Personality and Individual Differences 113 (2017) 155–160

Contents lists available at ScienceDirect

Personality and Individual Differences

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

Individual differences in perceived social desirability of openness to experience: A new framework for social desirability responding in personality research☆

Annique Smeding [a,*], Benoît Dompnier [b], Céline Darnon [c]

[a] Univ. Savoie Mont Blanc, France
[b] Univ. of Lausanne, Switzerland
[c] Univ. Clermont Auvergne, France

ARTICLE INFO

Article history:
Received 27 September 2016
Received in revised form 8 March 2017
Accepted 11 March 2017
Available online xxxx

Keywords:
Openness to experience
Individual differences
Perceived social desirability
Social value

ABSTRACT

The extent to which response distortion – such as social desirability responding (SDR) – is present in self–report measures is an issue of concern and debate in personality research, as it may seriously impact such measures' psychometric indices. The present research aimed at using the social value framework to shed new light on SDR in self–report personality tests. Two studies tested the moderating role of individual differences in perceived social desirability of the Openness to Experience dimension for test–retest reliability and predictive validity of a typical Openness measure. Results support the hypothesized moderating role of perceived social desirability for improving test–retest reliability, providing the testing condition guarantees full anonymity (Study 1), and for predictive validity (Study 2). Findings are discussed with regards to SDR in personality research and the social value framework.

The extent to which response distortion – such as social desirability responding (SDR) – is present in self–report personality tests is an issue of concern and debate, as it may seriously impact such measures' psychometric indices, including reliability and predictive validity, (e.g., Burns & Christiansen, 2011; Ganster, Hennessey, & Luthans, 1983; Paunonen & LeBel, 2012; Rosse, Stecher, Miller, & Levin, 1998). Here we aimed at using a new approach based on perceived social value of personality dimensions to shed new light on SDR in self–report personality tests. We focused on individual differences in perceived social desirability of the Openness to Experience dimension and on their crucial moderating role when examining test–retest reliability and predictive validity of an Openness measure (extracted from the Big Five Inventory; John, Donahue, & Kentle, 1991).

1. Social desirability responding in personality research

The definition of SDR is still debated in the personality literature (see Paulhus, 2002; Uziel, 2010). As an illustration, SDR has recently been conceived of as both a response distortion and a tendency of the test respondent "to select as self–descriptive the response options for items that are more desirable than warranted by his or her corresponding traits or behaviors" (Paunonen & LeBel, 2012, pp. 158–159). This tendency can be conscious and deliberate or unconscious, and can be conceived as an individual difference variable (Paunonen & LeBel, 2012). SDR can thus be conceived both as a bias and an individual difference variable. For theoretical and methodological reasons it is crucial, in the present perspective, to operate a clear distinction between these two elements (see also Paulhus, 1991, who differentiates – in another framework – contextual–based social desirability response sets from social desirability response styles, an individual differences variable).

As an individual differences variable, SDR can be conceptualized as being normally distributed in a given population (Paunonen & LeBel, 2012) and as a latent psychological construct that cannot directly be assessed (Bollen, 2002). When SDR is conceived of as a bias, it should be possible to rely on empirical indicators to approximate it, given the systematicity of some of its features (e.g., an average positive bias in the case of desirable traits if situational demands implicitly or explicitly require positive self–portrayals). Presumably, these two conceptions of SDR may be partially related, as individual differences on the SDR–latent variable may manifest in individual differences in SDR–bias (i.e., individuals at the right tail of the distribution will, on average, bias their responses more). Ultimately however, it is SDR as a bias that ought to capture attention if the emphasis is on psychometric indices, because

☆ The authors sincerely thank J.C. Quinton for his help in generating and updating the R code for the Supplementary Material as well as Emmanuelle Neuville and Claire Migne for their help in data collection.

* Corresponding author at: Univ. Savoie Mont Blanc, LIP/PC2S, BP 1104, 73011 Chambéry cedex, France.
E-mail address: Annique.Smeding@univ-smb.fr (A. Smeding).

http://dx.doi.org/10.1016/j.paid.2017.03.028
0191-8869/

it can affect their soundness, including reliability and predictive validity (Burns & Christiansen, 2011; Ganster et al., 1983; Paunonen & LeBel, 2012; Rosse et al., 1998). Henceforth, we will focus on SDR as a (positive) bias only and will refer to it by the generic term SDR.

2. Assessing social desirability responding within the social value approach

Originally, SDR has been assessed with scales, like the Marlowe–Crowne Social Desirability Scale (Crowne & Marlowe, 1960), which measure individuals' tendency to over report infrequent socially desirable behaviors and underreport frequent undesirable behaviors. Scores on social desirability scales can subsequently be related to individuals' responses on other measures, including self–report personality tests. Another way to estimate SDR in personality research is to compare mean scores for a given dimension obtained under honest and self–presentation (e.g., fake good) instructions (e.g., Holden & Evoy, 2005; McFarland & Ryan, 2000; Viswesvaran & Ones, 1999). Findings relying on this procedure usually show that mean scores for desirable traits are higher under self–presentation than under honest instructions, suggesting that participants can bias their responses if desired.

