Personality and Individual Differences 70 (2014) 200–205

Contents lists available at ScienceDirect

Personality and Individual Differences

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

Are there meaningful individual differences in temporal inconsistency in self-reported personality?

Andrea Soubelet [a,*], Timothy A. Salthouse [b], Shigehiro Oishi [b]

[a] Department of Psychology, University of Nice, Nice, France
[b] Department of Psychology, University of Virginia, Charlottesville, VA, USA

ARTICLE INFO

Article history:
Received 6 May 2014
Received in revised form 18 June 2014
Accepted 24 June 2014
Available online 31 July 2014

Keywords:
Variability in self-reported personality
Temporal inconsistency
Negative affect
Age

ABSTRACT

The current project had three goals. The first was to examine whether it is meaningful to refer to across-time variability in self-reported personality as an individual differences characteristic. The second was to investigate whether negative affect was associated with variability in self-reported personality, while controlling for mean levels, and correcting for measurement errors. The third goal was to examine whether variability in self-reported personality would be larger among young adults than among older adults, and whether the relation of variability with negative affect would be stronger at older ages than at younger ages. Two moderately large samples of participants completed the International Item Pool Personality questionnaire assessing the Big Five personality dimensions either twice or thrice, in addition to several measures of negative affect. Results were consistent with the hypothesis that within-person variability in self-reported personality is a meaningful individual difference characteristic. Some people exhibited greater across-time variability than others after removing measurement error, and people who showed temporal instability in one trait also exhibited temporal instability across the other four traits. However, temporal variability was not related to negative affect, and there was no evidence that either temporal variability or its association with negative affect varied with age.

1. Introduction

Researchers who have tried to identify and understand what underlies the variations in personality assessments have often examined variability in personality responses that occur within a person across roles and situations (e.g., Baird, Le, & Lucas, 2006; Bleidorn & Koedding, 2013; Diehl, Hastings, & Stanton, 2001; Donahue, Robins, Roberts, & John, 1993). However, another type of variability is inconsistency in measures of personality over time, which has received less attention because it is often interpreted as measurement error (e.g., Chmielewski & Watson, 2009). Although measurement error could be responsible for some of the temporal instability, it is also possible that there are meaningful individual differences in variability over time. That is, in addition to differences in mean levels of personality traits, people might also differ in the degree to which their self-ratings of personality are stable over time.

The first goal of the current project was therefore to examine whether it is meaningful to refer to across-time variability, over an average interval of about 3 years, as an individual differences characteristic that is manifested across different self-reported personality traits. We investigated variability occurring in a measure of the "self" in general, that is not related to specific situations, and were interested in the possibility that inconsistency reflects a general characteristic of the individual that is manifested across different traits.

If people differ in the degree to which they exhibit across-time variability in self-reported personality, it is worth considering what that variability might reflect. Researchers who have investigated individual differences in personality variability across roles and situations have often found that negative affect and related constructs were associated with a greater degree of personality variability (for a meta-analysis, see Bleidorn & Koedding, 2013). These results have been interpreted as support for the idea that within-person variability in personality reflects a low level of emotional adjustment and psychological well-being (e.g., Bleidorn & Koedding, 2013). In the present paper, we were interested in whether the association between variability and negative affect was observed when examining short-term consistency instead of cross-role consistency. Because there are many reports of significant relations between trait levels and affect, we examined whether negative affect predicts cross-temporal variability of

* Corresponding author. Address: Université de Nice-Sophia Antipolis, 3, Bd François Mitterrand, 06357 Nice, France. Tel.: +33 616 208 616.
E-mail address: soubelet.andrea@gmail.com (A. Soubelet).

http://dx.doi.org/10.1016/j.paid.2014.06.037
0191-8869/

self-ratings of Big Five traits, while controlling the mean levels of the traits (see Baird et al., 2006).

One of the most important factors affecting personality stability is age. A meta-analysis reported by Roberts and DelVecchio (2000) showed that test–retest correlation coefficients increased from .31 in childhood to .64 at age 30, and then reached a plateau of about .74 between ages 50 and 70. However, previous work on long-term change in personality has either confounded systematic change and short-term fluctuation, or did not control for measurement error (see however Kandler et al., 2010). The current project overcame these two limitations and examined whether variability over time in self-ratings of personality is greater among younger adults than among older adults, after removing variability associated with systematic change in personality measures and controlling for measurement error.

Another related issue regarding temporal inconsistency in personality is whether it reflects the same phenomenon at different ages. Because young adulthood is a period of transition, involving biological and psychological maturation after the crisis of puberty, transformation of social relationships, and finding oneself to "become a person" (Arnett, 2000), it is possible that variability in personality at young ages does not have the same meaning as it does at older ages (Lewis, 2001). In particular, variability at young ages may reflect a "core" self still in progress, while variability at older ages may reflect more incoherence or even pathology. To our knowledge, only one study examined relations between personality inconsistency and well-being as a function of age (Diehl et al., 2001). The third goal of the current project was to examine whether temporal inconsistency in self-reported personality shows the same relations with negative affect at different ages.

