and 2006–2007 (second sample). The students were told that their answers would be checked for missing, random, and copied responses. If, for whatever reasons, students did not want to fill out the questionnaire, they could pass the course by instead completing a test on the use of SPSS to analyse questionnaire data. Since there were some differences between both samples in the measures of N and E (wording and number of answering categories), and SC (extra items were added), we did not combine the two student samples into one larger sample. This also allowed us to replicate in the second sample the results found in the first sample.

2.2. Measures

2.2.1. Self-concealment

SC was assessed employing a Dutch translation of the Self-Concealment Scale (SCS; Larson & Chastain, 1990; Wismeijer, Sijtsma, van Assen, & Vingerhoets, in press). The SCS measures the tendency to keep negatively valenced private and intimate information secret and consists of 10 items that are rated on 5-point adjectival scales (lowest score 1 means 'does not apply to me', intermediate