Accordingly, most research on SDR in the personality literature has focused on these mean differences – including the inflation of scores between honest and self-presentation instructions (McFarland & Ryan, 2000) – while overlooking individual differences in responses under the latter type of instructions. This is unfortunate as findings in the achievement motivation literature suggest that individual differences in responses under self–presentation instructions contribute to clarify the meaning and to improve predictive validity of responses on the same measure obtained under honest instructions (Dompnier, Darnon, & Butera, 2009, 2013; Smeding et al., 2015). Specifically, this line of research – hereafter labeled social value approach – suggests that individuals' responses under self–presentation instructions (typically, asking students to respond to questionnaire items to make themselves likeable and popular with their teachers; Dompnier et al., 2009) reflect individual differences in perceived social desirability of the construct.

Within the social value framework it seems possible to integrate the individual differences and mean differences approaches, by measuring individual differences in self–report responses under self–presentation instructions. According to this perspective, the impact of a given measure – assessed under honest instructions – on the outcome depends on conditional values of perceived social desirability of the measured construct – assessed under self-presentation instructions – because they change the very meaning of individuals' answers to the measurement tool (cf. Dompnier et al., 2013). Specifically, at low levels of perceived social desirability, individuals' responses under honest instructions reflect to a high extent self–perceptions on the construct because they do not have the knowledge (or have it to a lesser extent) that would enable them to modify their responses to adapt to what is socially valued in a given context. Instead, at high levels of perceived social desirability, individuals' responses under honest instructions do not necessarily reflect self–perceptions on the construct because they have knowledge of what is socially desirable and thus may adapt their answers accordingly.

Our objective here is to use the social value framework to test this moderation effect on another construct widely used in personality research: The Big Five, and, specifically, the Openness to Experience dimension of the Big Five Inventory (BFI; John et al., 1991). Indeed, Openness may be considered as the most theoretically relevant dimension given its relation to overclaiming and self-presentation (e.g., Dunlop et al., In press). College students – which is our target population here – are particularly likely to present themselves as intellectuals and knowledgeable when they answer to a personality test in a university context.

3. Research overview and hypotheses

Our first objective was to test the general hypothesis that individual differences in perceived social desirability of Openness (obtained under self–presentation instructions) moderate levels of reliability and validity of its measure under honest instructions. Our second objective was to test the impact of testing condition as a determining factor in our model, as we assume construct validity to be maximal if testing condition does not encourage response modification for self–presentation purposes. A prototypical example of such a condition is one in which responses are given under explicit anonymity instructions. We investigated both hypotheses in two studies.

In Study 1 we investigated test–retest reliability of the Openness measure and to what extent individual differences in Openness' perceived social desirability (i.e., under self–presentation instructions) moderate the link between the same Openness measures spaced by a one–month time delay. In addition, we manipulated participants' motivation to fake their answers on the retest measure by placing them in an explicit anonymity condition or an explicit visibility condition. We expected test–retest reliability of the Openness measure to increase as Openness' perceived social desirability decreased, but only in the anonymity condition (it should be noted that, given the addition of several predictors, using the term “test–retest reliability” is unusual; however, as it is the most parsimonious term to convey our hypotheses, we maintain it in the manuscript).

In Study 2 we tested the same hypotheses as in Study 1, but focused on predictive validity of the Openness measure by using a valid behavioral, performance-based indicator as independent external criterion (i.e., a cultural knowledge test designed to be related to the intellectual and creative aspects of Openness; cf. Back, Schmukle, & Egloff, 2009). Another modification was the manipulation of condition at the onset of the study. We expected predictive validity of the Openness measure to increase as a function of the decrease of participants' perception of this dimension's social desirability, especially in a condition that does not encourage response modification for self–presentation purposes. Thus we assumed perceived social desirability of Openness to negatively moderate the link between self–reported Openness and the performance measure of Openness in an anonymity condition, but not in a visibility condition.

4. Study 1

4.1. Method

4.1.1. Participants and design

Sixty undergraduate psychology students (6 male, 1 unreported) were recruited from the introductory psychology pool and participated in exchange for course credit. At the beginning of the fall semester (session 1, test phase), they completed an anonymous mass survey, which included the relevant Openness measure. One month later (session 2, retest phase), they were invited for an unrelated laboratory study on Personality and completed the same Openness measure a second time, either in an anonymity (33 participants) or visibility condition (27 participants). Assignment to conditions was random (Table 1).

Table 1
Study 1 regression analysis predicting retest phase openness scores.

Predictors	*b*	*SE*	*t*
Condition (anonymity −1, visibility 1)	0.02	0.06	0.28
Openness (honest instructions) (OS)	0.72	0.13	5.46
Perceived social desirability of Openness (OD)	−0.01	0.09	−0.87
Condition * OS	−0.20	0.13	−1.52
Condition * OD	0.19	0.09	2.15
OS * OD	−0.21	0.16	−1.35
Condition * OS * OD	0.32	0.16	2.02