Among the desirable conditions for providing meaningful answers to these questions are a moderately large sample of participants, reliable assessments of major dimensions of personality and affect, and at least three measurement occasions to distinguish systematic trends from short-term fluctuation. The current project attempted to incorporate these characteristics by examining data from samples of either 510 (with three occasions) or 771 (with two occasions) adults between 18 and 92 years of age who completed reliable measures of self-reported personality and affect. In addition, the current project examined across-time variability with variability represented by latent variables rather than observed variables. Latent variables allow a focus on variance that is common to the indicators assessing each construct, and thus are free from measurement error (Loehlin, 2004). Finally, because there have been previous reports of systematic change in personality traits (e.g., Roberts & Mroczek, 2008), analyses in the current project controlled influences of systematic change when examining correlations among the measures of temporal variability to ensure that the correlations represent non-systematic variability.

2. Method

2.1. Participants

Participants were community volunteers who completed at least two measurement occasions, and had Mini-Mental State Examination (MMSE; Folstein, Folstein, & McHugh, 1975) scores above 27 at each occasion. Participants were recruited by newspaper advertisements, flyers, and referrals from other participants. They were paid for their participation.

The 2-occasion sample consisted of 771 participants between 18 and 92 years of age who completed only two measurement occasions. The 3-occasion sample consisted of 510 between 18 and 86 years of age who completed three measurement occasions. The two samples were independent of each other. The interval between Time 1 (T1) and Time 2 (T2) varied between 0.21 years and 7.84 years across participants, with a mean of 2.54 years for the 2-occasion sample. It varied between 0.86 years and 5.03 year across participants, with a mean of 2.15 for the 3-occasion sample. The interval between Time 1 (T1) and Time 3 (T3) varied between 1.74 and 8.16 years across participants, with a mean of 5.07 years. There were no significant correlations between age and length of the intervals ($r = -.03$ in the 2-occasion sample, and $r = -.06$ in the 3-occasion sample). Comparisons of the characteristics at T1 of the two samples are summarized in Table 1. In most respects the two samples were similar.

As a means of evaluating the representativeness of the sample, age-adjusted scaled scores are provided (see Table 1) for four tests from the Wechsler Adult Intelligence Scale III (Wechsler, 1997a) and the Wechsler Memory Scale III (Wechsler, 1997b). Scaled scores are adjusted for age and have means of 10 and standard deviations of 3 in the nationally representative normative samples (Wechsler, 1997a, 1997b). Values in Table 1 indicate that mean cognitive scores in our samples were higher than national mean scores.

2.2. Measures

2.2.1. Personality

Personality was self-rated with the 50-item version of the Big-Five Broad Domains (from the International Personality Item Pool; Goldberg, 1992, 1999), which are Emotional Stability, Extraversion, Openness, Agreeableness, and Conscientiousness. The internal consistency coefficients of the scales for each sample and measurement occasion were all acceptable, ranging from .77 to .90.

Affect. Measures of affect included the Center for Epidemiological Studies-Depression Scale (CES-D; Radloff, 1977), the State-Trait Anxiety Inventory (STAI; Spielberger, Gorsush, Lushene, Vagg, & Jacobs, 1983), and the Negative Affect Scale of PANAS (Positive and Negative Affect Schedule; Watson, Clark, & Tellegen, 1988). The internal consistency coefficients of the scales ranged from .88 to .93.

Table 1
Comparison of the two samples on characteristics at T1.

	T1–T2 sample	T1–T2–T3 sample	*d*
N	771	510	
Female %	66.3	68.1	
Age	53.08 (17.56)	54.23 (15.36)	.07
Health	2.15 (.84)	2.13 (.87)	.02
Education	15.91 (2.59)	16.07 (2.63)	.06
CES-D	10.99 (8.34)	10.25 (8.00)	.09
Anxiety	35.15 (10.19)	34.60 (10.10)	.05
MMSE	29.04 (.97)	29.15 (.95)	.11
Age-adjusted scaled scores			
Vocabulary	12.82 (2.70)	13.30 (2.62)	.18
Digit symbol	11.82 (2.74)	11.84 (2.74)	.01
Log memory	12.20 (2.73)	12.43 (2.57)	.09
Recall	12.27 (3.09)	12.87 (3.12)	.19
Traits			
Emotional Stability	34.17 (7.87)	34.77 (8.29)	.07
Extraversion	31.63 (7.69)	31.21 (7.70)	.05
Openness	36.55 (6.37)	36.97 (6.30)	.07
Agreeableness	41.14 (5.60)	41.10 (5.44)	.06
Conscientiousness	36.94 (6.51)	37.40 (6.07)	.07

Note: Health was self-rated on a scale ranging from 1 (*excellent*) to 5 (*poor*). Education is the number of years of education. Depression was assessed with the Center for Epidemiological Studies-Depression Scale (CES-D; Radloff, 1977). Anxiety was assessed with the State version of the State-Trait Anxiety Inventory (Spielberger et al., 1983). Average scaled scores is the average of the age-adjusted scores for four tests from the Wechsler Adult Intelligence Scale III (Wechsler, 1997a) and the Wechsler Memory Scale III (Wechsler, 1997b). Personality was self-rated with the 50-item version of the Big-Five Broad Domains (Goldberg, 1992, 1999). Values in parentheses are standard deviations. *d* values are absolute values of Cohen's *d*.